

## REVIEW ARTICLE OPEN ACCESS

# Use of Telehealth Technology in the Delivery of Community Health Services for Children and Young People in New Zealand. A Scoping Review

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**Received:** 15 December 2025 | **Revised:** 28 August 2026 | **Accepted:** 22 September 2026

**Keywords:** children | community health services | health equity | healthcare access | New Zealand | paediatric scoping review | telehealth

## ABSTRACT

**Aim:** To explore what is known about the use of telehealth for delivering community health services to children and young people in New Zealand, this review will map the existing evidence and identify key characteristics, gaps, and opportunities to support equitable service delivery.

**Methods:** A scoping review was conducted following Arksey and O'Malley's framework, enhanced by Joanna Briggs Institute recommendations. A systematic search was performed across MEDLINE, SCOPUS, and CINAHL databases, supplemented by grey literature searching. Included studies focused on children and young people up to 24 years, involved telehealth interventions, and were conducted in New Zealand primary care or community settings. Two reviewers independently screened records and extracted data. The Mixed Methods Appraisal Tool was used for quality appraisal. Findings were synthesised thematically.

**Results:** Twelve studies were included from 259 initial records. Three main themes emerged: enablers, barriers, and acceptability/feasibility. Enablers included improved healthcare access, reduced time and travel costs, enhanced care coordination, and strong therapeutic relationships. Barriers encompassed limited access to devices and reliable internet, privacy concerns, and perceived loss of care quality. Telehealth was generally acceptable and feasible across various paediatric services, though effectiveness varied by consultation type. Evidence specifically addressing Māori children and young people was notably limited.

**Conclusions:** Telehealth shows promise for improving access to paediatric community health services in New Zealand but risks exacerbating digital inequities. Future telehealth development must prioritise digital inclusion, cultural responsiveness, and co-creation alongside Māori and other populations experiencing inequities to ensure equitable healthcare access for all New Zealand children.

## 1 | Introduction

Telehealth has gained international attention to address health access barriers for adults, youth, children, and families. By connecting patients and clinicians through digital platforms, telehealth can reduce travel burdens, improve continuity of care,

and support healthcare access for families living in rural or under-resourced communities [1, 2]. The COVID-19 pandemic accelerated the adoption of telehealth globally, with health systems rapidly expanding virtual care across primary, specialist, and allied health services [3]. However, alongside its potential to improve access to healthcare, studies have identified challenges

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related to communication quality, relational connection, and the provision of culturally appropriate care, particularly for Indigenous and minority populations [4, 5].

Telehealth is increasingly recognised as a strategy for improving healthcare access in underserved areas, with evidence suggesting it can help overcome geographical barriers and reduce disparities in healthcare delivery [6, 7]. However, questions remain regarding the quality of clinician-patient interactions, clinical safety and continuity of care particularly for paediatric populations [8, 9]. In New Zealand, these considerations are compounded by inequities in digital access, which may limit the equitable reach and delivery of telehealth services, particularly for Māori and Pasifika communities [5, 10].

From a paediatric perspective, telehealth has become increasingly established internationally as a means of supporting children and young people across a range of health conditions, including mental health, chronic disease management, and rehabilitation. Recent evidence indicates that telemedicine interventions are being increasingly integrated into paediatric chronic care pathways for conditions such as diabetes, asthma, and obesity, with studies demonstrating feasibility, high patient satisfaction, and in some cases, improved clinical outcomes compared with usual care [11]. In mental health care, approaches such as cognitive behavioural therapy delivered via video conferencing have shown good acceptability and satisfaction among young people and families, although further research is needed to establish their long-term effectiveness [12]. Similarly, telehealth applications in paediatric rehabilitation, particularly for children with neurodevelopmental or physical disabilities, have shown potential to improve access to therapy and continuity of care for families in rural regions [13, 14].

Children and young people in New Zealand face persistent challenges in accessing healthcare that is timely, culturally appropriate and equitable [15]. National data indicate that Māori children in particular experience higher levels of unmet healthcare need than their non-Māori peers [16, 17]. Geographic remoteness, socioeconomic disadvantage and digital inequities further compound these access barriers, with children from high deprivation areas and rural regions being more likely to report unmet need [18]. Telehealth has the potential to help address inequities in healthcare access, with equitable implementation requiring services to be co-designed with communities and tailored to

meet the cultural, linguistic, and developmental needs of children, young people, and their families [5, 19].

Despite growing activity, the evidence base for telehealth use with children and young people in New Zealand remains fragmented. To the best of our knowledge, no comprehensive mapping has been undertaken to synthesise what is known, and where gaps remain including the types of telehealth interventions in use, their effectiveness and acceptability, key contextual enablers and barriers, the populations studied, and how outcomes are measured. The aim of this scoping review, therefore, is to map the use of telehealth in the delivery of healthcare for children and young people in New Zealand. Mapping the existing evidence will identify key characteristics, gaps, and opportunities to inform equitable and sustainable models of telehealth care.

## 2 | Methods

A scoping review was conducted following Arksey and O'Malley's [20] framework. enhanced by Joanna Briggs Institute (JBI) [21] recommendations was conducted. Reporting followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines [22]. Stages included: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting data, and (5) reporting results.

### 2.1 | Identify the Research Question

Using JBI's Population-Concept-Context (PCC) framework [21] we focused on children and young people (population), telehealth interventions (concept), and the New Zealand context. The research question was: What is known about the use of telehealth, telemedicine, telemonitoring, telepractice, telenursing, or telecare for children and young people in New Zealand?

