

# Telehealth in Respiratory Education: Dialing into a New Model of Care

# What is Digital Health

Digital health enables people to better manage their health, supported by connected, integrated, and digitally-enabled care systems.

Digital health connects and empowers people and populations to manage health and wellness through accessible and supportive provider teams working within flexible, integrated, interoperable, and digitally-enabled care environments that strategically leverage digital tools, technologies and services to transform care delivery.

Digital health offers **transformational** opportunities to reach more people in their own space, and to use data and digital technologies to make healthcare more personalized, accessible and effective.

# Telehealth – the past

Telehealth in New Zealand dates back to early use of the telephone for clinical advice (early 20th century)

- Growth remained limited until the 1990s, when more structured services emerged

## 1990s

- PlunketLine (1994) – national telephone advice service
- Early teledermatology initiatives (~mid-1990s)

## 2000s

- Introduction of video conferencing in healthcare → limited by cost, infrastructure, and usability
- Development of early telepaediatric and regional telehealth services

## 2015 onwards – National Telehealth Service

- Establishment of Whakarongorau Aotearoa
  - Contracted to deliver national telehealth services (2015–2025)
  - Social enterprise (ProCare & Pegasus Health)
  - Delivers services such as Healthline and 1737 (mental health support), Quitline and many others

**In the last ten years, several factors have converged, enabling a more rapid increase in the number and breadth of telehealth. These include:**

- **Increased connectivity** - Expansion of Ultra-Fast Broadband enabling high-speed internet across NZ
- **Affordable technology** - Widespread access to smartphones, laptops, and digital tools
- **Mature software platforms** - Secure, user-friendly video and communication systems (teams, zoom)
- **COVID-19 pandemic** - Rapid shift to remote care and normalization, increased uptake and acceptance of telehealth
- **Funding and policy changes** - Support for virtual consultations in primary care
- **Health system pressure** - Increasing demand and limited workforce capacity
- **Changing expectations** - Greater acceptance from both clinicians and patients

# The global pandemic – COVID 19

**In 2020, when COVID-19 reached New Zealand, our entire health system had to rapidly adapt, almost overnight**

COVID exposed how dependent NZ was on traditional, in-person health care models

- Patients still required care
- Long term conditions such as asthma, bronchiectasis and COPD didn't pause
- Face to face consults not always possible
- Patients already struggling to access health services – COVID widened the gap

What we learned during COVID continues to shape how we think about access to care today, including how we support people with respiratory conditions

# Telehealth is now a government priority and no longer a 'nice to have' – it is part of how health care must be delivered

## Health Digital Investment Plan (HDIP)

- Dedicated investment in 'National Telehealth Service Plan 2024-2026'
- Investment in digital infrastructure
- Objective: 10% of medical appointments done via digital channels by 2026
- \$330m earmarked for data and digital health initiatives

## Shared Digital Health Record (SDHR)

- The result of a long-standing need to connect fragmented health information across the system
- Onboarding of GP clinics commenced April 2026
- Clinicians are expected to be able to start accessing Shared Digital Health Record data from mid-2026

# Types of Telehealth

- **Real-time (live care)**  
Phone or video consultations with patients
- **Asynchronous (store-and-forward)**  
Information sent and reviewed later (e.g. messages, photos, eConsults)
- **Remote monitoring**  
Patient data collected at home (e.g. peak flow, blood pressure)
- **Mobile health (mHealth)**  
Apps, texts, and wearable devices supporting self-management
- **Hybrid care**  
A combination of virtual and in-person care

# National Telehealth Services in Aotearoa

Telehealth is already embedded at a national level, providing accessible, 24/7 entry points into the health system

- Healthline (24/7 health advice)
- 1737 (mental health support)
- National Telehealth Service (Whakarongorau Aotearoa)
- Alcohol & Drug Helpline
- Gambling Helpline
- Quitline
- National Poisons Centre
- Immunisation Advisory Centre

# Telehealth – Across the Health System

Telehealth is embedded across national services, primary care, and specialist care

## **Primary care (GP / virtual providers):**

Tend, CareHQ, Practice Plus, HouseCall, Online Doctor NZ

## **Private / digital-first providers:**

MedOnline, Bettr, Well Revolution, PocketLab

## **Hospital & specialist services:**

Virtual outpatient clinics (e.g. dermatology, paediatrics, follow-ups)

