phorix
Digital Futures

The future of healthcare

A presentation by Phorix
Consumer Disruption

Disruptive business

AR/VR  Automation  Social Networks  Big Data
Evolving The Healthcare Model

- Less time spent in each stage
- Largest difference is yet to come
- New tools need be created to realize this
<table>
<thead>
<tr>
<th>Stage</th>
<th>Research</th>
<th>Development</th>
<th>RealWorld</th>
<th>Commercial</th>
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<tbody>
<tr>
<td>Technology</td>
<td>Big Data</td>
<td>Sensors Machine Learning</td>
<td>Non Clinic Monitoring Robots (surgery/ Delivery/ engagement)</td>
<td>Digital Diagnostics At home monitoring Adherence/ Persistence Motivation Hospitalisation/ Readmission prevention</td>
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The usual pattern of clinical observation
Sporadic
Diary Based Recall

Diaries / PRO often only provide accurate observations for a few day prior to consultation.
Consultations have a full picture of health not just a snapshot.
The Digital Future

**Preventative**
Data, Digital Tools & Evidence based Pharma/ Non Pharma Interventions

**Predictive**
Machine Learning will predict events avoiding higher cost interventions

**Prescriptive**
Interventions will be algorithm driven based on clinical trial and RW data

**Personalised**
Interventions will be personalised matching individual to population data

**Precision**
Healthcare will take an “Always-on” approach to monitoring and decisions
Choice Architecture

From ever-present to hyper-relevant

Behavioural change for patients becomes possible with digital nudges. Digital devices will become hyper-relevant at times where we have little daily choices to make and help us navigate a better path.

- Medication adherence
- Physical activity
- Neurological activity
- Sleep
- Location
- Stress
Health Care Location

From Doctor’s office to Smart Health spaces

The place that healthcare takes place is moving from the hospital and GP surgery to other smart spaces. The connected consumer home is now becoming the connected Healthcare home.
Machine Learning and AI

Use Cases

- Imagining
- Decision making
- Predictive analytics
- Medical Assistants

Companies
Zebra Medical
PhysIQ
Virtual Reality/ Augmented Reality Healthcare

1. Education
2. Treatment
3. Changing Perception
4. Experience
5. Visualisation
Summary Pharma 3.0

There are 8 themes that will change healthcare as technology intersects with biology.

- Behavioural Change
- Wearables and Invisibles
- Robotic Surgery
- VR (Transportation)
- AR (Transformation)
- Gene Editing
- Digital Engagement
- Knowledge