### 2.2 | Identify Relevant Studies

A systematic search of MEDLINE, SCOPUS, and CINAHL captured biomedical, nursing, allied health, and interdisciplinary literature. The search strategy, developed with a librarian,

**TABLE 1** | Inclusion and exclusion criteria.

| Domain     | Inclusion criteria                                                                                                                                                                              | Exclusion criteria                                                                                                                           |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Population | Children and young people up to 24 years of age (reflecting the definition of youth)                                                                                                            | Adults aged over 24 years; studies focusing solely on adult populations                                                                      |
| Concept    | Health-related interventions, services, or experiences addressing physical or mental health                                                                                                     | Studies unrelated to health interventions, services, or experiences; purely theoretical studies without health-related focus                 |
| Context    | Studies conducted in New Zealand within primary care or community-based settings; studies with a significant community-based component<br>Peer reviewed studies published between 2020 and 2025 | Studies conducted solely in secondary or tertiary hospital settings without a community component; international studies outside New Zealand |

TABLE 2 | Study characteristics.

| Author (Year)         | Design                                                                                         | Sample                                                                                                                                                                                                                                                                                                             | Data collection                                                                                                                                                                                                                                                                                                                                                                                     | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Relevance to project question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Babbage et al. (2020) | Qualitative exploratory design using thematic analysis within a social constructivist paradigm | Total participants: 114<br>Youth (12–15 years): 31<br>Youth (16–20 years): 42<br>Adults (21+ years): 41<br>Gender: 74 female, 40 male                                                                                                                                                                              | Data collection method: 18 semi-structured focus groups held in rural locations<br>Groups were stratified by age<br>Each group lasted ~1 h<br>Conducted in community/school/health settings                                                                                                                                                                                                         | <ul style="list-style-type: none"><li>Participants—especially youth—valued the accessibility of health information via smartphones, internet, and apps.</li><li>Rural communities face barriers such as poor connectivity, power cuts, and affordability of internet and devices.</li><li>While tech can reduce travel costs, the upfront cost of devices and internet is a barrier for low-income families.</li><li>Technology fosters independence, especially among young people seeking privacy and control over their health.</li><li>Concerns about misdiagnosis and the reliability of online content were expressed, particularly by older participants.</li><li>Online platforms can reduce stigma and support private exploration of sensitive issues (e.g., mental health).</li><li>Social media is seen as a way to connect with others with similar health conditions and raise awareness.</li><li>Tech enables social connectedness in isolated areas but also raises concerns about reduced face-to-face interaction and cyberbullying.</li></ul> | The study focuses on youth and young adults in rural NZ and their attitudes to using technology for health, including telehealth, eHealth, and mHealth. While it does not specifically examine primary care telehealth delivery to children, it offers crucial insight into acceptability, access, and equity considerations in community-based digital health for young people. Highlights barriers and enablers relevant to implementing telehealth for children in rural primary care contexts (e.g., digital access, autonomy, cost). Demonstrates telehealth potential to extend mental health services to youth in underserved areas?     |
| Chan et al. (2024)    | Prospective observational cohort study.                                                        | Total participants: 300<br>Age above 12 years with a history of moderate or severe asthma attack in the past 12 months.                                                                                                                                                                                            | Smart watch to assess heart and respiratory rate.<br>Peak flow meter and smart inhaler (adherence and inhalation).<br>Cough monitoring application (regular use over 6-month period).<br>Fortnightly questionnaires on wellbeing and asthma control.                                                                                                                                                | <ul style="list-style-type: none"><li>Study protocol -an example of how digital technology could generate a more accurate risk prediction model for asthma attacks.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | This study demonstrates current research being undertaken which will impact the delivery of digital technology in the future.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Garrett et al. (2022) | Cross-sectional observational study, using thematic analysis.                                  | Total participants: 346<br>15–17 years: 96<br>18–19 years: 44<br>20–21 years: 54<br>22–23 years: 80<br>24–25 years: 72<br>Māori: 40<br>Pacific: 7<br>Asian: 51<br>European: 236<br>Middle Eastern, Latin, American, African: 9<br>Not stated: 7<br>Female: 206<br>Male: 96<br>Gender diverse: 11<br>Not stated: 33 | Data collection method: 30 question survey formatted as multiple choice, Likert scales, slider scales, and open-ended questions with free-text comments.<br>Assessing the advertising link directed potential participants to the study information.<br>Free-text comments were analysed using template analysis by developing a coding template and defining themes at the initial template phase. | <ul style="list-style-type: none"><li>Barriers to accessing primary healthcare: belief that concerns will not be taken seriously; anxiety; lack of time and feeling rushed; waste of time and resources.</li><li>Positive aspects of telehealth: convenience, less energy required to attend appointment; less anxiety; cost saving.</li><li>Negative aspects of telehealth: lack of privacy; quality of care compromised; too rushed; difficulties with communication; don't like talking on the phone; concern about missing the call.</li><li>Situations most appropriate for telehealth: only for specific minor issues; useful for certain people.</li><li>Supporting young people to use telehealth: concerns about practicalities of telehealth; limitations about safety and effectiveness of telehealth.</li><li>Young people voiced that telehealth consultations should be offered as a choice.</li><li>Young people shared a preference for in-person consultations despite barriers to accessing clinics.</li></ul>                                 | The study focuses on young people (15–25 years) in the Greater Wellington area and their views on the use of telehealth for the delivery of primary care. It offers insight into both the positive and negative aspects identified by young people towards the use of telehealth for the delivery of primary care. The study does not differentiate between phone calls and video calls as mode of telehealth delivery. Supports the integration of asynchronous digital tools (like apps) with synchronous telehealth services. Indicates how mobile health tools can empower youth self-management and reduce reliance on emergency services. |

(Continues)

TABLE 2 | (Continued)