## **Patient tools:**

Patient portals (e.g. Manage My Health), messaging / e-consults

# The Digital Divide

## In 2024 in NZ:

- 5.03m internet users | Internet penetration stands at 97.56 %
- 6.84m cellular mobile connections were active (equivalent to 130.3 % of the total population, indicating people have more than one mobile)
- An estimated 10-20 % of people in NZ experience some form of digital exclusion

*NB: Māori and Pasifika disproportionately impacted by digital exclusion*

## Digital Exclusion:

- Affects a wide range of people. Over a three-month period, CAB volunteers recorded 4.397 clients identified as being digitally excluded
- Affects people across all age demographics. This challenges the assumption that older people primarily struggle with online services

# Telehealth Safety and Security

## Privacy & confidentiality

- Comply with Privacy Act 2020 & HIPC
- Keep conversations private

## Secure systems

- Use approved, secure platforms
- Protect and store data safely

## Identity & consent

- Confirm patient identity
- Obtain informed consent

## Clinical safety

- Same standard as in-person care

## Environment & cultural safety

- Ensure private, safe setting
- Respect patient preferences

## Documentation

- Record consultation and modality
- Ensure follow-up and continuity

# Asthma NZ – our response

Like many health organisations, we had to rapidly adapt during COVID-19

- Asthma NZ was not considered an ‘essential’ service
- Long term conditions such as asthma, bronchiectasis and COPD did not pause
- Virtual and telephone appointments was our only option – our patients still needed support
  - Uncertainty about COVID-19 and its risk to health
  - Increased concern for respiratory health
  - Hesitation to access in-person care (acute services)
- Telehealth enabled us to continue delivering education and support
  - Reach patients safely
  - We posted out resources
  - Maintained connection during a time of isolation

# Where are we now?

**What started as a rapid response to a global pandemic has become a core part of how we deliver care**

Telehealth enables us to:

- Reach patients across all regions in NZ, including rural communities
- Reduce access barriers like travel, cost, and time
- Offer more flexible and timely support
- Support the increase in patient and healthcare confidence in telehealth

We have now successfully implemented a hybrid model of care:

- Virtual education and follow-ups
- In-person support where needed
- Referrals and demand have continued to grow, reflecting ongoing gaps in access to care
- Working in partnership with various PHO's

# Health Professional Courses

## **COVID-19 presented another challenge – educating health professionals:**

- Face-to-face training was no longer possible but demand for upskilling in asthma and COPD increased
- Historically only face to face courses available in Auckland, Wellington and Rotorua

## **We rapidly transitioned to virtual and online delivery:**

- Live webinars and virtual workshops/courses
- Remote education sessions across regions

