Delivering Virtual Health as a service
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Aceso Virtual Health is a flexible telehealth consultation service.

Our Aceso Virtual Health service has a strong focus on offering better virtual care options alongside the traditional in-person healthcare model. The platform’s capabilities include; online triaging workflow, video and audio consultation, and a secure payment gateway, all of which are immersed into a single platform.

Healthcare is riddled with lacunae in service delivery. Consumers are now prepared to engage with more convenient care options especially when it comes to their health. Reducing clinical wait times are an aspirational goal for many healthcare organisations. Getting close to your consumer and finding the right digital tools are the first steps toward developing a personalised engagement strategy.

Aceso Virtual Health is an efficient tool which should reduce unnecessary travel and provide quality care irrespective of a patient’s or clinician’s location. Telehealth is also a critical way that providers can reduce risk in situations like COVID-19 while maintaining close relationships with their patients.

Aceso Virtual Health is a cloud health platform delivered as a service. Users can customise their own branded front end and we can support multiple brands within the one tenancy if appropriate.
Use cases of Aceso Virtual Health delivery:

- Virtual consultations
- Health literacy and training
- Digital care planning
- Remote monitoring
- Workflow tools
- Communication channels

Aceso Virtual Health

Our Aceso Virtual Health platform is a modular solution built on top of Aceso Pinga. Our Virtual Health offering can be integrated with external third-party solutions such as Patient Management Systems.

Current functionality includes:

- A fully browser based consultation platform with neither clinicians or patients needing to install additional software.
- A roster of clinicians
- A calendar of clinicians and resources to enable bookable virtual health consult slots
- Online payments integration
- Electronic forms
- The forms module drives the booking process

Aceso Pinga delivers our Virtual Health service. The diagram above indicates some of the additional functionality delivered by Pinga to our local and international customers.

Core modules

- These modules are the basic functional elements, incorporating clinician rosters, diaries, and credentials

Booking

- Our rostering and scheduling system can be integrated with your existing systems to ensure no appointment is double booked or require double entry.
Aceso Virtual Health

- Aceso Virtual Health includes a highly functional browser-based video and audio-only calls capability, a suite of call management features, and configurable waiting rooms.

Patient CRM

- We offer patient CRM functionality that can be used, to enable patients who are regular users to authenticate themselves and to enable patient enrolment information to be stored.
- New patients can also request service without the need for an account which increases the usability and adoption for getting to first appointment.

Contract and billing module

- This module is required to store service codes and prices, and implement these for billing and invoicing.
- This module includes integration with the relevant payment gateways.

Electronic forms

- The forms module will be used for
Virtual Health features

There are a number of features available in Aceso Virtual Health that may be used ‘as is’ or reconfigured for use, depending on the requirements of the project.

Some information about these is supplied in this section. Note that the specific implementation of each of these features will vary based on the requirements that we define together at project kick off.

1. Patient confirmation page
Virtual Health enables a patient to access a confirmation page of their booking without needing to remember a username and password. Once a booking is completed, patients are shown and sent a link to a simple ‘booking info page’. This is a long hash key, difficult to guess or stumble on at random, but includes an additional validation step (based on a patient identity parameter such as date of birth) for access. This is a light version of our patient portal in Aceso Pinga, which is available as an add-on module if required.

The basic confirmation page:
- Enables patients to upload information or referral letters
- Manages forms delivery to patients (e.g. consent forms, insurance forms, payment details and other related material that is required)
- It also serves as a reminder of when a booking is made and allows the patient to open the video call from this screen

2. Patient reminders
Virtual Health sends a confirmation message and reminders to patients by e-mail and/or SMS. Reminders are set up based on various rules (‘SMS a reminder at 1700 hrs the day before a consult’ is a common example). Reminders can be flexibly configured based on any rules desired.

Information to be provided by your organisation:
- Text for the reminders
- Rulesets to follow with the reminder configuration

3. Automated resource management
Virtual Health provides automated resource management of clinician available patient windows.

This feature can dynamically create or hide clinician booking slots based on business rules and based on what is currently taking place. For example, the following workflows are supported:

Example of design used for patient booking confirmation
• Enrolled patients can view more bookable slots than non-enrolled patients
• If a clinician finishes a virtual consult early, the time remaining until their next appointment can be dynamically filled by a patient waiting for urgent telecare, or waiting for a simple prescription refill appointment
• If a day is completely full, extra slots might be dynamically opened at the end of the day to service overflow demand
This is a powerful feature but must be carefully configured, and this is expected to take place during implementation workshops.