| Author (Year)          | Design                                                                                                                                                                                                                                     | Sample                                                                                                                     | Data collection                                                                                                                                                                                                                                                                                    | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Relevance to project question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Graham et al. (2022)   | Mixed methods realist evaluation.                                                                                                                                                                                                          | Phase 1: 37 practitioners<br>Phase 2: 15 case note audits<br>Phase 3: 15 practitioners who had case notes audited.         | Phase 1: Determinants of Implementation Behaviours Questionnaire.<br>Phase 2: Retrospective case note audit identified practitioner input during telehealth.<br>Phase 3: Interviews with practitioners and parents.                                                                                | <p>Phase 1:</p> <ul style="list-style-type: none"> <li>Health professionals had modest use of telehealth (53% reported daily or weekly use), however most intended to use it.</li> <li>Skills at applying telehealth were low, but perceived knowledge about telehealth was high.</li> <li>Health professionals were supportive of telehealth but only a few practitioners had a plan for implementation.</li> </ul> <p>Phase 2:</p> <p>During telehealth sessions the extend of parent/child was unable to be extracted from the case note audit due to a lack of documentation.</p> <p>Phase 3: Five main themes identified.</p> <ol style="list-style-type: none"> <li>I'd recommend you try it</li> <li>I felt listened to</li> <li>Motivated to enable access</li> <li>It's a tool not a go-to</li> <li>When not to telehealth</li> </ol>                   | <p>This mixed methods study focused on the conditions required to facilitate telehealth for children with Neurodisability.</p> <p>A key factor in telehealth being offered to families was the health practitioners' confidence and willingness to try telehealth as an alternative to in-person care.</p> <p>Experiential and ongoing training for health professionals is needed to overcome the unfamiliar and uncomfortable start to implementing telehealth into practice.</p> <p>Practice guidelines and policies detailing with whom, when and how to offer telehealth may support practitioners to plan telehealth care.</p> <p>Recommended the development of resources to improve culturally competent telehealth care for Māori.</p> <p>Highlights the need for more research pertaining to Māori perspective to inform the development of telehealth.</p> <p>Parents and practitioners collaborative approach allowed to telehealth to be presented as a choice, and often families moved between telehealth and in-person meetings. A hybrid approach is suggested.</p> <p>Telehealth improved access to therapy in conjunction to decreasing the duration or therapy session and increasing the intensity of the therapy session.</p> <p>Emphasises the need for greater availability of telehealth services in paediatrics and the need to move telehealth from novel innovation to standard practice.</p> |
| Humphrey et al. (2021) | Qualitative descriptive study with a two phased approach.<br>Phase 1: Focus groups of parents and professionals (paediatricians and midwives).<br>Phase 2: testing of app over a 12-week period with caregivers of children under 2 years. | 208 participants<br>101 completed follow-up survey<br>92% female<br>93% European<br>14% Māori<br>Mean child age 7.8 months | 48% entered measurements (weight, height, and head circumference) on three or more occasions (data collected from the app).<br>90% of all measurements were from a health professional.<br>44% participants engaged in the app up to the 12-week period.<br>101 participants completed the survey. | <ul style="list-style-type: none"> <li>70% reported that the app was helpful in their understanding and interpretation of their child's growth chart.</li> <li>A participant shared that the app was a helpful tool to show both the GP and paediatrician the growth charts. This was helpful for information sharing between the well child nurse, paediatrician and GP to identify the child's weight trend.</li> <li>A few had potential privacy concerns. No other comment was given regarding this.</li> <li>Sharing of the app was highlighted as an important function. This allowed for the app to be shared between all the child's caregiver, providing them with access to adding information.</li> <li>Culturally appropriate information is essential, e.g., cultural differences for Chinese mothers during the first month postpartum.</li> </ul> | <p>This qualitative descriptive study demonstrated the acceptability, feasibility and use of child growth app.</p> <p>The app allowed for information sharing between parents/caregivers and their child's health professional team.</p> <p>The app was a tool for improving the health literacy of caregivers/parents regarding their child's growth and development.</p> <p>There was low Māori and Pasifika engagement with the app which suggests that further research is required to investigate the cultural acceptability of the app.</p> <p>Although not discussed in detail, a few participants raised potential privacy concerns about the app.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| McLay et al. (2022)    | Randomised single-blind clinical trial with three parallel arms.<br>Naturalistic developmental behavioural intervention (NDBI). Acceptance and commitment therapy (ACT).<br>NDBI and ACT.                                                  | Minimum of 78 caregiver-child dyads who meet the inclusion criteria.                                                       | Caregivers will participate in the ACT NDBI programmes over the 13-week study period including size self-directed online web-based modules and seven group Zoom sessions.                                                                                                                          | <ul style="list-style-type: none"> <li>Study protocol is an example of how telehealth-delivered therapy sessions could support early access to support for children with autism and their caregiver's mental health.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>This study suggests that further research is required to determine if specific telehealth-delivered therapy sessions are effective.</p> <p>It highlights that telehealth may be a solution for timely access to required supports for children with autism and their caregivers.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

(Continues)

**TABLE 2 |** (Continued)

| Author (Year)         | Design                                                        | Sample                                                                                                                                                              | Data collection                                                                                                                                                                                                                                 | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Relevance to project question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| Pavlova et al. (2022) | Qualitative study design.                                     | 23 employees/volunteers from included organisations.                                                                                                                | Data collection method:<br>Semi-structured interviews which were audio-recorded and transcribed.                                                                                                                                                | <p>Technological innovations</p> <ul style="list-style-type: none"> <li>• Innovation in service delivery, e.g., Viber, TikTok, WhatsApp, Facebook and Instagram</li> <li>• Remote working: enhanced recruitment and employee retention. Allowed for greater diversity in staff providing service and for more qualified staff to be hired.</li> <li>• Technological innovations in service promotion, e.g., geotargeting</li> </ul> <p>Positive impacts:</p> <ul style="list-style-type: none"> <li>• Increased flexibility, e.g., not needing to travel to appointments</li> <li>• Able to reach previously underserved populations</li> <li>• Enriched practice with whanau input and more casual doctor appointments</li> </ul> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• Accessibility—lack of access to technology and internet</li> <li>• Privacy and safety concerns regarding patient information being overheard while on call, storage of medical information and images.</li> <li>• Efficiency—missing non-verbal cues which resulted in consultations lasting longer</li> <li>• Discrepancies between the level of innovation in GP practices is in part due to the lack in infrastructure to have virtual consultations</li> </ul> | <p>This study focuses on the innovation of digital health during the COVID-19 pandemic. Telehealth services improved accessibility for population previously not able to access services due to living remotely or time restraints. In some cases, the use of telehealth provided additional therapeutic opportunities for greater rapport in an informal setting.</p> <p>The study notes that not all health consumers had equal access to internet, data, hardware or safe, confidential and professional environments suited to a virtual consultation.</p>                                                                                                                                                                                |
| Rose et al. (2022)    | Quantitative descriptive study design.                        | Total participants: 346 (aged 15–25)<br>313 full completed survey<br>33 partially completed survey<br>15–17: 96<br>18–19: 44<br>20–21: 54<br>22–23: 80<br>24–25: 72 | Data collection method:<br>Online surveys accessed through clicking the advertisement link.                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Phone call 91%, 15.8% video call, 8.3% both phone and video call.</li> <li>• When rating their telehealth experience on a five point “happy face slider scale” 73% were happy.</li> <li>• 47.3% of those surveyed checked one or more of the following: lack of phone data, lack of reliable internet access, lack of a mobile phone coverage, unreliable phone, no device to use, no camera for video calls, share a phone with family.</li> <li>• A higher proportion of people with transport difficulties or disabilities wanted to use telehealth in the future compared with those without.</li> <li>• Only half wanted to use telehealth for future primary health care appointments in the future and would prefer phone call over video calls.</li> <li>• Both convenience and lack of travel time were identified as benefits of telehealth.</li> <li>• Concerns were identified about clinician diagnostic accuracy, technical and connectivity issues and privacy issues while using telehealth.</li> <li>• Recommends preparing young people for telehealth consultation by providing them with detailed information on the clinical website and via explanation when enrolling.</li> </ul>                 | <p>This quantitative descriptive study explored the experiences of young people who had received telehealth for primary care.</p> <p>Although most of the surveyed young people positively rated their previous telehealth experience, only half wanted to use telehealth for future primary health consultations.</p> <p>The young people identified benefit of increased convenience and lack of travel time. However, they were concerned about potential technological and connectivity issues, as well as concerns about the clinician's ability to diagnose accurately using telehealth.</p> <p>This study recommended providing information regarding the telehealth consultation to the young person prior to their consultation.</p> |
| Simkin et al. (2023)  | Non-randomised study design. Prospective observational study. | 314 children (5–8 years) were eligible. 69 children attended the examination.                                                                                       | 68 children (5–8 years old) who were screened using the ART-ROP telemedicine model. Comprehensive paediatric eye exams and retinal imaging were conducted. Participants were grouped into two cohorts: those with and without a history of ROP. | <ul style="list-style-type: none"> <li>• No significant differences in long-term visual outcomes (visual acuity, stereopsis, refractive error, intraocular pressure, or optic nerve appearance) between children with and without a history of ROP.</li> <li>• Persistent peripheral avascular retina was found in 4 children—all had a history of ROP but were asymptomatic at follow-up. Children who underwent laser treatment for ROP showed no evidence of high myopia, contrary to previous studies suggesting increased myopia risk post-treatment.</li> <li>• The ART-ROP model was effective at detecting ROP—no missed cases were identified in follow-up assessments.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>First New Zealand-based study reporting long-term outcomes of children screened with enhanced telehealth technology (wide-field imaging and remote review).</p> <p>Validates the use of non-ophthalmologists for image capture and remote assessment, supporting work force sustainability and accessibility.</p> <p>The study provides evidence regarding one specific e-health application—telemedicine-based ROP screening using wide-field digital imaging—in a paediatric population in New Zealand.</p> <p>It demonstrates effectiveness, safety, and positive long-term outcomes of this telehealth model, making it a successful example of enhanced technology in community-based paediatric eye care.</p>                        |