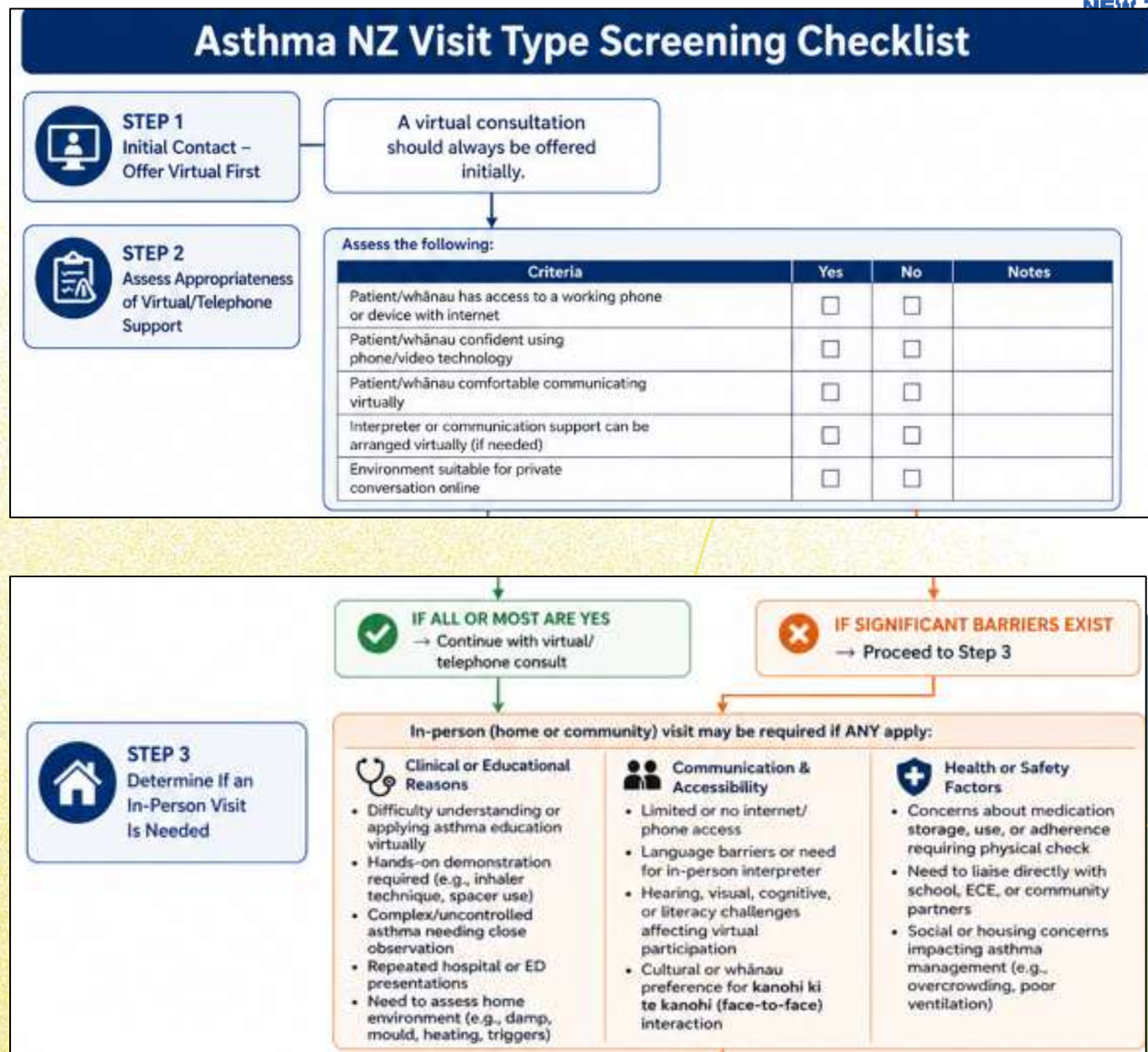
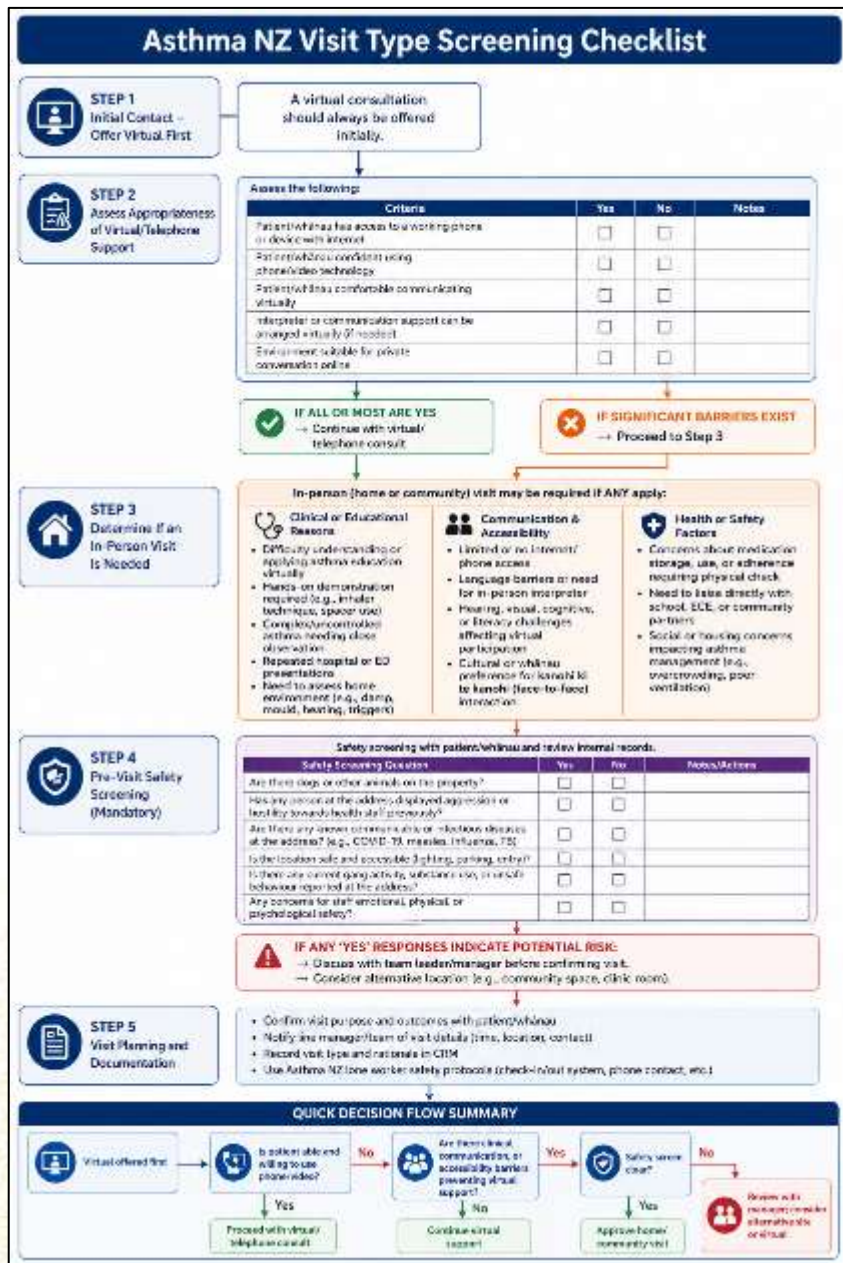
## **What this enabled:**

