

Quro Medical
Innovation with care

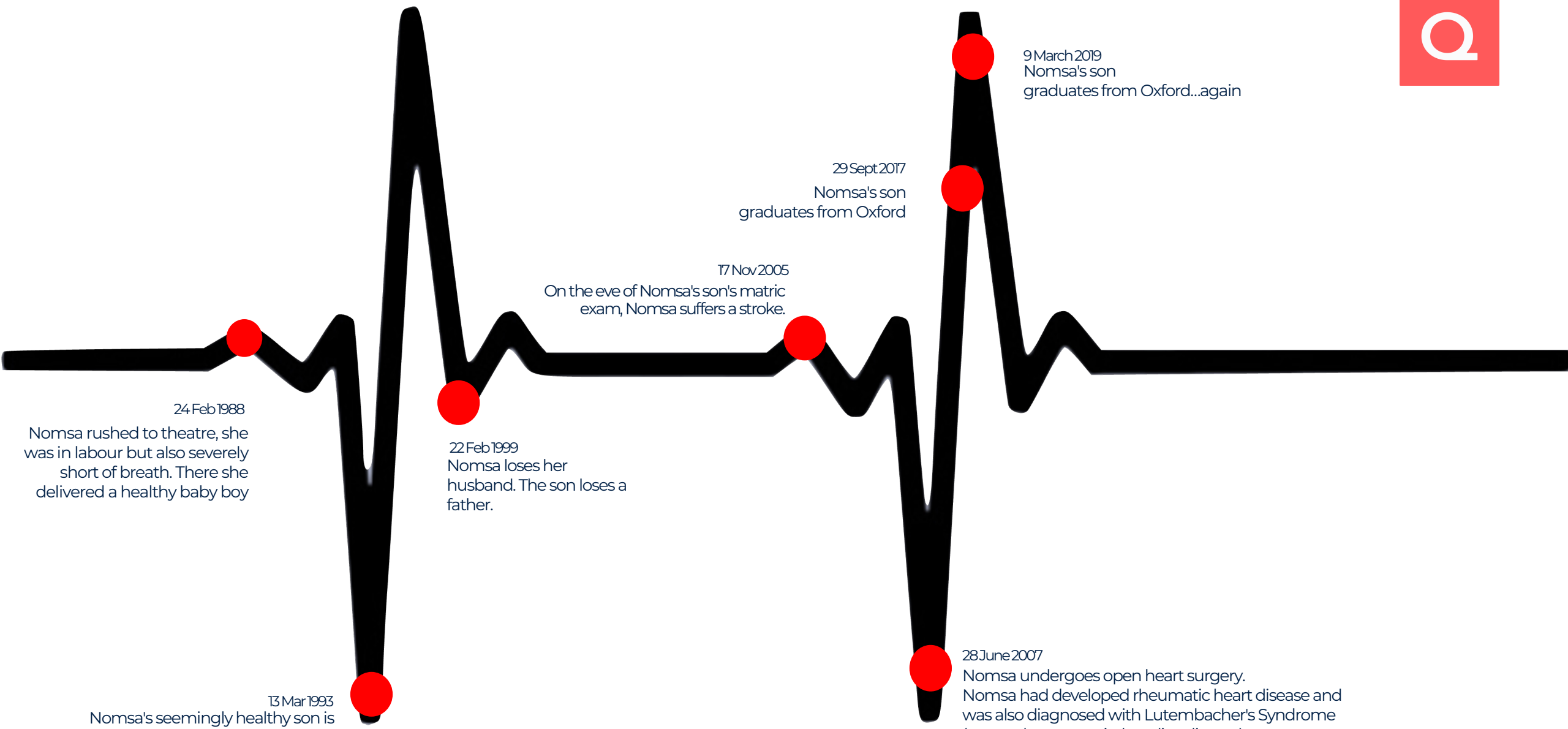
Hospital at Home

Pioneering Africa's First and Largest virtual hospital

NEDBANK CIB

Dr Vuyane Mhlomi


THE JOURNEY
A quick introduction



24 Feb 1988
Nomsa rushed to theatre, she was in labour but also severely short of breath. There she delivered a healthy baby boy

13 Mar 1993
Nomsa's seemingly healthy son is diagnosed with viral meningitis.

22 Feb 1999
Nomsa loses her husband. The son loses a father.

17 Nov 2005
On the eve of Nomsa's son's matric exam, Nomsa suffers a stroke.

28 June 2007
Nomsa undergoes open heart surgery. Nomsa had developed rheumatic heart disease and was also diagnosed with Lutembacher's Syndrome (a complex congenital cardiac disease).

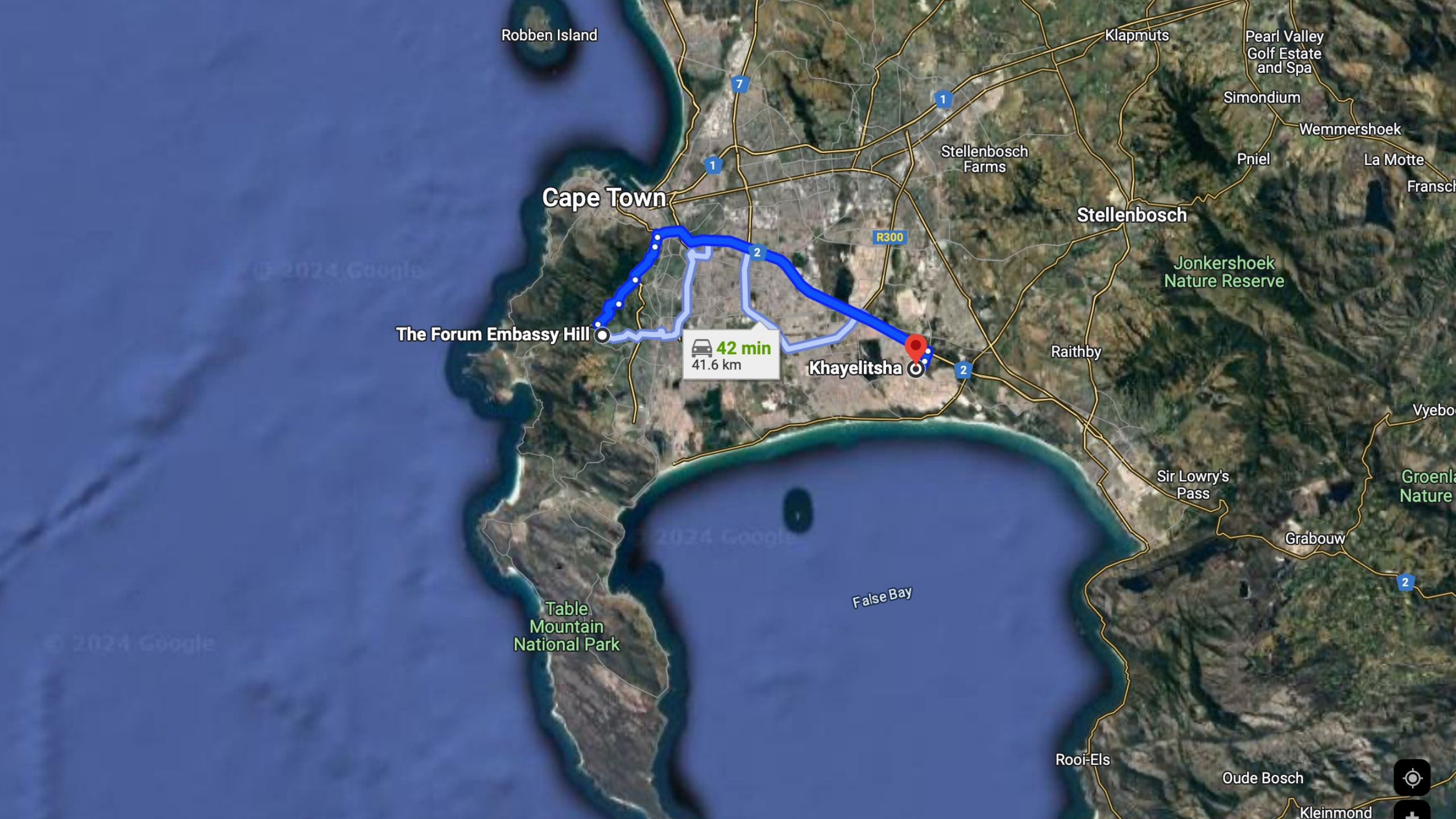
29 Sept 2017
Nomsa's son graduates from Oxford

9 March 2019
Nomsa's son graduates from Oxford...again





Oxford, 2018


Robben Island
Klapmuts
Pearl Valley Golf Estate and Spa
Simondium
Wemmershoek
Pniel
La Motte
Stellenbosch Farms
Cape Town
Stellenbosch
R300
Jonkershoek Nature Reserve
The Forum Embassy Hill
42 min
41.6 km
Khayelitsha
Raithby
Sir Lowry's Pass
Grabouw
False Bay
Table Mountain National Park
Rooi-Els
Oude Bosch
Kleinmond
© 2024 Google



DPhil , University of Oxford, 2017



MBChB, University of Cape Town, 2011



MBA, University of Oxford, 2018

Education is when information collides with who you are and sparks something new!



Zikho Pali




Q uro Medical
Innovation with care

Healthcare is ~~failing~~ changing.

We are a **Purpose-driven** organisation.



Mission

We leverage technology and harness the best of our people to improve the wellbeing of others.



Vision

Pushing the boundaries of innovation to deliver premium healthcare solutions that are more accessible and affordable for everyone.