(Continues)

TABLE 2 | (Continued)

| Author (Year)     | Design                                                                        | Sample                                                                                                                                                                                                                                                                    | Data collection                                                                                                                                                                                                                                                                                                             | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Relevance to project question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Tye et al. (2020) | Exploratory descriptive qualitative study design using a sociotechnical lens. | Actors were school staff involved in delivering telemedicine in school. Twenty-one school were using telemedicine. Thirteen schools were selected for the study. Five schools agreed to participate in the study and from these schools eight participants were selected. | <p>Data collection method: Semi-structured interviews (40 min) were completed to develop and understanding of the participants experiences with the telemedicine programme.</p> <p>Thematic analysis and data coded using the Social Actor Model constructs of identities, affiliations, interactions and environments.</p> | <p><b>Identities:</b></p> <ul style="list-style-type: none"> <li>• Provided an opportunity for teaching and administration staff to support healthcare.</li> <li>• Was seen as a learning opportunity.</li> <li>• Being a part of the telemedicine programme was an important part of their professional identity.</li> <li>• Providing telemedicine was linked to supporting the school's values.</li> </ul> <p><b>Affiliations:</b></p> <ul style="list-style-type: none"> <li>• Strong relationships between the children and staff were key to the telemedicine success.</li> <li>• These relationships were enabled by the smaller size of rural schools.</li> <li>• Wider community support was important.</li> <li>• The telemedicine team was important in providing support and for school staff.</li> </ul> <p><b>Interactions:</b></p> <ul style="list-style-type: none"> <li>• The telemedicine programme contributed to building positive affiliations with providing opportunities for interaction with the students.</li> <li>• The telemedicine interaction was relaxed and was an opportunity for the students to discuss any of their concerns.</li> <li>• Telemedicine checks were educational for the students and encouraged health-seeking behaviours.</li> </ul> <p><b>Environments:</b></p> <ul style="list-style-type: none"> <li>• Participants identified the need for privacy, protecting vulnerability and the need to provide a safe and open environment.</li> <li>• Telemedicine required staff to accommodate extra duties.</li> <li>• Telemedicine seen to have positive impact on reducing absenteeism, lack of disruption due to health concerns and promote healthier students and therefore better learning opportunities.</li> </ul> <p><b>Role of school staff:</b></p> <ul style="list-style-type: none"> <li>• Discusses the diversification of teacher aide and principal role to align with providing telemedicine in school.</li> </ul> <p><b>Doctor-patient relationship:</b></p> <ul style="list-style-type: none"> <li>• Staff-student health checks are empowering and effective. Staff have strong relationships with the students and can complete a biopsychosocial assessment as well as addressing the presenting ailment.</li> <li>• Staff can identify the social determinants of health and provide support as needed.</li> <li>• While school staff cannot replace health professional they become an extension of this relationship.</li> </ul> <p><b>Cultural considerations:</b></p> <ul style="list-style-type: none"> <li>• Identified further research is required.</li> <li>• School staff are a part of the wider social system of the child, and this research suggests that telemedicine aligns with Māori models of health and reinforces whānau centred care.</li> </ul> | <p>This study focuses on the perceptions of a telemedicine model of care in school-based health. Demonstrates the acceptability and feasibility of a telehealth model of care within New Zealand schools from a school staff perspective (the main administrators of telemedicine programme). Further research needed into understanding the acceptability of telehealth from the student, caregiver or cultural perspectives. The existing relationships between school staff and students were contributed to the telemedicine success. Telemedicine supported students to learn positive health-seeking behaviours. School staff are a part of the child's wider social system and are in the optimal position for understanding the child and their whānau determinants of health.</p> |

(Continues)