- Greater reach across Aotearoa – including remote and rural areas
- Increased registration, attendance and accessibility
- More flexibility learning for busy clinicians
- Faster dissemination of best practice and evidence based respiratory information

## **Our learnings:**

- Virtual delivery of our respiratory courses remained interactive and high quality
- Connected health professionals from around the country
- We wondered why we didn't do it sooner!!

# How We Decide: Virtual vs In-Person Care





**STEP 4**  
Pre-Visit Safety Screening  
(Mandatory)

Safety screening with patient/whānau and review internal records.

Safety Screening Question	Yes	No	Notes/Actions
Are there dogs or other animals on the property?	<input type="checkbox"/>	<input type="checkbox"/>	
Has any person at the address displayed aggression or hostility towards health staff previously?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there any known communicable or infectious diseases at the address? (e.g., COVID-19, measles, influenza, TB)	<input type="checkbox"/>	<input type="checkbox"/>	
Is the location safe and accessible (lighting, parking, entry)?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there any current gang activity, substance use, or unsafe behaviour reported at the address?	<input type="checkbox"/>	<input type="checkbox"/>	
Any concerns for staff emotional, physical, or psychological safety?	<input type="checkbox"/>	<input type="checkbox"/>	



**IF ANY 'YES' RESPONSES INDICATE POTENTIAL RISK:**

- Discuss with team leader/manager before confirming visit.
- Consider alternative location (e.g., community space, clinic room).