4. Operational dashboard
Aceso Virtual Health supports an embedded Microsoft PowerBI reporting function. An operational report tailored to the needs of your business will be supplied based on our standard reporting capabilities. This report will show:
• The number of online bookings;
• Bookings distribution per clinician;
• The time of day bookings were made;
• Timelines of when bookings were made and who they are made for;
• Clinic statistics; and any filtering functions on the above
Integration with any data warehouse is also available.

5. Soft launch
Aceso Health will deploy all live-ready Virtual Health configuration into the production environment, but it will be in an invisible state. Only by logging in to the Virtual Health platform are soft-launched resources accessible – the public cannot see them and book. The administrator can then complete their tests on the production application before the clinics are live. Once a go live date is arranged the administrator login to the administrator panel and enables the clinic to go live.

6. Aceso Virtual Health architecture
Aceso Virtual Health is deployed on the Microsoft Azure Australia East data center, which has been approved for use for New Zealand citizens’ personal and health information by the DIA and MoH in New Zealand.
To enable the PMS integration, an integration endpoint will need to be provided by Aceso and your business’s integration flow (via Data Factory will connect with this endpoint. Alternatively, your business will provide access to your data warehouse.
The exact configuration of this will be determined during a technical workshop and project meetings while implementation is underway.
Because Azure Data Factory or a database connection will drive the integration, the only complexity will be ensuring that an appropriately secure connection is established, and this will likely be driven by a secure key exchange. This too is an implementation detail that will be resolved through implementation.

7. 24x7 availability target
• 24/7 Online Support is a Microsoft Azure guarantee when using the infrastructure
• Aceso Health take the uptime of our Virtual Health service as a top priority for the business
• Major custom implementations (50,000+ daily users) have five-nines uptime
Frequently asked questions

**Does the clinic or the patient need to install an app or download anything on my computer to enable virtual consults?**

No - Aceso’s Virtual Health service is web based. There is no app or software to be downloaded or installed. It is a seamless plug and play Virtual Health service.

**How can the care provider monitor the duration of the virtual consult?**

The consultation window features a time ticker that will act as a reminder to the care provider to keep the consultation within the pre-determined time boundary.

**Can I make an audio call instead of video?**

Yes- The Aceso Virtual Health service supports both video/audio and audio-only calls.

**Can I have multiple people in one consultation e.g. a nurse and a doctor?**

Conference consultation sessions can be enabled allowing for multiple care providers and family to attend.

Virtual Health supports an embedded Microsoft PowerBI reporting function.
Virtual Health Workflow

Process flows can be customised to suit your clinical and business needs

Below is an example of suggested process flows

**Consultation:**

![Diagram of consultation process]

- **Provider**
  - Consultation link/details in PMS
  - Review notes/Triage questionnaire
  - Start call to patient

- **Start video consult**
  - **VIDEO CALL**
  - **VOICE CALL**

- **Consult ends**
  - Further action required?
  - Enter notes

- **YES-CONSULT**
  - Consult booked
  - Booking link/info: Email/SMS confirmation
  - SENT TO PATIENT

- **YES-PRESCRIPTION**
  - Prescription created/ordered

- **NO**
  - Process ENDS
Appointment booking

1. **Patient**
   - Call practice
   - Practice website
   - Practice portal
   - Clicks “Book an appointment”

2. **Triage questions**

3. **Emergency**
   - YES
   - Patient directed to 111
   - NO
   - YES
   - Patient nudged to enrol/call practice
   - NO/ERROR

4. **Consultation method:**
   - YES
   - Phone
   - Video
   - NO

5. **Patient’s personal details**
   - YES
   - NES/Health summary lookup
   - NO/ERROR

6. **Choose clinician; date/time**
   - YES
   - Payment
   - Booking confirmed
   - NO
   - Integrated into PMS

7. **Enrolment status/fee determined**

8. **Check availability**

9. **Enrolment Form**

10. **Booking link/info: Email/SMS confirmation**

**Sent to Patient**
Post booking

- Patient
  - Change of appointment
    - NO
      - Integrated into PMS
    - YES - CANCEL
      - Integrated into PMS
  - YES - CANCEL
    - Re-book
      - Video call commences
      - Consult ENDS
      - Further action required?
        - YES - CONSULT
          - Consult booked
        - YES - PRESCRIPTION
          - Prescription created/ordered
      - Process ENDS
  - Integrated into PMS
    - Enter virtual waiting room
      - Video call
        - VIDEO CALL
        - VOICE CALL
      - Clinician phone call
        - YES – CONSULT
        - YES – PRESCRIPTION
        - Consult booked
        - Prescription created/ordered

- Email/SMS reminder/notification
Support

Customer calls Internal Help Desk

Internal Help Desk notifies Aceso Service Desk

Email (name contact details of requester, detailed request description, how the fault affects the operation, any special requirements)

Aceso Service Desk provides request # to customer

Aceso Service Desk actions request

Request resolved? NO

Access works on request resolution with customer

Aceso Service Desk emails customer help desk
Aceso offers multiple integration options.