TABLE 2 | (Continued)

| Author (Year)      | Design                                                                                                                                  | Sample                                                               | Data collection                                                                                                                                                                                                        | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Relevance to project question                                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wade et al. (2021) | Mixed method study design. Focus groups by telephone using a semi-structured interview technique. Reviewing NZ data in this study only. |                                                                      | 1. A Māori cultural advisor reviewed the TOPS therapist manual.<br>2. 6 adolescent-parent dyads and two health professionals completed the 10-TOPS sessions and then participated in focus groups to provide feedback. | <ul style="list-style-type: none"><li>• Adolescents and parents agreed that TOPS would help with the young person plan for future handling of problems, understanding their injury better, get along with parents better, feel less stressed and help make positive changes with their family.</li><li>• Parents provided feedback suggesting shorter more concise sessions.</li><li>• Recommended resources and sessions to be in NZ English with NZ actors sharing personal experiences.</li></ul> | This mixed method study discusses the acceptability of an online support tool for adolescence with traumatic brain injury. The study highlights the need for Māori cultural input into the design of telehealth services. |
| Ying et al. (2023) | Retrospective review. Non-randomised study design.                                                                                      | 162 participants<br>83—males<br>79—female<br>Average age of 62months | Review of data from Te Whatu Ora Waikato District Dermatology Department's telehealth advice service.                                                                                                                  | <ul style="list-style-type: none"><li>• The use of telemedicine improved the prescribing of more potent topical steroid creams on the body and mild/moderate topical steroid creams on the face.</li></ul>                                                                                                                                                                                                                                                                                           | This retrospective review focuses on the prospection patterns of eczema in children and the impact of telemedicine. It demonstrated that telemedicine improved GP prescribing patterns.                                   |

combined MeSH terms and keywords using Boolean operators. Searches were limited to peer-reviewed, English-language studies (2020–2025) capturing contemporary post-pandemic telehealth practices. Grey literature searching included the first 200 Google Scholar results 23. Reference lists were manually screened. Original searches (May 28–August 15, 2025) were updated December 8, 2025, and again in August 2026; no additional eligible studies were identified. Covidence software [23] managed results and facilitated screening.

2.3 | Study Selection

Two reviewers screened titles, abstracts, and full texts against pre-defined criteria (Table 1), with discrepancies resolved through discussion or third-reviewer consultation. Full-text exclusion reasons were documented.

2.4 | Charting the Data

A standardised data extraction form was developed with the following headings: citation details, study design, sample, data collection methods, key findings and outcomes, and relevance to the research question (Table 2). Data extraction was undertaken independently by two reviewers, with regular meetings to address inconsistencies and ensure accuracy.

2.5 | Collating, Summarising and Reporting the Results

Findings were collated and summarised using content synthesis, consistent with scoping review methodology [20]. Extracted data were systematically reviewed to identify and group similar concepts, mapping the range and nature of evidence. Categories were developed inductively and refined through iterative comparison across studies. This approach accommodated the heterogeneity of study designs and evidence types.

2.6 | Quality Appraisal

The Mixed Methods Appraisal Tool (MMAT) [24] was used to appraise each included study (Table 3). Each study was assessed for sampling strategy relevancy, target population representativeness, measurement appropriateness, nonresponse bias, and statistical analysis appropriateness. Please see Supporting Information S1 for the questions related to MMAT.

3 | Results

As demonstrated in Figure 1. PRISMA flowchart a total of 259 records were identified through database searches (MEDLINE: 175, Scopus: 68, CINAHL: 16). No additional records were found through citation searching or grey literature. After removing 112 duplicates via Covidence, 147 studies were screened. Of these, 31 were assessed for eligibility, with 19 subsequently excluded due to reasons such as wrong setting (*n* = 7), adult population (*n* = 6), wrong intervention (*n* = 4), wrong outcomes (*n* = 1), and inability to

**TABLE 3** | MMAT scores.

| <b>Qualitative studies</b>              |           |           |            |            |            |            |            |
|-----------------------------------------|-----------|-----------|------------|------------|------------|------------|------------|
|                                         | <b>S1</b> | <b>S2</b> | <b>1.1</b> | <b>1.2</b> | <b>1.3</b> | <b>1.4</b> | <b>1.5</b> |
| Babbage et al. (2020)                   | Yes       | Yes       | Yes        | Yes        | Yes        | Yes        | Yes        |
| Pavlova et al. (2022)                   | Yes       | Yes       | Yes        | Yes        | Yes        | Yes        | Yes        |
| Simkin et al. (2023)                    | Yes       | Yes       | Yes        | Yes        | Yes        | Yes        | Yes        |
| <b>Randomised controlled trials</b>     |           |           |            |            |            |            |            |
|                                         | <b>S1</b> | <b>S2</b> | <b>2.1</b> | <b>2.2</b> | <b>2.3</b> | <b>2.4</b> | <b>2.5</b> |
| McLay et al. (2023)                     | Yes       | Yes       | Yes        | Can't tell | Can't tell | Yes        | Can't tell |
| <b>Non-randomised controlled trials</b> |           |           |            |            |            |            |            |
|                                         | <b>S1</b> | <b>S2</b> | <b>3.1</b> | <b>3.2</b> | <b>3.3</b> | <b>3.4</b> | <b>3.5</b> |
| Garrett et al. (2022)                   | No        | Yes       | Yes        | Yes        | Yes        | Can't tell | Yes        |
| <b>Qualitative descriptive studies</b>  |           |           |            |            |            |            |            |
|                                         | <b>S1</b> | <b>S2</b> | <b>4.1</b> | <b>4.2</b> | <b>4.3</b> | <b>4.4</b> | <b>4.5</b> |
| Humphrey et al. (2021)                  | Yes       | Yes       | Yes        | Yes        | Yes        | Can't tell | Yes        |
| Rose et al. (2023)                      | Yes       | Yes       | Yes        | No         | Yes        | Can't tell | Yes        |
| Simkin et al. (2023)                    | Yes       | Yes       | Yes        | Yes        | Yes        | Yes        | Yes        |
| Ying and Koch (2024)                    | No        | Yes       | Yes        | Yes        | Yes        | Yes        | Yes        |
| <b>Mixed methods studies</b>            |           |           |            |            |            |            |            |
|                                         | <b>S1</b> | <b>S2</b> | <b>5.1</b> | <b>5.2</b> | <b>5.3</b> | <b>5.4</b> | <b>5.5</b> |
| Chan et al. (2024)                      | Yes       | Yes       | Yes        | Yes        | Yes        | Can't tell | Yes        |
| Graham et al. (2023)                    | No        | Yes       | Yes        | Yes        | Yes        | Can't tell | Yes        |
| Wade et al. (2021)                      | Yes       | Yes       | Yes        | Yes        | Yes        | Can't tell | Yes        |

extract paediatric data from mixed populations ( $n=1$ ). Ultimately, 12 studies were included in the final review [14, 25–35].