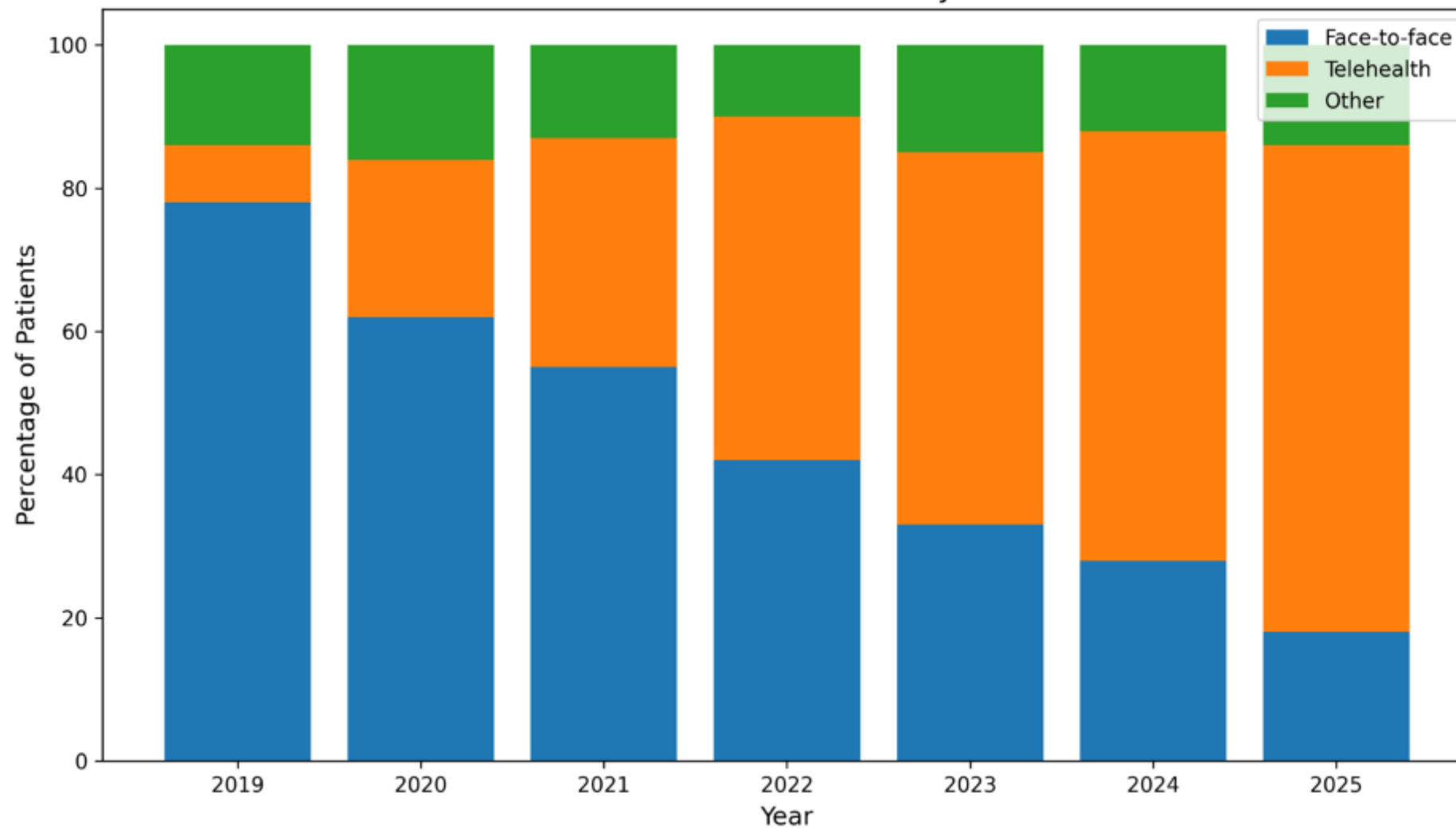
**STEP 5**  
Visit Planning and Documentation

- Confirm visit purpose and outcomes with patient/whānau
- Notify line manager/team of visit details (time, location, contact)
- Record visit type and rationale in CRM
- Use Asthma NZ lone worker safety protocols (check-in/out system, phone contact, etc.)

**QUICK DECISION FLOW SUMMARY**



# Asthma NZ Service Delivery Shift



# Patient Feedback

Mum said she finds telehealth consultations beneficial as her and her husband are both busy full-time working parents. Dad was able to log into the consultation while on the bus and mum while in her office. Says she also likes not having to go through any physical assessments that are often done in person.

A patient who is a working professional says she likes the telehealth platform as she is able to fit the session into her working schedule. Otherwise, she said that she would be hesitant to follow through with a face to face session as it would be in the 'too hard basket.' She enjoyed being able to see the airway models and diagrams easily and clearly via Teams and found the audio to be clear. She still felt the human interaction to be comparable to a face to face meeting.

## Asthma NZ team Feedback

I enjoy working via telehealth as I feel as though I can be flexible with my schedule and have more time to see more patients, compared to if I was having to travel to see a client (this takes into account travel time etc). At first, I questioned whether I would be able to educate patients as effectively when face to face. However, I have found that when the IT components are working on both sides, there has been no difference.