Est: 2018

The **Faces Driving Change Healthcare**

A young, diverse, and globally best-in-class team to reimagine healthcare



Dr Vuyane Mhlomi
Co-Founder, Chief Executive Officer
MBChB (UCT), DPhil in Medical Sciences (Oxon), MBA (Oxon)



Ms Zikho Pali
Co-Founder, Chief Operations Officer
LLB (Wits), LLM (Harvard)



Mr Joost Pielage
Chief Technology Officer
BSc Software Engineering (Fontys)



Dr Luke Sampson
Chief Medical Officer
MBChB (UCT)

Our **Board**

A committed, multi-skilled board with decades of industry experience.



Dr Penny Moumakwa, MBChB
Chief Executive Officer
Mohau Equity Partners



Dr John Lazar, PhD
Co-Founder and General Partner
Enza Capital | Royal College of Engineering



Mr Pieter van der Westhuizen, CA(SA)
Group Chief Financial Officer
Life Healthcare



Mr Thato Ntseare, CA(SA)
Impact Investment Manager
Mineworkers Investment Company



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Ms Zikho Pali
Co-Founder, Chief Operations Officer
LLB (Wits), LLM (Harvard)



Dr Rob Cornish
Co-Founder, Chief Scientific Officer
Elec. Eng (Melbourne), PhD in Machine Learning (Oxon)



From facility to home: How healthcare could shift by 2025

February 1, 2022 | Article

By Oleg Bestsennyy, Michelle Chmielewski, Anne Koffel, and Amit Shah

New!

Up to $265 billion worth of care services for Medicare fee-for-service and Medicare Advantage beneficiaries could shift to the home by 2025.

Quro Medical is **pioneering the change.**



The **need** for change

Medical care is increasingly becoming unaffordable
with providers facing mounting pressure to reduce costs, maintain quality and increase patient satisfaction.

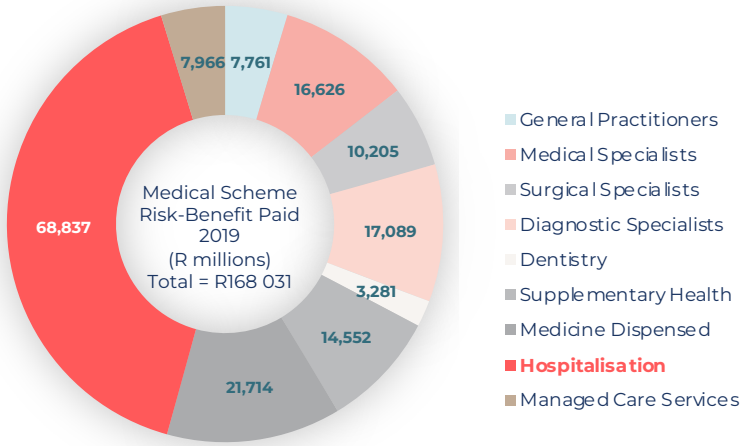
The average cost per hospital stay is R 42 000 and rising.
making hospitalization one of the most expensive types of healthcare utilization

There is a growing number of cases that require hospitalisation.
drivers include: ageing population, increase in non-communicable disease, access to medical aid benefits

Hospitalisation is associated with unintended clinical consequences.
~20% elderly suffer from delirium. 1-in-3 patients will lose functional status. 10% will have hospital-acquired conditions or fall.

Hospitals are hotspots for antibiotic-resistant infections and COVID19
Causing significant morbidity and mortality in patients receiving healthcare

Global trends show patients' homes as a setting for healthcare delivery.
There is a global need to ease the burden on increasingly overwhelmed hospital systems while providing people access to quality, affordable care.



Approx. **1 in 7** patients entering South African hospitals are at high risk of acquiring a hospital associated infection.

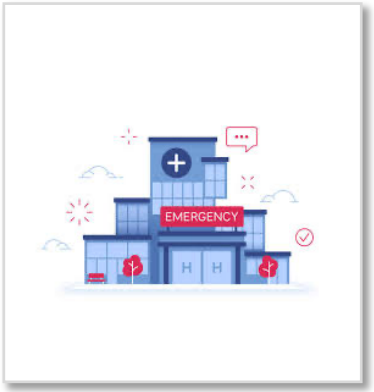
Research showed that healthcare costs were **52% lower** when acutely patients received care at home versus in the hospital

The **current** landscape

A hospicentric model with rising costs and lower system quality

Increased Cost of Care

High rate of in-Hospital admissions



High rate of re-admissions

+

Duplication of Services

Radiology

Pathology

Specialist referrals

Fraud; Waste; Abuse

Medical Aid/ Funder

Gaps in care delivery

Poor coordination of care between multiple clinicians

Poor medicines reconciliation

Poor patient follow-up post discharge

No post-discharge patient monitoring

Decline in Quality of Care

We provide an **alternative to general ward hospitalisation**

LEVEL OF ACUITY

Hospital at Home

Highest Acuity → Lowest Acuity

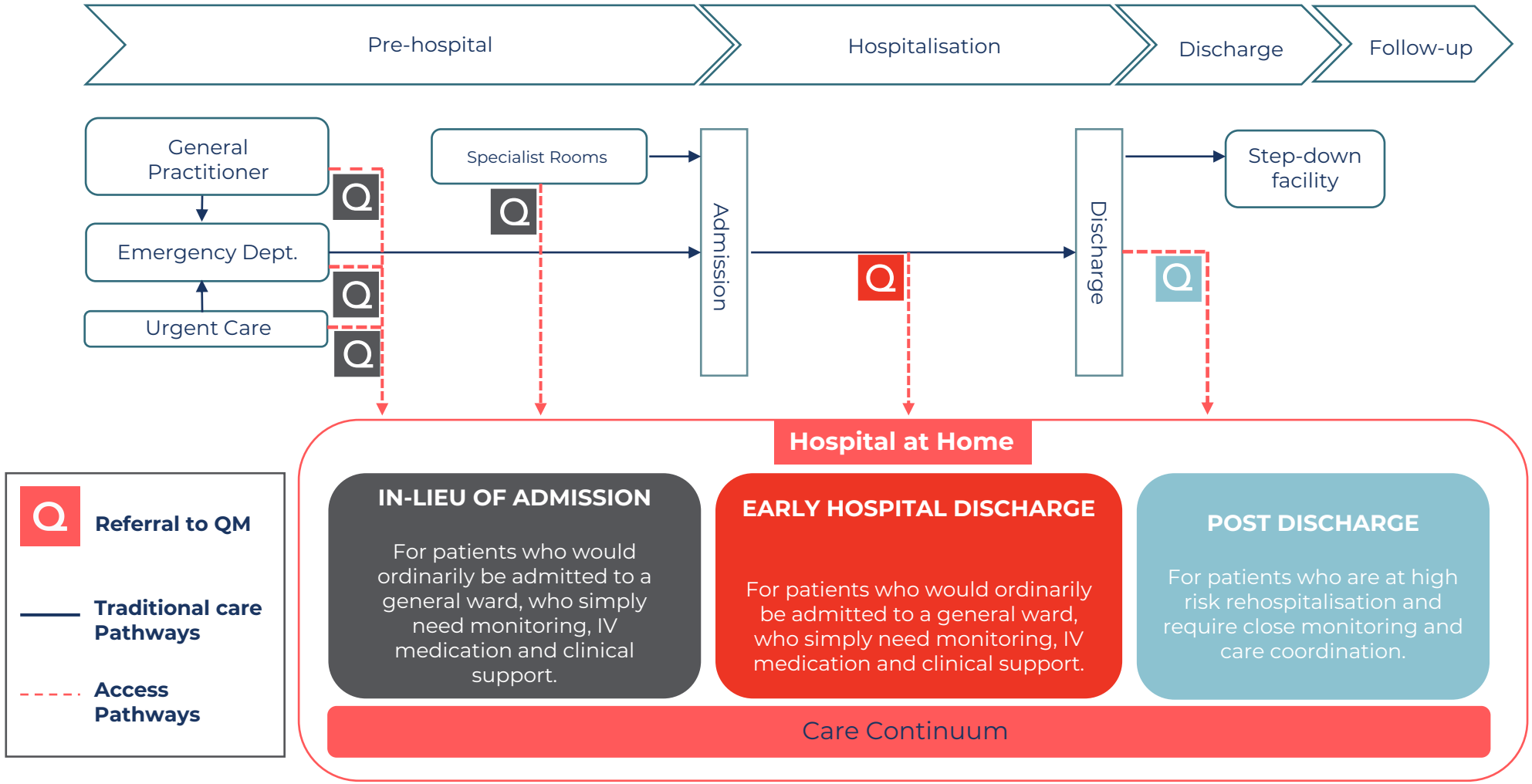
ICU | High Care | General Ward | Sub-acute | Home-based nursing | Telemedicine

PLACE OF CARE

	ACUTE CARE	SUB-ACUTE CARE	PALLIATIVE CARE
BRICK & MORTAR	Clinix, Life Group, Netcare, lenmed, Mediclinic	Bryanston Subacute, Intercare Sub-Acute and Rehabilitation Hospital	Stepping Stone Hospice & Care Services, Hospice Wits
AT-HOME	uroMedical	uroMedical	centurion hospice, aligned.