The aim of this scoping review was to map the use of telehealth in the delivery of community health services for children and young people in New Zealand. The results were organised into three main themes: (1) enablers; (2) barriers; (3) acceptability and feasibility. Representative quotes can be found in Table 4.

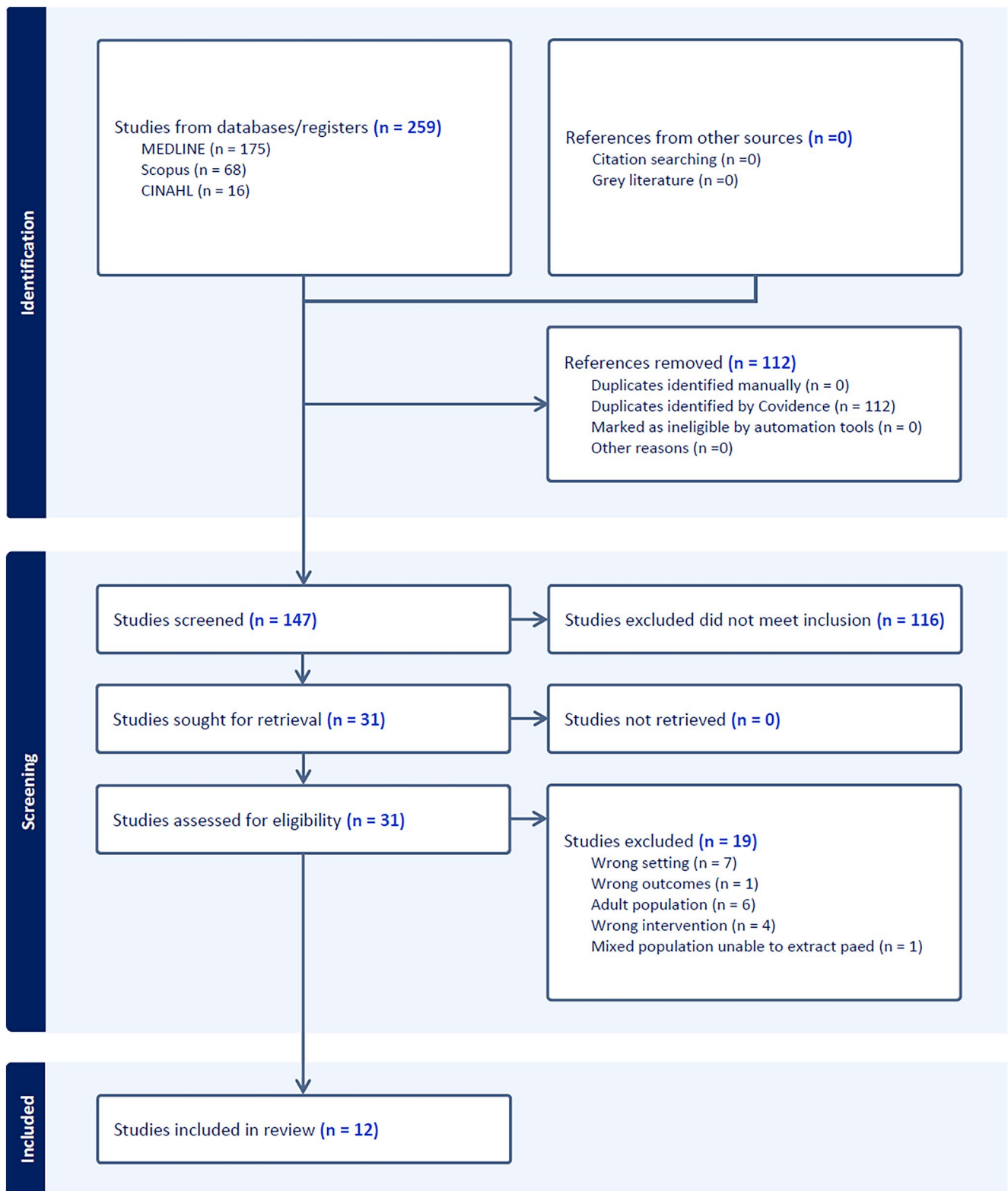
### 3.1 | Enablers

Health professionals and patients reported that telehealth improved access to healthcare while saving time and reducing costs for both clients and providers [25, 27, 29–31]. By reducing reliance on in-person healthcare services, telehealth also enabled providers to extend service delivery to populations who may otherwise have had limited access to care [30]. For example, 'Digital connectivity also enabled service providers to reach out and expand service delivery to previously underserved populations' [30, p. 6]. In addition to enhanced access, parents and caregivers reported that telehealth facilitated greater collaboration between themselves and their child's healthcare team, promoting more integrated and coordinated care [28]. This collaboration was particularly evident when digital tools allowed parents

to consolidate and share information across providers. As one parent explained,

Because we could show the GP and the Paediatrician .... The DHB [District Health Board] Paediatrician had a paper and had to replicate the plots, and the GP only entered the measurement she took, which didn't show a real trend. [with the APP]...We had the birth weight, Plunket nurse weights, paediatrician and GP weights on the graph (Parent of under 6-month child) [28p. 11].

The success of telehealth implementation was also influenced by the motivation and adaptability of health professionals. A willingness to improve access for families was identified as a key enabler in overcoming initial learning curves and technological challenges [14]. As one occupational therapist reflected, 'We just need to keep thinking about different ways to make it work better for the families, and I think there's plenty of scope for that' [14, p. 162]. Relationships between the child, young person, their whānau, and the health professional also contributed to the success of telehealth [14, 27]. Similarly, school-based telehealth clinics were able to draw upon existing relationships between school staff and students,



**FIGURE 1** | PRISMA flow chart.

enhancing acceptability and engagement [35]. As one participant noted, 'It's all positive for us because the whole point about being here is for our kids to be healthy and well' [35, p. 2035]. Tye et al. [35] suggested that these established relationships supported the integration of digital health into the care experience, with minimal disruption to client-provider relationships.