- Aceso offers multiple integration options. These include, but are not limited to:
  - API integration
  - Web service/webhook integration
  - Integration agent: this option will require the use of an external conductor
- You can set up a data warehouse that brings together data from all sites. Aceso are able to provide this setup for an additional project fee.
- Once set up, you can then set up an Azure Data Factory to read certain data from the PMS database and send it to the Aceso service or enable the platform access to the data warehouse. Information accessed will include:
  - Clinician schedules and current bookings (to calculate availability on the platform)
  - List of enrolled and non-enrolled patients
- The Aceso team will set up an endpoint where the Data Factory is able to send the requisite data, or a connection to the data warehouse.
- A schedule of data processing will be established.
- Aceso Virtual Health can integrate with the source of truth of your scheduling data from the PMS. We are able to synchronise those to ensure close to real time booking accuracy.
- Our Virtual Health platform will be configured with a report of new or projected enrolments, so that new enrolment information can be ensured to be correct for appropriate billing and invoicing.
These prerequisites are required to drive a successful implementation and project with Aceso Virtual Health.

- A desired schedule of data processing (e.g. nightly for enrolled patient list, hourly for availability)
- All forms and questionnaires that you would like to be used for the interactions with patients and clinicians.
- Workflows for patients who are or are not enrolled (i.e. what questions are they asked during the booking/urgent care process)
- Processes for urgent care vs. booking when a patient comes from the website

- what questions must answer, etc
- Information on all sites and clinicians. This will be combined with the PMS integration phase
  - List of clinicians. If appropriate, list of sites
  - Name
  - Address and any contact details that may be required (this will be decided upon the commencement of the project)
- Default booking length of time
- graphics, stylesheets such as CSS, fonts, and other appropriate design files and assets to be incorporated to ensure your organisations brand experience is integrated.
Deployment of Aceso Virtual Health includes training and ‘train the trainer’ sessions for your organisation.

- Virtual Health User Interface – two one-hour workshops to walk users through the workflows so they can learn what a patient's experience is like. Your users are trained on how to deliver the best virtual consult experience.

- Virtual Health ‘train the trainer’ – one three-hour workshop to train the Virtual Health product expert in your organisation so they can help others grow and learn too. Virtual Health user manuals will be provided at the training sessions.

Additional training sessions will be available upon prior agreement during the first three months after the go live date.

Extra time slots can be dynamically opened at the of the day to service overflow demand.
Patient Scenario

Kate has a sore throat which has worsened over time. She is at home with her kids but she needs to see a doctor.

Goes to Aceso’s Virtual Health website

Kate fills in details about her health issues and her personal information

Kate chooses the time and date that suits

Kate confirms her details and pays through the secured payment gateway
Confirmation of booking received → Kate waits in the virtual waiting room → Kate’s appointment begins with her doctor
Admin Scenario

Jane looks after the administration at Aceso Virtual Health service

Jane checks to see who is rostered on today for the Virtual Health service

She can also view what bookings are in today

Jane can organise questionnaires to be filled in while a patient is in the virtual waiting room

Making managing bookings easy, with everything in one place.
Clinician Scenario

Dr. Baker wants to view her next scheduled appointment

Scheduled consultations are easy to manage. The inbuilt time tracker enables you to better keep to your scheduled consultations.

She can see how many patients are in the waiting room now

She can also check to see how many other appointments she has today

Dr. Baker goes into a scheduled appointment
Tāmaki Health are the management service organisation for East Tāmaki Healthcare, Local Doctors and White Cross network of medical clinics. As the largest independent primary healthcare group in New Zealand, their network has 40+ clinics that together provide more than a million consults a year.

Tāmaki Health offers Aceso’s Virtual Health platform known as Bettr to their patients as they are committed to delivering a full range of general practice and urgent care services.

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Read the Tāmaki Health case study here:  
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