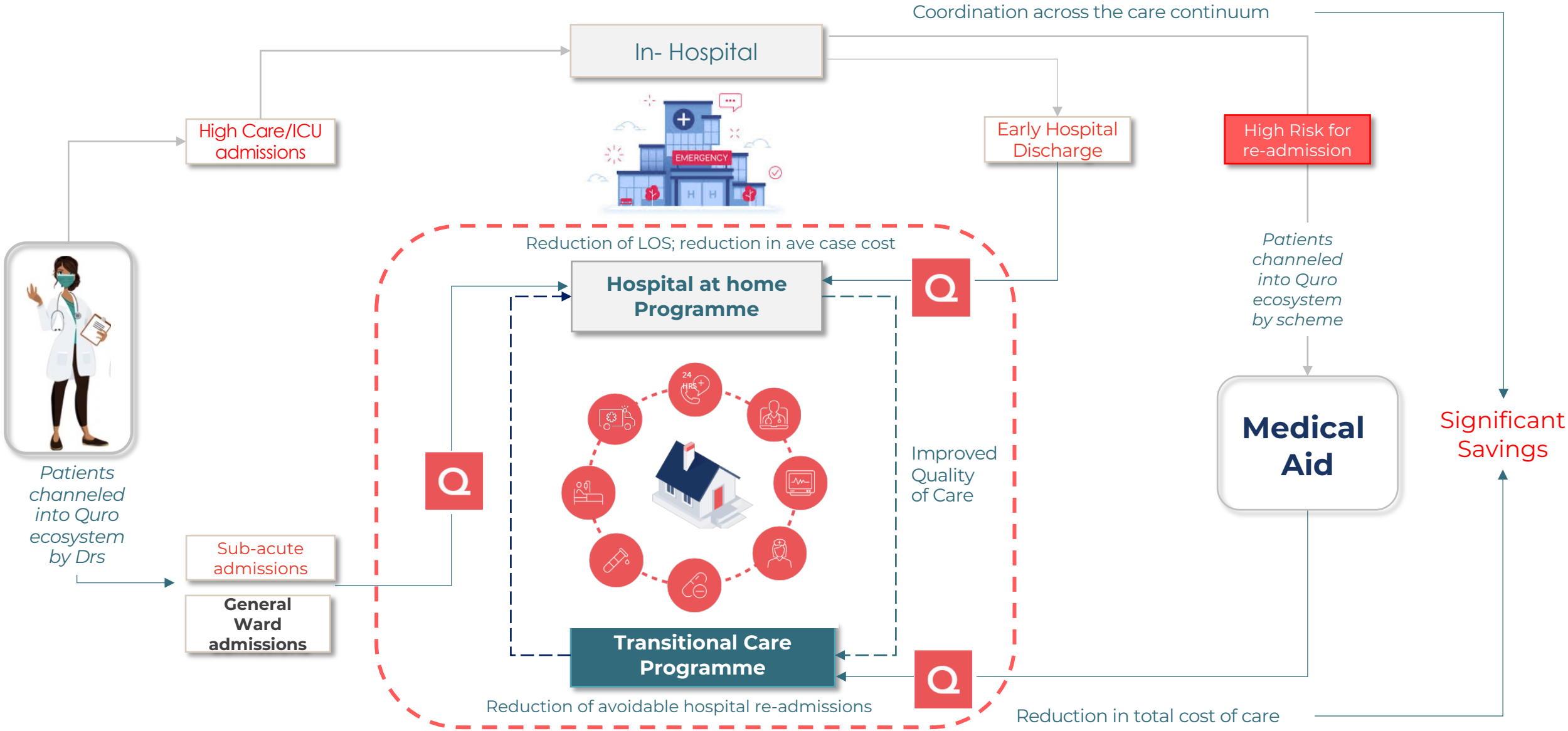
Hospital at Home has multiple access points.

Patients can be referred through the **care continuum.**



Quro Medical creates **systemic value**

Improved quality and costs of care by delivering the appropriate level of care in the appropriate setting.



We bring all the **essential elements of in-hospital care**, home



- CLINICAL OVERSIGHT BY TREATING DOCTOR
- REAL-TIME VITAL SIGN MONITORING
- 24-HOUR CLINICAL COMMAND CENTRE
- IN-PERSON AND VIRTUAL VISITS
- MEDICATIONS
- INTRAVENOUS THERAPY
- SHORT-TERM OXYGEN
- LABORATORY SERVICES
- SKILLED NURSING
- ALLIED HEALTHCARE SERVICES
- RAPID RESPONSE PROTOCOLS INCL. EMS

Designed to treat a broad spectrum of clinical conditions

Quro Medical is designed to treat patients with a broad spectrum of diseases/conditions.

Examples of Acute Conditions treated by QM Hospital-at-Home:

- Infections
  - Community-Acquired Pneumonia
  - COVID19
  - Cellulitis
  - Urinary Tract infection e.g., Pyelonephritis
- Chronic conditions with frequent exacerbations
  - Acute exacerbation of COPD
  - Acute exacerbation of Asthma
  - Acute exacerbation of Congestive Cardiac Failure
- Post Surgery
- Dehydration
- Deep vein thrombosis
- Stable Pulmonary embolism
- Post MI
- Epistaxis
- Transient Ischaemia
- Syncope/Collapse

Any other condition deemed appropriate by the referring doctor.

Inclusion & Exclusion Criteria

GENERAL CLINICAL

Inclusion Criteria:
- The patient requires acute hospital admission for a Quro Medical HAH acceptable condition.

Exclusion Criteria:
- Patient requires critical care unit admission.
- Patient has a concomitant acute illness that cannot be managed in the home e.g. seizure.
- Expected terminal event, except for someone receiving palliative care with a reversable acute condition that can be treated at home e.g. pneumonia in a patient with a terminal disease.
- Patient with marked altered mental status.
- Patient's only access is a central line.

ADMINISTRATIVE

Inclusion Criteria:
- Patient lives in the Quro Medical HAH catchment area.
- Patient is stable enough to receive care at home.
- Patient is at least 18 years old.
- Patient meets medical scheme eligibility for the program.
- Home meets basic amenity requirements including electricity.

Our patients are monitored with **cutting-edge technology**



Connects to the **Quro™ Medical InSight platform**

Monitoring multiple parameters in **REAL TIME**

U.S Food and Drug Administration

SAHPRA
South African Health Products Regulatory Authority



Automatic, wireless, continuous monitoring

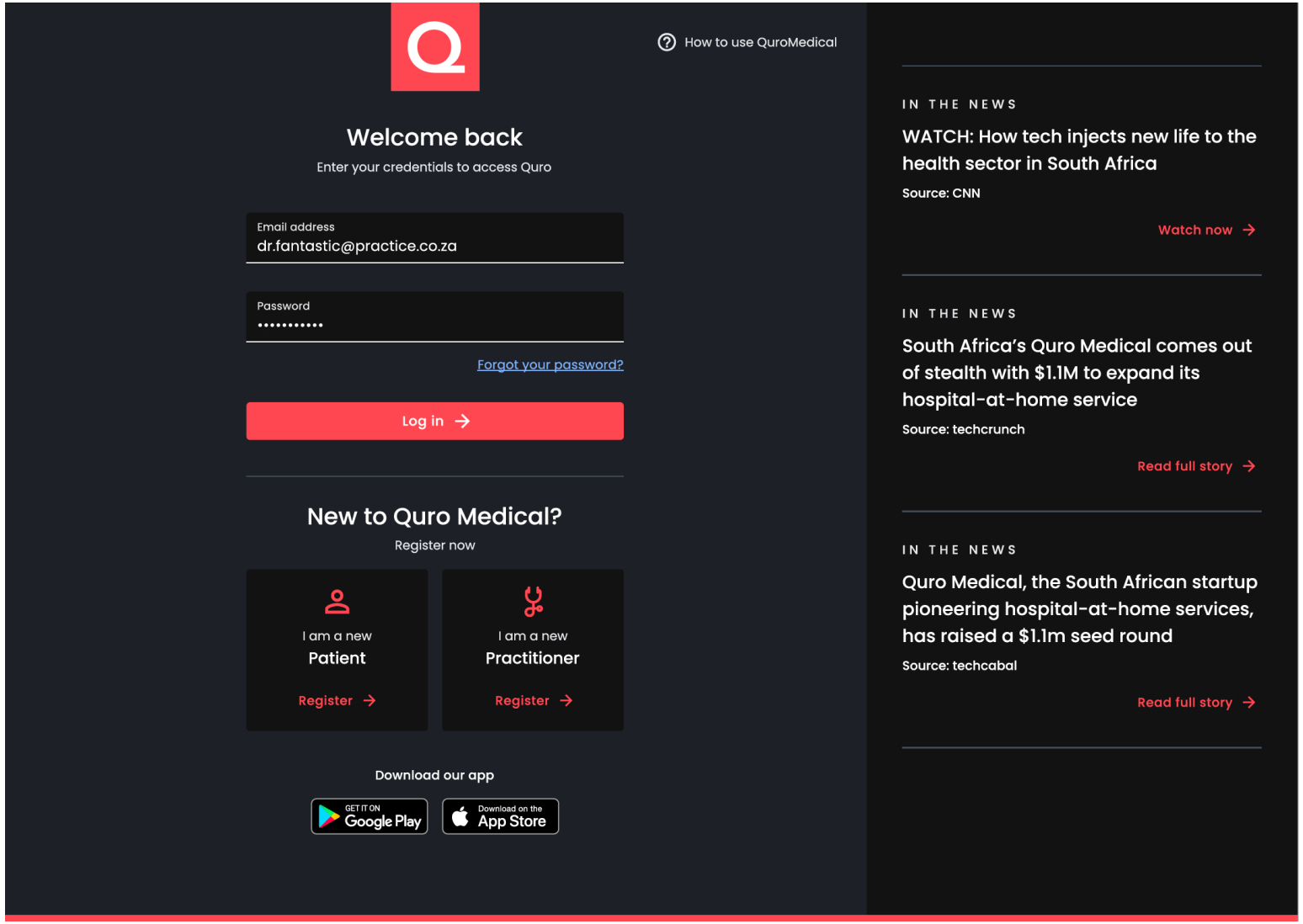
Quro Medical brings hospital grade patient monitoring to the home.