### 3.2 | Challenges

Whilst telehealth's benefits were recognised, barriers such as limited access to compatible devices and reliable internet were noted [25, 30, 31]. Health providers cautioned that unequal access to such technology could worsen health inequities [30]. As Babbage et al. [25] observed, '*for others the high costs of internet*

**TABLE 4** | Representative quotes.

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enablers                      | <p><i>“You wouldn’t want to go somewhere where everyone could see that you had a problem or going to the counsellor at school is kind of scary for some people so if there was something like that online that they could go by themselves then no-one would know that” [25, p. 7].</i></p> <p><i>“I think it’s great because the kids feel more comfortable and they see you every day so it’s not like [they’re] just going to a stranger, because some kids get really scared. But at least you have the kids’ trust and it makes it easier for them to come in and see you and open up about things” [35, p. 2035].</i></p>                                                                                                                                                                                                                                      |
| Challenges                    | <p><i>“We had to be specific about what we would accept when (soliciting medical images). It had to be anonymous, there had to be no identifying feature, so certainly not a face in the shot. You took a picture of the areas itself. So, it’s all of that—safety, security, privacy. The IT guys were working red hot hours (to meet) the kind of quality, privacy, and ethical standard of healthcare” [30, p. 7].</i></p> <p><i>“Letting young people know that clinicians are skilled in diagnosis using specific lines of questioning and do not always need to see physical signs or symptoms could help reassure them that telehealth can be used safely and effectively for many clinical concerns” [31, p. 324].</i></p>                                                                                                                                   |
| Acceptability and feasibility | <p><i>“I think technology could help in [LOCATION] as like more of an outreach thing because we are so rural and we are so separated from a lot of the big kind of city centres that have a lot more kind of medical awareness [...] And I feel like technology can contribute to [LOCATION] by like opening that a lot more and letting some of those new ideas come in too [...] like I reckon especially things with mental health which is still unfortunately quite stigmatised here” [25, p. 7].</i></p> <p><i>“Easier to remember and speak to people from the comfort of your own home or somewhere familiar. Sometimes I feel so awful (physically and mentally) I can’t even move and to get help while I feel that would be incredibly beneficial... would benefit a lot of people especially those with struggling mental health” [27, p. 6352].</i></p> |

usage were a major barrier ... especially if a person did not own a smart phone or computer or have easy access to an internet connection’ (p. 5). Limited internet access also constrained the services clients could receive,

(Some) people that didn’t have the strength of the internet to be able to do that. And that discriminated those people. (In such case) we had to default to the phone which just means you lose out on all those visual cues, and I worried that I wasn’t going to service them as well as I could if I was seeing [30, p. 7].

Health providers and consumers expressed privacy concerns about telehealth, including apprehension over sharing personal information online and uncertainty about data storage safety [25, 30]. Some participants highlighted the need for anonymity when sharing medical images, *“it had to be anonymous... There had to be no identifying feature, so certainly not a face in the shot”* [30, p. 7]. Others noted the importance of having a private space for consultation, particularly when at work or school [27] and/or emphasised the clinician’s role in confirming the client’s privacy at the outset of a session [31]. In addition, some participants perceived a loss of quality in care delivered via telehealth, prompting the need for reassurance that accurate diagnoses can still be made without physical examination [31].

**3.3 | Acceptability and Feasibility**

Across the included studies, telehealth technologies were consistently found to be both acceptable and feasible for use in community health services for children and young people. Simkin et al.

[32] provided a successful example of the use of telehealth technology in community-based paediatric eye care. This validates the use of remote assessment, supporting workforce sustainability and accessibility. Additionally, Tye et al. [35] demonstrated the feasibility of a school-staff administered telehealth model of care within New Zealand schools and highlighted the acceptability of telehealth from the school staff perspective.

It illustrates that telemedicine is an appropriate model of care for schools, with non-clinically trained school staff involved in its delivery. Telemedicine was perceived positively by the school staff across many aspects, which affirms the idea that non-clinicians can play a key role in healthcare delivery [35, p. 2039].

Two study protocols further illustrated potential benefits. Chan et al. [26] explored digital technology to improve asthma risk prediction, while McLay et al. [29] examined telehealth-delivered therapy for children with autism, noting that *“Telehealth provides consumers with additional ways to access supports... [and] may help reduce inequalities in healthcare faced by Māori and other ethnic minorities”* (p. 2). Research also identified that some types of consultations were more easily adapted to telehealth than others.

This instance it was fine as it was just about a small rash on my face, I sent through pictures etc. But wouldn’t’ve felt as comfortable doing that for other parts of my body. Video appt would only work for certain visits (participant 22–23 years) [27, p. 6352].

Additionally, Ying et al. [34] found that telemedicine advice improved some aspects of General Practitioner prescribing.

However, it was insufficient to overcome existing barriers to following recommended best practice for paediatric eczema management in primary care.

There was limited research identified about the acceptability and feasibility of telehealth technologies in community services for Māori children and young people. However, it was acknowledged that Māori consultation is recommended in the development of telehealth to include the cultural context and the incorporation of Te Reo Māori [33, 35].

## 4 | Discussion

This scoping review identified 12 studies examining telehealth technology use in community health services for children and young people in New Zealand [14, 25–35]. While the evidence base remains limited, the findings reveal important insights about how telehealth is being adopted in the New Zealand paediatric context and raise critical questions about equity and access.

### 4.1 | The Promise and Paradox of Access

The finding that telehealth improves healthcare access for rural populations aligns with international literature demonstrating telehealth's capacity to overcome distance barriers [2, 36–38]. However, this review also uncovered a paradox where telehealth was seen as having the potential to reduce geographical inequities, while simultaneously risking the creation of new digital inequities. The digital divide as a primary barrier is particularly concerning in the New Zealand context, where existing health inequities are already pronounced along socioeconomic and ethnic lines [5, 15, 16, 39].

International evidence suggests that disadvantaged populations often face compounding barriers to telehealth access, including limited device ownership, unreliable internet connectivity, and lower digital literacy [40–42]. Healthcare providers in the included studies recognised that these barriers may exacerbate existing inequities, highlighting the need for deliberate digital inclusion strategies. These may include device provision programmes, subsidised internet access, and low-bandwidth alternatives for families with limited connectivity [43, 44].