The cons I have found with telehealth have been when there are clients who have limited access to online communication. It can also make it difficult if the patient has trouble hearing or seeing

# Telehealth Benefits | What's Working Well?

- **Improved access to services**
  - Reaches rural, unenrolled (GP), and deprived communities
  - More equitable service provision
  - Reduces travel, cost, and time barriers
- **Faster support for patients**
  - Timely advice, education, and escalation
  - Can reduce delays in getting treatment
- **Reduces pressure on primary and secondary care**
  - Supports patients who struggle to access GP appointments
  - Supports patients to manage asthma well, reducing risk of hospitalisation
- **Flexible, scalable and sustainable**
  - Deliver care across regions and quickly
  - Reach more patients and clinicians
  - Contract nurse model sustainable
  - Increased confidence (health consumers and health professionals)
- **Supports self-management**
  - Improves understanding, adherence, and action plan use

# Telehealth Limitations

- **No physical assessment**
  - Limited ability for physical assessment (measurement of clinical obs, chest auscultation)
  - Home assessment – difficult to do online
- **Digital divide**
  - Lack of technology access, confidence or connectivity
- **Engagement challenges**
  - Harder to build rapport over a screen
  - Harder to assess understanding
  - Language barriers (interpreting services can be a challenge online)
  - Missed non-verbal cues
- **Clinical risk**
  - Risk of missing signs of deterioration without escalation
- **System limitations**
  - Fragmented information or lack of integration
  - Reliance on other services (GP prescribing access)

# Key Take Aways

**asthma**  
NEW ZEALAND



# How can telehealth work more effectively in your clinical environment?

- **Don't go it alone**
  - First – identify rationale for commencing/improving telehealth services
  - Know where to go to find out what 'effective' telehealth looks like
  - Know what resources and support you can access and from where
  - Don't reinvent the wheel – adapt existing models
- **Embed telehealth into existing workflows**
  - Integrate into routine care (not an add-on)
  - Offer telehealth early, not as a fallback
  - Align with existing systems and documentation
  - Build clear escalation pathways to in-person care
- **Use hybrid pathways (virtual + in-person)**
  - Use virtual for follow-up, in-person for assessment
  - Combine both to improve access and outcomes
  - Ensure easy transition between care types

- **Use telehealth to:**
  - Follow up sooner
  - Reduce delays in care
  - Support self-management
- **Think beyond your service and link patients with:**
  - Asthma NZ (of course!)
  - Other virtual support services
  - Community pathways
- **Escalate system gaps (telehealth is an ongoing and evolving system)**
  - Document access barriers
  - Feedback into service design
  - Advocate for better pathways

# Maximising Funding | The Role of Collaboration

- **Funding for respiratory consults via POAC/EPCC:**
  - Is limited to regions
  - Provides an opportunity to connect with local respiratory education providers who can complement and build on your initial work (I.e. once funding runs out)
  - Can combine both in-person and telehealth models of care across providers
- **Expected outcomes of this hybrid collaboration:**
  - Rapid follow up education
  - Action plan reinforcement
  - Reduction in acute ED/GP presentations (and representations)
  - Reduction in OCS use
  - Reduction in overuse of reliever inhalers
- **Where funding is not available:**
  - Refer to local respiratory education provider early – find out where that is on our website [www.asthma.org.nz](http://www.asthma.org.nz)

# Resources, Support and Tools

## **National Telehealth guidance** | [NZ Telehealth Resource Centre](#)

- Central hub for NZ-specific telehealth guidance
- Implementation advice
- Free webinars and practical resources

## **GP-specific training & clinical guidance** | [RNZCGP Telehealth Resources \(Doing telehealth well\)](#)

- Practical guidance for running telehealth consults
- Training modules (via Collaborative Aotearoa)
- CPD-accredited learning for GPs and teams

## **Free training, webinars & learning** [NZ Telehealth webinars \(recorded + live\)](#)

- Topics include:
  - Privacy & security
  - Remote monitoring
  - AI & telehealth

# Resources, Support and Tools

## Implementation support & models of care [Telehealth “Getting Started” for General Practice](#)

- Focus on:
  - Workflow integration
  - Change management
  - Interoperability & systems

## Broader digital health resources

- Health Navigator NZ (apps, patient tools, education)
- Digital Inclusion Blueprint (equity + access considerations)
- Ministry of Health / Health NZ digital health guidance

## Local PHO / network support (often overlooked)

- ProCare, Pegasus, HealthPathways, etc
- Many provide:
  - Telehealth templates
  - Clinical pathways
  - Practice support