- Heart Rate
- Respiratory Rate
- Temperature
- ECG
- Oxygen Saturation
- and many more

1 min

Vitals captured **every minute**.

Doctors can access patient data, **anywhere, anytime**



Quro Medical Insight

Web and Mobile App
Disease, wearable, and cloud-agnostic
Robust and Scalable
Simple, Intuitive, Elegant

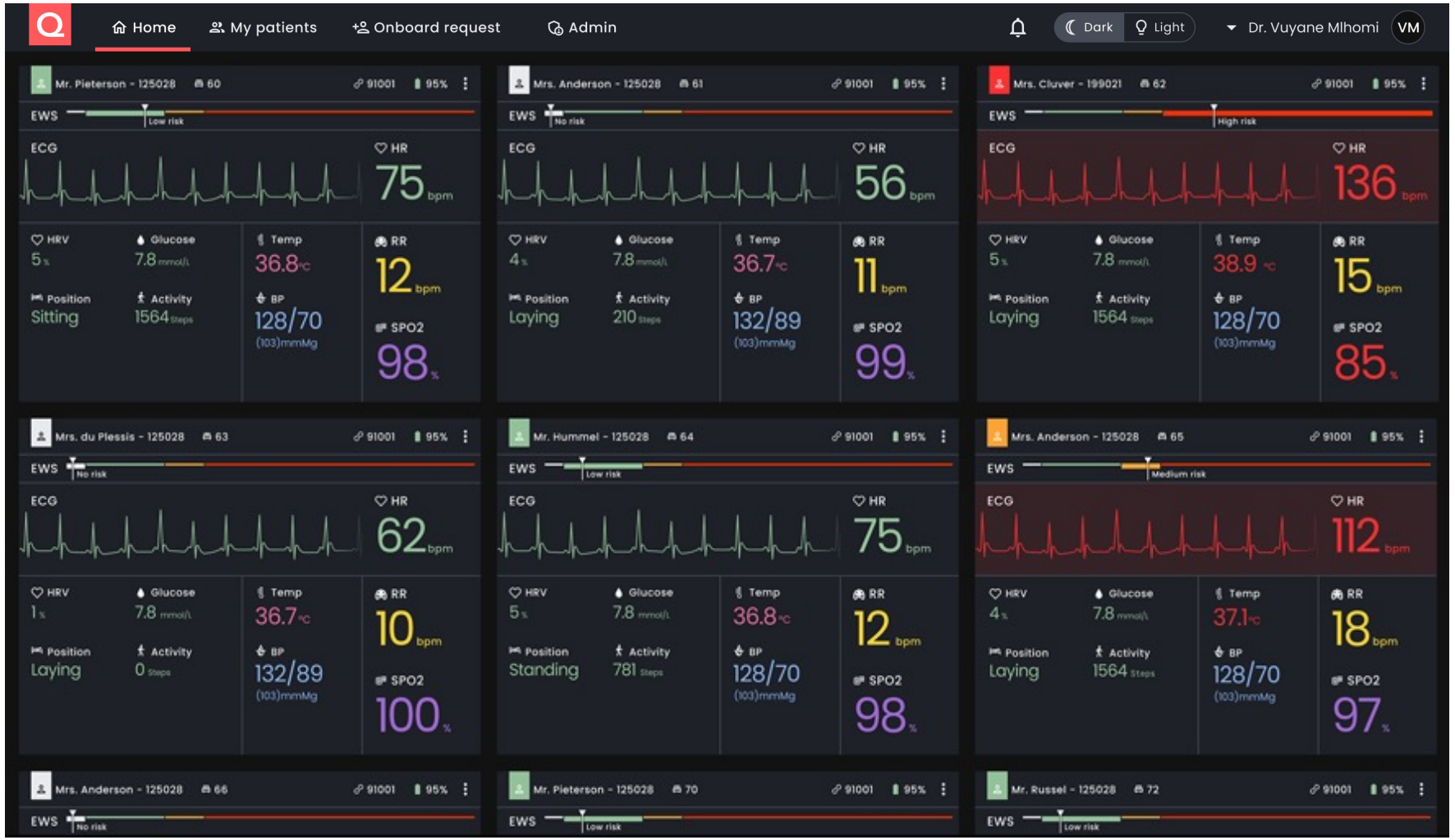
State-of-the-art **Technology**



Quro Medical Insight

Designed to be a *single source of truth* unlocking efficient in patient care.

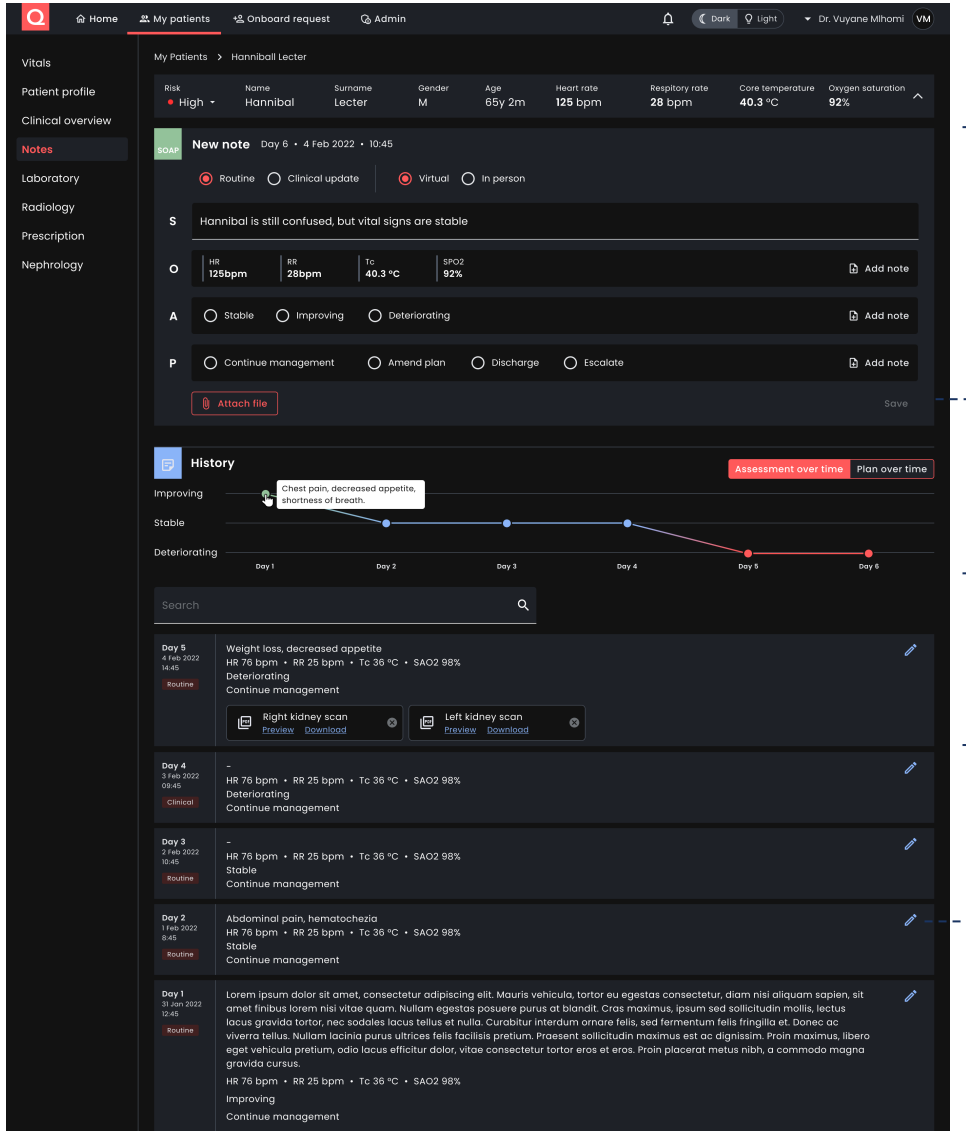
Enables **real-time** vital signs monitoring



Quro Medical Insight

Early warning system to enable early detection and timely intervention.

Dynamic electronic medical record keeping



Real-time, **personalised data**.