### 4.2 | Relationships as Enablers of Success With Telehealth

Existing therapeutic relationships appear central to successful telehealth delivery, challenging assumptions that technology inherently disrupts patient–provider connections. Hybrid models that combine telehealth with face-to-face care may support relationship-building, particularly in culturally sensitive contexts such as Indigenous health services [4]. Similarly, a systematic review of telehealth in well-child settings found that consumer satisfaction was closely linked to the quality of practitioner–consumer interaction, with positive relationships identified as key drivers of successful implementation [14, 45].

These findings raise important questions about telehealth's role in initial consultations versus ongoing care. If therapeutic relationships underpin telehealth acceptance, services may face challenges when establishing new patient connections remotely. This has implications for service design, suggesting that hybrid models incorporating initial in-person consultations followed by telehealth follow-up may be optimal for many paediatric services [45, 46].

### 4.3 | Cultural Safety–Māori Health Equity

The paucity of evidence specifically addressing telehealth for Māori children represents a significant gap for the New Zealand context. Internationally, Indigenous populations have experienced both benefits and harms from telehealth implementation, with outcomes heavily dependent on whether services are co-designed with Indigenous communities and incorporate cultural protocols [4, 47]. While telehealth may reduce some barriers such as transport costs and time away from work [48], it cannot address the fundamental drivers of Māori health inequity, including racism within healthcare systems and socioeconomic disadvantage [5, 49]. Without explicit attention to cultural safety, including appropriate education for those delivering care, telehealth risks becoming yet another healthcare innovation that fails to benefit Māori communities. This reinforces the importance of telehealth models that are informed by Indigenous perspectives and introduced within trusted environments to support equitable outcomes.

### 4.4 | Privacy, Quality and Clinical Gaze

Concerns about privacy and care quality reflect broader tensions in digital health implementation. The finding that patients were concerned about diagnostic accuracy in the absence of physical examination highlights the importance placed on hands-on clinical assessment. However, evidence suggests these concerns may not apply equally across all clinical presentations, with some studies indicating that telehealth achieves comparable clinical outcomes to in-person care across a range of conditions [3]. In contrast, telehealth presents some challenges for procedures requiring hands-on physical assessment, for example, palpation, posterior pharyngeal examination, and reflex testing [50]. The findings of this review also suggest that the suitability of telehealth varies according to the clinical presentation and the degree to which physical examination is required. For example, one participant reported that telehealth was appropriate for assessment of a facial rash when photographs could be provided but was perceived as less suitable for other concerns. While advances in remote examination technologies have increased the capacity for virtual assessment, limitations remain where hands-on examination is required. Recent evidence suggests that telehealth can achieve comparable assessments in selected circumstances, particularly when supported by remote examination devices, but diagnostic uncertainty may remain for more complex presentations [51]. Additionally, diagnostic test completion rates following telehealth consultations have been reported to be significantly lower compared to in-person visits, with one study reporting completion rates of 43% for telehealth versus 58% for in-person visits [52]. As telehealth continues to evolve,

addressing current limitations through innovative technologies, such as remote examination devices, will be essential. Equally important is the development of evidence-based guidelines to ensure appropriate use, maximising benefits while minimising risks to diagnostic accuracy and patient safety.

Privacy concerns raised by participants reflect legitimate anxieties about data security and data sovereignty in an increasingly digital world. These concerns are reflected in the international literature on telehealth and relate not only to data security and confidentiality, but also to the availability of fit-for-purpose private spaces in which consultations can take place in [9, 25, 53]. With these considerations in mind, New Zealand's regulatory framework for digital health will need to evolve alongside technological change whilst maintaining public trust and protecting patient confidentiality. These provisions should explicitly uphold Māori data sovereignty.

#### 4.5 | Strengths, Limitations and Future Directions

The small number of included studies ( $n=12$ ) and limited evidence examining clinical effectiveness and outcomes restrict the conclusions that can be drawn about the effectiveness of telehealth for children and young people in New Zealand. Despite searches being updated twice following the initial review process, including immediately prior to manuscript submission in August 2026, no additional eligible studies were identified. This finding highlights the limited and emerging nature of the evidence base relating to telehealth delivery for children and young people in New Zealand and underscores the need for further primary research. In particular, further research examining clinical outcomes, cost-effectiveness, and the long-term sustainability of paediatric telehealth services is needed to inform future service development and policy. Furthermore, research focused on populations including Māori, Pacific peoples, children with complex medical needs, and families in rural areas is needed to support evidence-informed and equitable service development. Studies examining the optimal balance between telehealth and face-to-face care across different clinical contexts and presentations would further strengthen the evidence base for service planning.

#### 5 | Conclusion

Telehealth shows promise for improving access to community health services for children and young people in New Zealand. However, realising this potential requires careful attention to equity, particularly addressing the digital divide and ensuring culturally responsive care. Telehealth should be positioned as a complementary tool within integrated models of care, supported by appropriate infrastructure, workforce training, and ongoing monitoring to ensure it improves access without reinforcing existing inequities.

#### Author Contributions

Conceptualisation: all authors equal. Methodology: Julie Blamires and Jessica Gardiner (equal lead), Sarah Williams, Te Wai Barbarich-Unasa. Formal analysis: Julie Blamires, Jessica Gardiner. Investigation: Jessica Gardiner. Data curation: Jessica Gardiner (Covidence), Julie Blamires. Writing – original draft: Julie Blamires and Sarah Williams equal.

Writing – review and editing: all authors equal. Visualisation: all authors equal.

#### Acknowledgements

This scoping review was supported by a grant from the Auckland University of Technology Faculty of Health and Environmental Sciences Rolling Funds, which provided funding for research assistance. Open access publishing facilitated by Auckland University of Technology, as part of the Wiley - Auckland University of Technology agreement via the Council of Australasian University Librarians.

#### Funding

This work was supported by AUT Faculty of Health and Environmental Science.

#### Conflicts of Interest

The authors declare no conflicts of interest.

#### Data Availability Statement

The data that support the findings of this study are openly available in CINAHL at <https://research-ebSCO-com.ezproxy.aut.ac.nz/c/cz6jai/search/advanced/filters?auth-callid=be60851-d860-4238-90b6-8513d8a100f2&autocorrect=y&defaultdb=ccm>.

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## Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Supporting Information S1:** Part I: Mixed methods appraisal tool (MMAT), version 2018. **Supporting Information S2:** Preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews (PRISMA-ScR) checklist.