Babylon: Digital Primary Care

Thursday 17th March, 2022
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   ● Introduction to Babylon
   ● What digital health services can be provided via telemedicine?

02| Babyl Rwanda (Shivon Byamukama)
   ● Introduction
   ● Telemedicine and the overall health ecosystem
   ● Technology and appropriate levels of care and continuity of care
   ● COVID-19 and telemedicine
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01 | Babylon’s Global Mission

Tim Rideout, UK General Manager
Babylon’s Global Mission

Introduction to Babylon and the essentials of remote consulting

Founder - Ali Parsa
People covered - millions globally
Global in app rating - 90% 5*
Countries Live and In Progress - 15
First App - April 2014
Consultations & AI Interactions - 5.1m in 2021

Source: Babylon Press Kit, May 2021
Our Partners and Funders around the world

*Funder: Initial funding for Babylon’s Rwanda operations was provided in conjunction with the Bill and Melinda Gates Foundation.
Babylon is re-engineering the healthcare continuum

We are creating a scalable, digital first healthcare service that addresses all members’ needs in one place and aligns everyone's interests through a value based care model.
Digital Health Services and Babylon
02 | Babyl Rwanda

Shivon Byamukama, PhD
Managing Director, Babyl Rwanda

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2. Telemedicine and the overall health ecosystem
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Babyl Rwanda

Babylon was invited by the Rwandan Government to Contribute to the Rwandan efforts to ensure access to quality health for all through digitally-enabled healthcare. Babyl is the brand name that is used in Rwanda, Babyl started to operate upon the receipt of the license granted by the Ministry of Health in September 2016.

- Proof of concept country
- Aligned with the vision of Babylon
- 1:8,000 doctor-patients ratio
- Existence of universal health scheme
Partnerships

**Government partnerships**

- National Identification Agency for patient identity verification
- Ministry of Health providing access to laboratories and pharmacies at Health Centers and District Hospitals HC 501/506
- RSSB (Rwandan Social Security Board) funding digital consultations, prescriptions, and lab tests for Babyl patients covered by Mutuelle (universal health care system)
- Close collaboration with Ministry of ICT and Rwanda Development Board

**Plus**

- Mobile Network Providers
- Private Pharmacies
- Private Insurers
Partnering with the government of Rwanda to transform healthcare using Babylon’s digital technology and expertise

Registered patient books an appointment using the USSD app

A triage nurse calls the patient; completes triage appointment

If patient suitable for digital health; receives consultation (GP or Senior Nurse)

Lab & prescriptions sent as SMS code to be redeemed at ~500 partner (public & private) facilities; referrals to secondary care

20% empowered by AI

2.5 M registered users (equating to 19% of 13m population)

2.9M Completed consultations

4,000 average daily appointments are closed

10 year government contract signed March 2020

501 partner public health centres, (+additional private lab facilities, pharmacies)
Patient Experience captured through ongoing learning, regular customer surveys and independent evaluations

High levels of satisfaction
95% of Babyl patients would recommend the service
98% were satisfied with their experience

Equity of access
Women and men are equally likely to use Babyl...
...and patients from all age brackets seek digital care

Speed of accessing care
94% of Babyl patients finished their consultations within one hour of seeking care

Ease of use
93% scored Babyl either 4 or 5 out of 5 for the ease of use/accessibility

Consistently high ratings
97% rated their clinical consultation 4 or 5 out of 5
99% would use Babyl again next time they are unwell
Role in the COVID-19 response

Asymptomatic and mildly symptomatic COVID-19 patients referred into Babyl system → Babyl staff, supervised by GPs, call patients daily to monitor symptoms, provide advice, and record progress updates → Daily patient calls supplemented by 2-way SMS check-ins → Where required, clinical consultations additionally provided by GPs

After confirmed negative test result, (usually after 14+ days), monitoring and care journey completed → Patients with worsening systems detected, and referred into conventional care system → E-prescriptions issued where required
Extending artificial intelligence to Rwanda

In a context of low smartphone penetration, introducing AI-triage within both the Babyl call centre and in public health centers takes us a step closer towards directly empowering Rwandans with the benefits of Babylon's AI.

Phase I: Introduction of AI-triage within Babyl's call centre in Q4 2021

- Babyl has introduced AI triage platform with the Babyl patient journey which aims to improve the efficiency the process and the quality of questions asked to patients and provide standardised clinical notes to be used by other clinicians.

Phase II: Digitisation of public health centres

- Digitising patient journey, including introducing Babylon’s symptom checker AI tool to support effective triage for patients arriving at health centres.
- Improving efficiencies and utilisation of scarce health resources through effective prioritisation of patients; referring suitable patients to Babyl’s digital service and therefore reducing demand on health centres; which will therefore increase patient experience and the quality of care provided to patients.

Babylon’s AI has been fully localised to the Rwanda context. Our approach to localization includes epidemiology, language, care pathways and culture.
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Babylon UK’s Mission

**Access**
More available appointments, no restriction on geographics.
Patients can access appointments quicker via the app compared to other GP practice waiting times.

**Cost**
Less costly, especially where clinicians are working from home.

**Quality**
Better insight into mental health and other conditions, seeing patients in their environment.

**Engagement**
More opportunity to engage with the patient, satisfaction for patients and healthcare professionals - can see notes and follow up advice in app.

Source: Babylon Press Kit, May 2021
Virtual and physical services

GP at Hand launched in 2017 and is the first digital first primary care NHS practice in the UK.

We have grown it to be the largest GP practice in the UK with a current list size exceeding 100,000 patients.

Patients can book an appointment 24/7/365 and we undertake the full remit of primary care NHS work.
London and Birmingham: Our Babylon clinics support our digital services for our NHS patients
London and Birmingham: Our Babylon clinics support our digital services for our NHS patients
Babylon UK: Access
Babylon UK Digital Clinicians: Skills mix
COVID-19 pandemic and Babylon

- Continued our **highly-accessible digital and physical appointments** throughout 2021 and 2022 despite continued challenges of Covid
- Adapted demand to meet patient needs
- **Diversified our clinical team** to include appointments with Pharmacists, Advanced Nurse Practitioners, Physiotherapists, Mental Health Nurses and Care Navigators as well as GPs and Nurses
- Continued to offer digital appointments within 24 hours
04 | Closing Summary

Shivon Byamukama, PhD
Managing Director, Babyl Rwanda
Putting an accessible and affordable quality health service in the hands of every person on Earth
We are at the dawn of the **transformation** of the healthcare sector

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Transformation of one of the largest sectors of the world economy has the potential to give birth to some of the most valuable and impactful companies.

Notes: (1) Based on article written by Daniel Kraft, MD: “The Future of Health & Medicine: Looking Ten Years Back & Ten Forward...”; December 31, 2021
Thank you