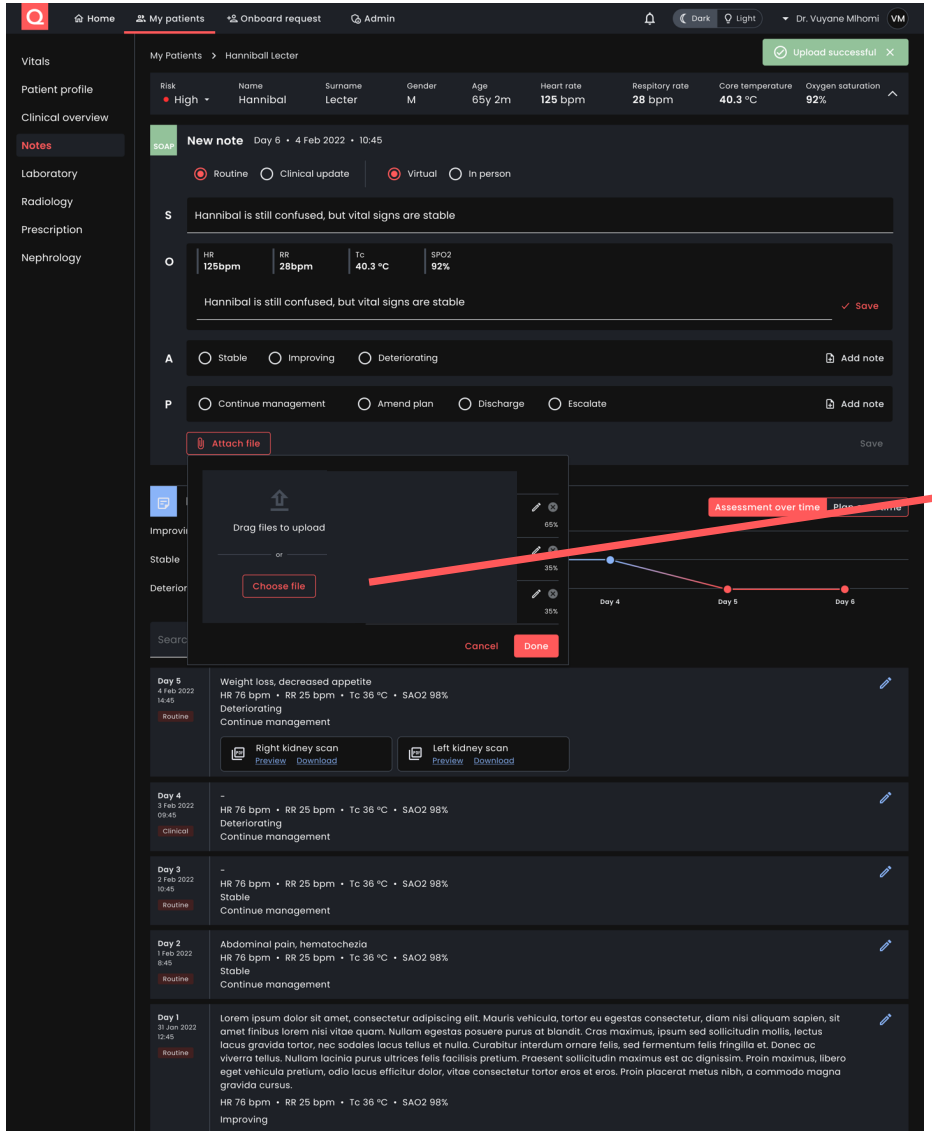
Guided note-taking, **reduces errors**.

Data-driven admission trends to **track progress**.

Seamless upload ensures **no information is lost**.

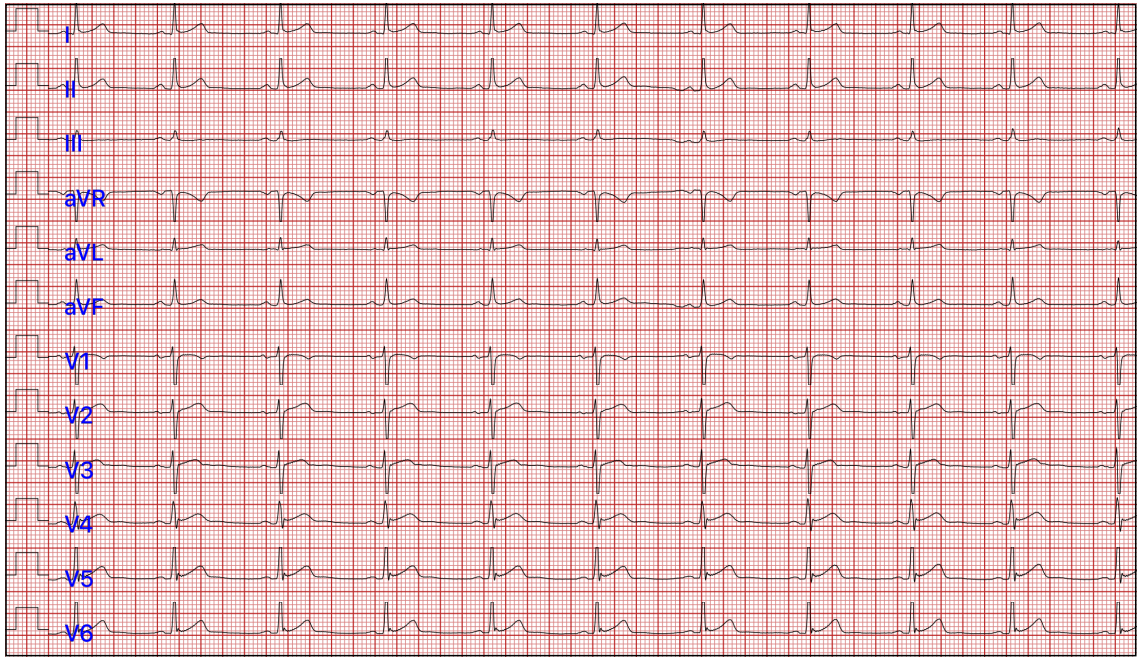
Organised and **easily retrievable clinical notes**.

Example: Uploaded **12-lead ECG** done **at home**

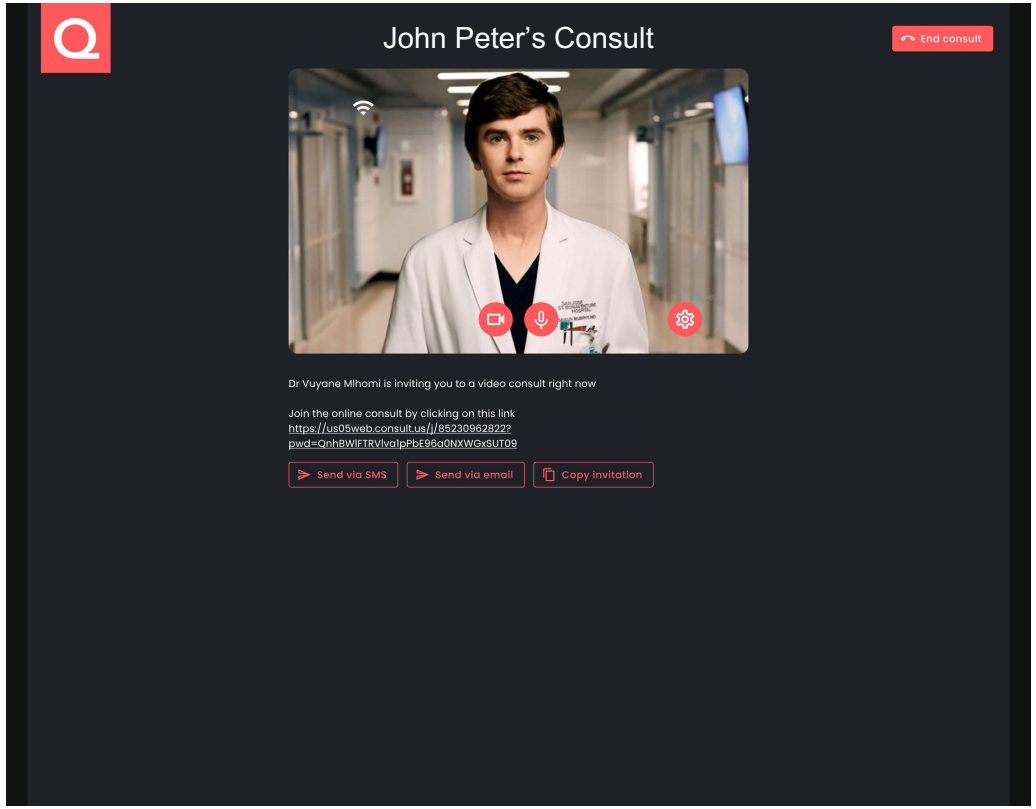


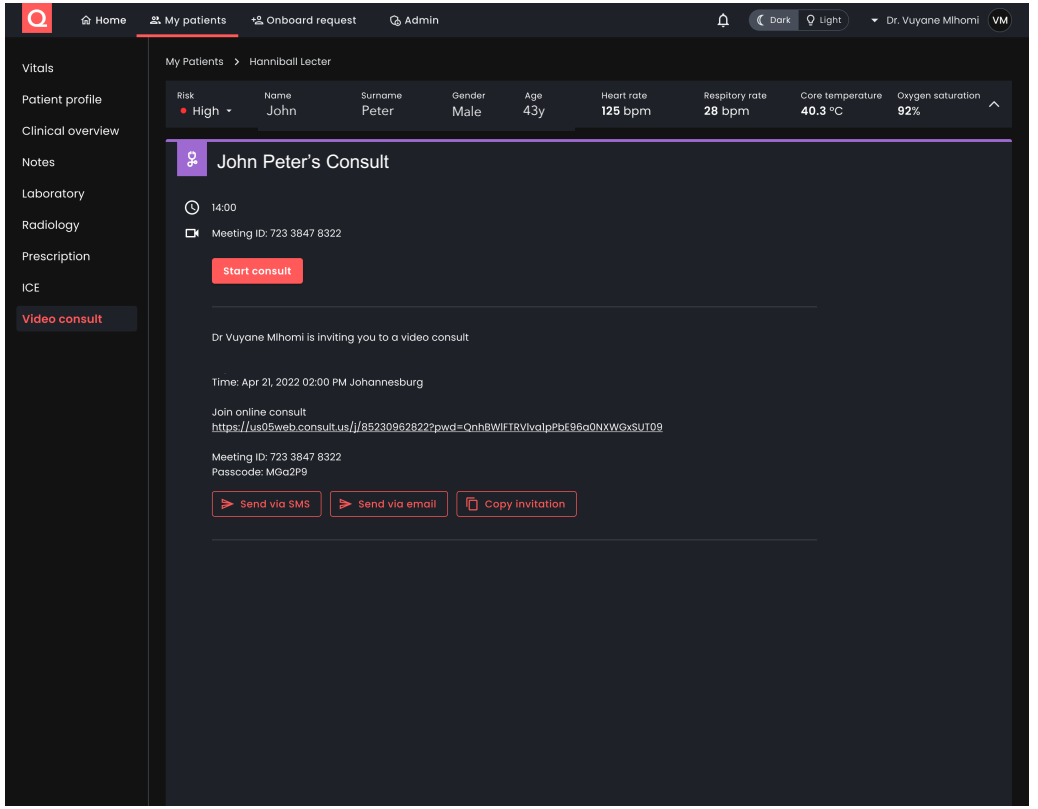
HR: 62 BP: Glu: Spo2: Temp:

Quro Medical 24 Peter Place, Bryanston Signature: _____	ID: QMTEST1 First Name: Vuyane Last Name: Mhlomi Birth Date: 02-24-1988 Sex: Male Age: 34	Non Confirmed Diagnosis: age=34, ;sex=male, sinusrhythm, P:, normal, QRS:, possibleLVH, age-correctedSokolowindex(SV1+RV5orV6)=5.3mV, age-correctedRinleftprecordialleads=2.7mV, age-correctedvectorialRinextremityleads=2.5mV, ST-T:, normal, conclusion:, possiblyabnormalECG	P(ms) = 114 PR(ms) = 148 QRS(ms) = 84 QT(ms) = 378 P Axis = 64 QRS Axis = 48 T Axis = 39 RR(ms) = 960 QTc = 385

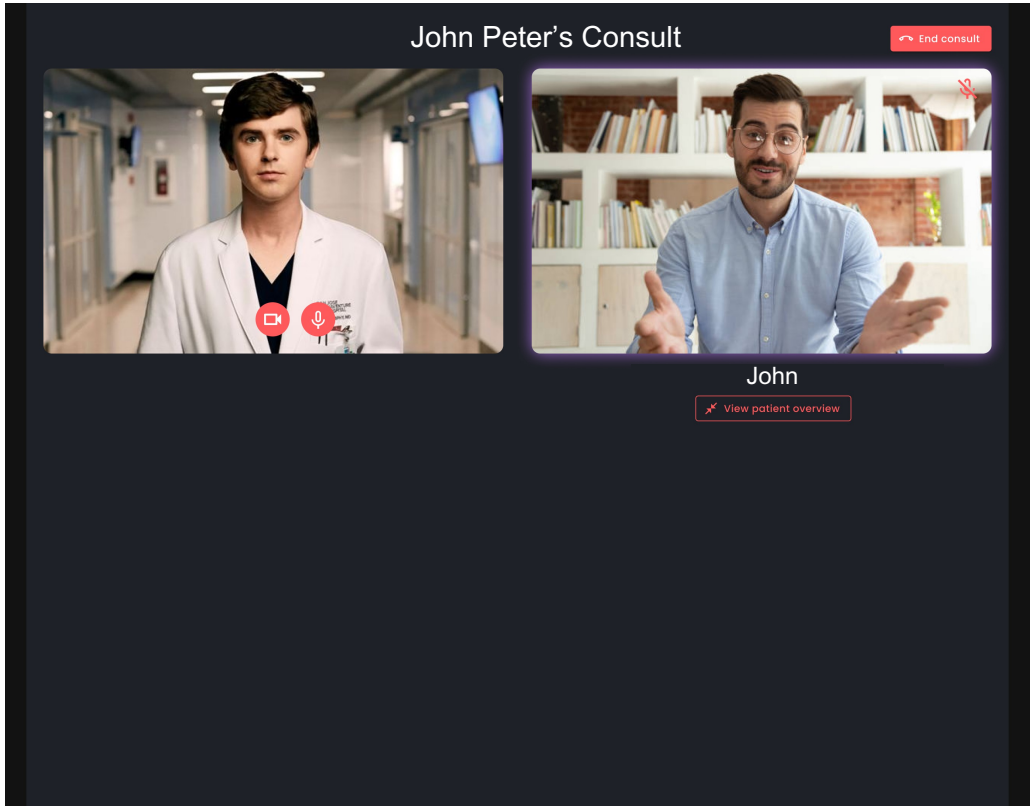


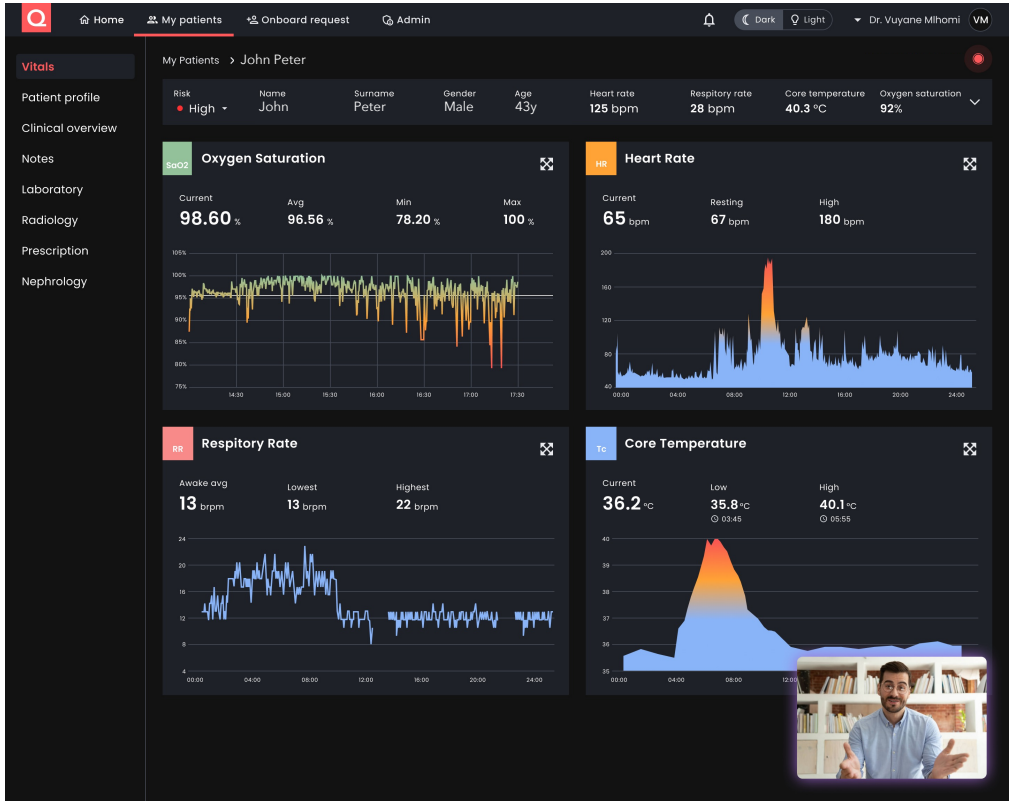
Virtual Calls: On-demand or Scheduled





Virtual Calls: Key information – always in sight





24-hours Command Centre: Data-driven clinical interventions



Hospital at Home: **How are we doing?**

Quro Medical Hospital at Home.

Bringing hospital-level care to patients' homes.

QURO MEDICAL DELIVERS HOSPITAL-LEVEL CARE, AT HOME

In 2020, Quro Medical launched Hospital at Home, which provides qualifying patients with clinically appropriate and patient-centric hospital-level care in their homes. Since launching, hundreds of patients have been successfully treated in their homes with similar or improved levels of clinical outcomes and a better patient experience.

50000+ ADMISSION DAYS TO DATE

20+ CLINICAL CONDITIONS MANAGED

9.2/10 PATIENT SATISFACTON

6000+ VIRTUAL BED DAYS PER MONTH

60% REDUCTION IN LENGTH OF STAY

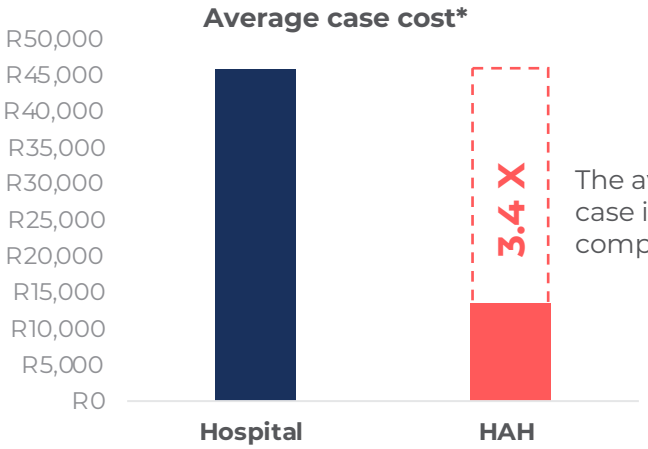
WE'VE CREATED A FAVOURABLE REIMBURSEMENT ENVIRONMENT

We have signed with all the major medical aid administrators and schemes to ensure that all services offered are funded from the patient's hospital benefit including other clinical interventions in the home. Moreover, our service attracts no co-payments for patients and the treating doctors can claim for providing clinical oversight.

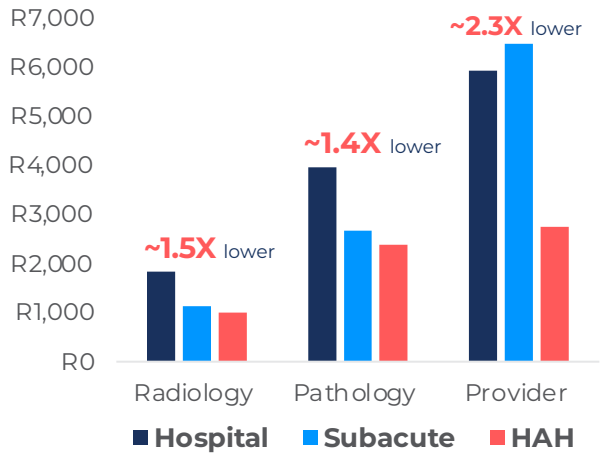
Bonitas, gems, POLMED, FEDHEALTH, PARMED MEDICAL AID SCHEME, horizon medical scheme, Barloworld Medical Scheme, MEDSHIELD medical scheme, SAMWUMED Real Heritage. Real People. Real Health Care., AECI MEDICAL AID SOCIETY, medscheme, SABC Medical Scheme, MBMED, sasolmed, Discovery Health, THE FOSCHINI GROUP Medical Aid Scheme, CAMAF MEDICAL SCHEME, CompCare Medical Scheme, NASPERS, BMW Employees Medical Aid Society, OMSMAF OLD MUTUAL STAFF MEDICAL AID FUND, LA Health Powered by Discovery, TSOGO SUN GROUP Medical Scheme, UKZN MEDICAL SCHEME Administered by Discovery Health

We are creating **value : Cost Efficiency and Clinical Quality**

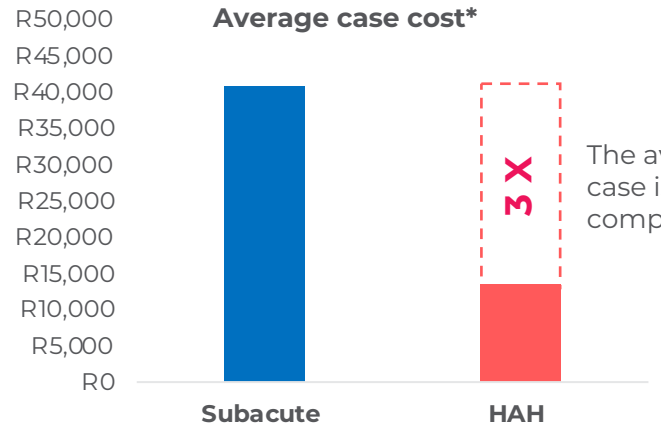
Quro Medical has demonstrated lowering of costs through HAH.



The average cost per case is lower in HAH compared to Hospital.



Over the past few years, Quro Medical has demonstrated that it is entirely possible and desirable to deliver hospital-level care safely and effectively in a patient's home for numerous medical and surgical conditions that would otherwise require admission to the hospital.



The average cost per case is lower in HAH compared to Sub-acute .

3 X

Reduction in costs

↓40%

Decreased Length of Stay

9.2/10

Improved Patient Satisfaction and Experience

* Actual Scheme data

Feedback from our patients

"The aftercare service my husband received was amazing. Much better than being in a hospital. We were extremely grateful and impressed. Thank you."

"The staff are always friendly and help where they can and give you feedback"

"Thank you for this program. It meant the world to us to have been able to take care of my husband at home."

"Words fail to convey my thanks to you, for your caring, may God our Saviour bless all your services you do for the sick and lonely, including me!

I appreciate your kind service to all in need. May God bless Quro Medical for their dedication to assist the lonely & helpless in their need. Good night, & God bless each one of you!"

Employee Distribution Overview

Demographics, Diversity and Departmental Breakdown

63

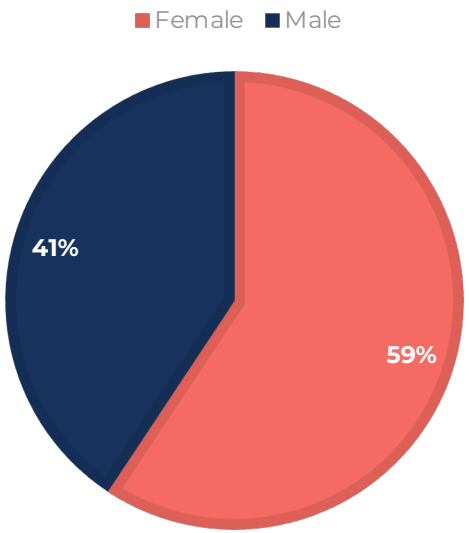
Employees

31

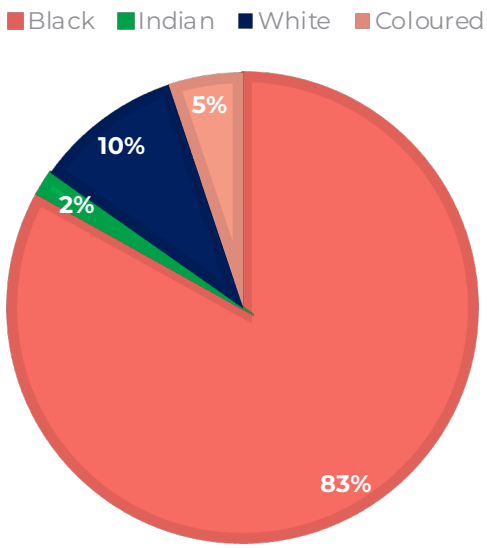
Average Age

78%

Under 35



Gender



Ethnicity

A growing product offering: Current Product Overview

Diversifying our revenue stream - from service to SaaS

	Hospital at Home	Remote Patient Monitoring	Transitional Care Program	Post-Surgical Monitoring	At-Home Geriatric Screening & Prevention
Technology	QM Insight Wearables	QM Insight Wearables	QM Insight Wearables	QM Insight Wearables	QM Insight Wearables
In-person Homecare	Nurses Clinical Associates Medical Doctors	Nurses Clinical Associates	Nurses Clinical Associates	Nurses	Nurses Clinical Associates Medical Doctors
Virtual Care	Clinical Oversight Daily Review with H/C Professional Care Coordination	Clinical Oversight Daily Review with H/C Professional Care Coordination	Clinical Oversight Daily Review with H/C Professional Care Coordination	Clinical Oversight Daily Review with H/C Professional Care Coordination	N/A
Average Length of Stay	5 days	5 days	30 days	3 days	1 day
Clients	Approx. 89% Medical Schemes	Approx. 89% Medical Schemes	Medscheme- administered schemes	Advanced Health Medscheme Discovery Health	Fedhealth Bonitas Pfizer (New)

We are on strong growth trajectory

We have established good PMF; our customers love our offerings, and we iterate and ship fast!

4.4x

Revenue Growth in the last year

21x

Revenue Growth in the last two years

3.69x

Admission Growth in the last year

7

Provinces by March 2025

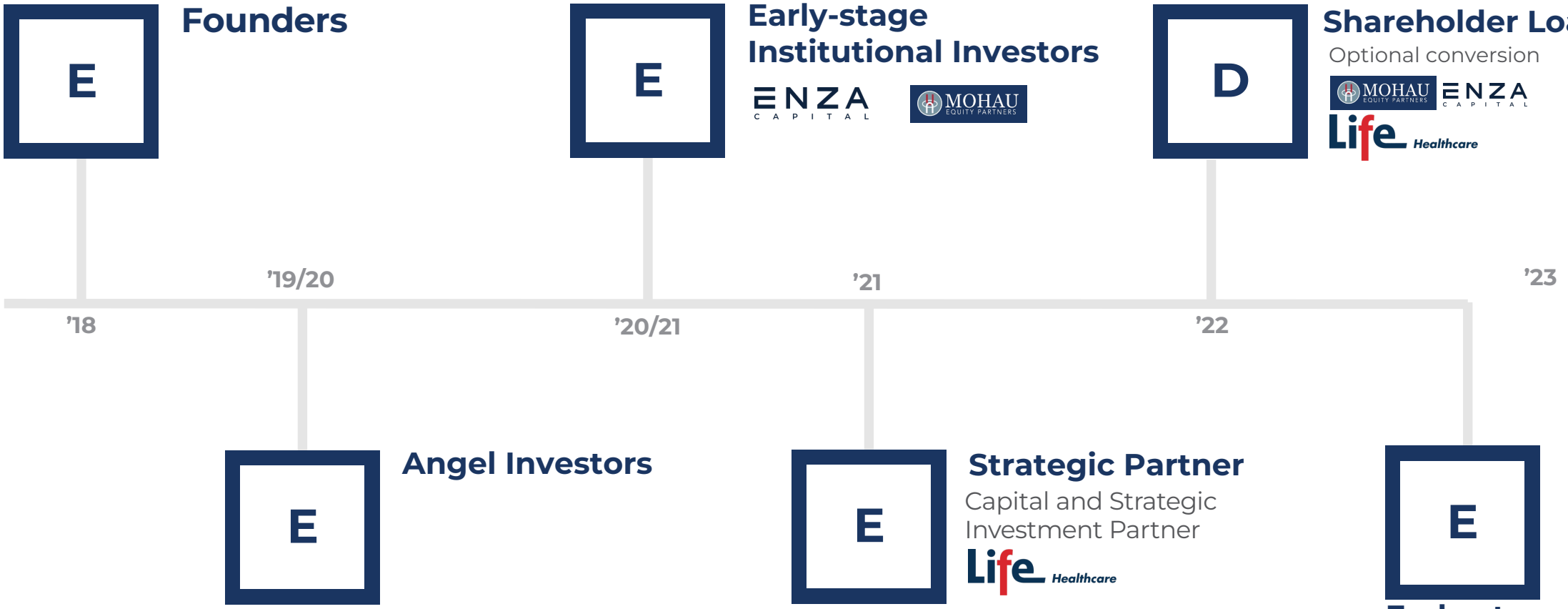
2

Targeted regions outside of SA

1

Month to set up new regions

Key **Funding Milestones**



Strengthening the Market: Anchor partner of DMHS DSP

1 January 2024: Hospital at Home a Designated Service Provider

Discovery Health



Deepening Client Relationships

Endorsement by GEMS

gems
Government Employees
Medical Scheme

gems
Government Employees
Medical Scheme

Dear Healthcare provider

GEMS has launched the hospital at home service for members.

1. GEMS has partnered with Quro Medical to provide access to a technology-enabled **"hospital at home"** (HAH) solution.
2. Digital health that is a technology-enabled combines in-home and virtual visits with remote monitoring, offering patients timely, hospital-level care in their homes.
3. GEMS members have access to the HAH solution "in lieu of" or as an alternative to an in-hospital admission. The HAH admission is funded from the hospital benefit, where there is a valid pre-authorisation and attracts no co-payments.
4. These services are available to your patients in Johannesburg, Pretoria and surrounding areas, Port Elizabeth, Bloemfontein, Durban and Cape Town.
5. For your patients to access this benefit, you can send your request to homebasedcare@medscheme.co.za
6. Providers will be reimbursed as per the scheme tariff schedule available on the GEMS website.
7. For more information, please contact **homebasedcare@medscheme.co.za** or 0860436777.

Sincerely,
The GEMS Hospital Benefit Management Team

Home-based care faces growing patient volume and acuity

NEJM Catalyst, 2023



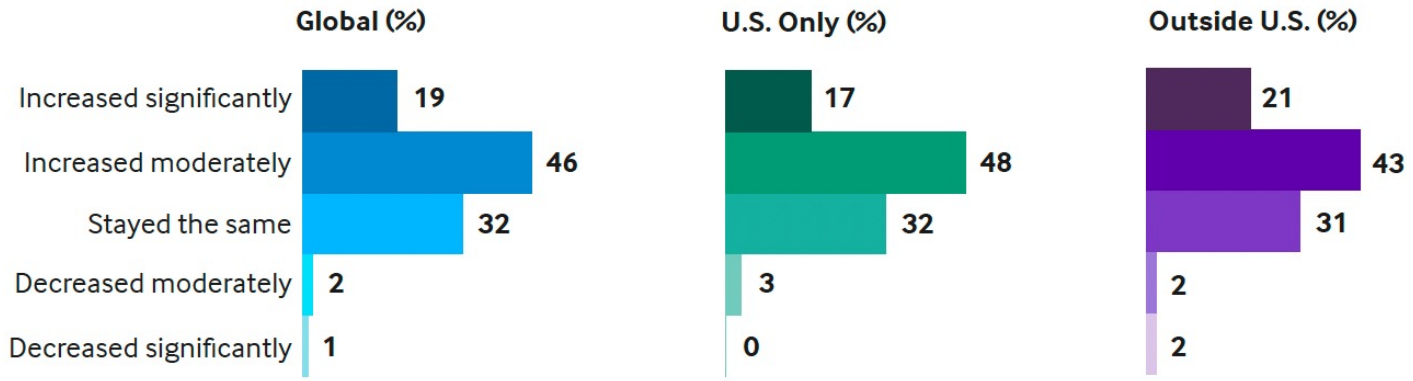
Region (%)

U.S. Regions	
West	21
Midwest	23
South	33
Northeast	23

Outside U.S. Regions	
Africa	6
Americas	34
Asia	25
Europe	29
Oceania	6

Patient Acuity in Home-Based Care Has Increased Over the Past 2 Years

What is the trend for patient acuity level in your organization's home-based care program over the past 2 years?



Statistically significant differences are noted in orange

Base: Global – 498; U.S. only – 275; Outside U.S. – 223 (Among those whose organizations provide home-based care)

(may not total 100 due to rounding)

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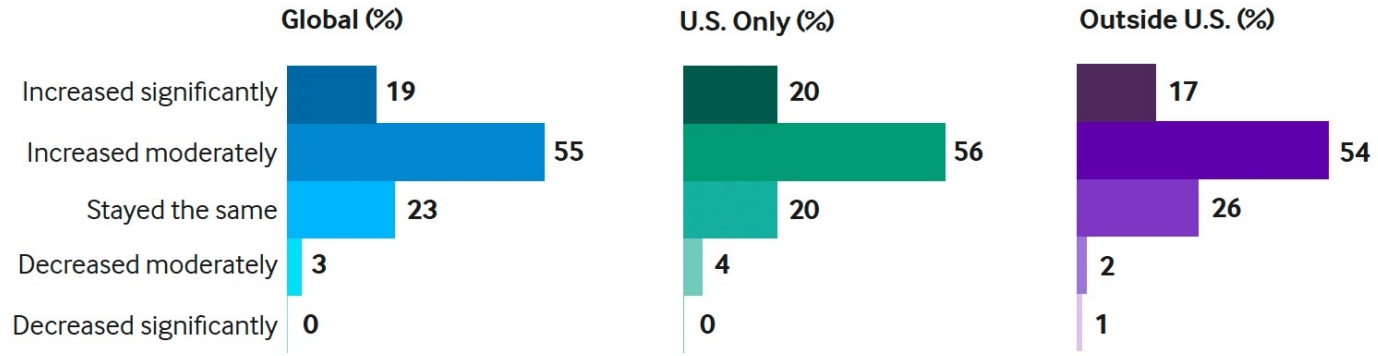
Home-based care faces growing patient volume and acuity

NEJM Catalyst, 2023



Upward Trend in Patient Volume for Home-Based Care

What is the trend for patient volume in your organization's home-based care program over the past 2 years?



Statistically significant differences are noted in orange

Base: Global – 498; U.S. only – 275; Outside U.S. – 223 (Among those whose organizations provide home-based care)

(may not total 100 due to rounding)

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

There is a global proliferation of **Hospital at Home**



UK

- **Centrally driven by the NHS**
- **Well established UK Hospital-at-Home Society**
- **Programmes widely available across all UK countries**



USA

- **59 health systems: 133 hospitals; across 32 states have been approved to deliver care through large, established service providers**



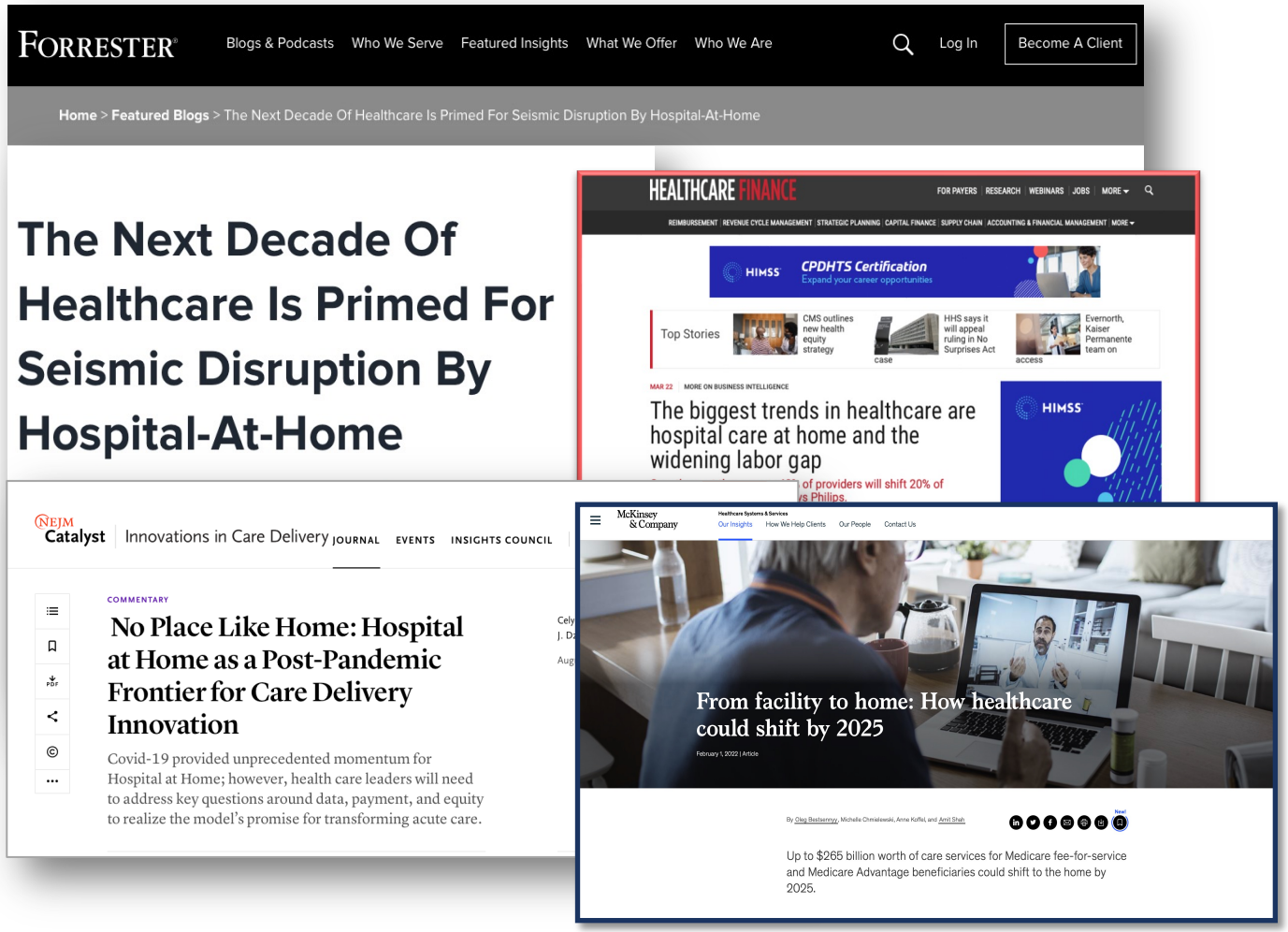
AUSTRALIA

- **Driven at national and local government level with strong market expansion.**



INDIA

- **Leading hospital at home providers serve over 5 million patients across more than 16 cities**



Decentralising radiology and pathology. Improving access.







Helping taking patients **“off the grid”**



Operation Healing Hands
passion • patients • purpose

Quro Medical
Innovation with care

Together for **a healthier, more resilient world**



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Innovation with care