

# **RESPIRI** LIMITED

Chairman's Address

14 December 2017



# OUR MHEALTH TECHNOLOGY

For personal use only

The world's first, clinically proven, digital wheeze detection technology. A system using a connected medical device for measuring respiratory wheeze in asthma sufferers and patients with respiratory conditions.

Our wireless technology has two components:

- A breath sensor handset to capture and transmit breath sounds to the app
- A real time app as part of a sophisticated and scalable IT platform that contains the Acoustic Respiratory Monitoring algorithm with Artificial Intelligence or machine learning technology.

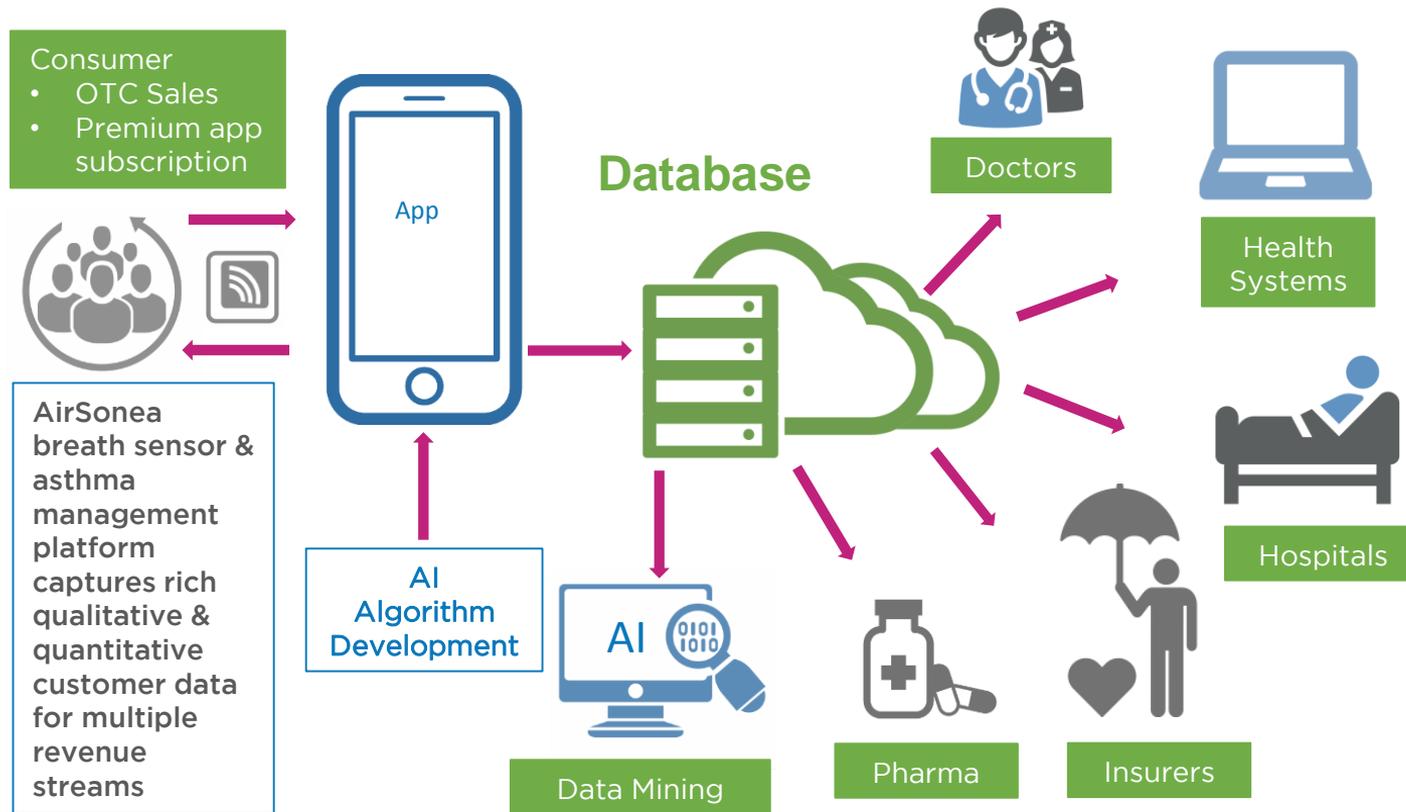


CONCEPT RENDER



# MHEALTH PLATFORM: REVENUE STREAMS

For personal use only



# RESPIRI: COMPANY REBUILT 2014-2017

The pivotal tasks of the company were to develop a new product (hardware & software) from scratch with technological and financial rigor and build global potential partner relationships.

1. Searched for and appointed suppliers with world class technology skills and rigorous product development processes
2. Reduced operating costs by \$8M per annum from \$10.3M in 2014 to \$2.5M in 2017 by using outsourced best in class skills
3. AirSonea product had to be rebuilt from scratch due to its faulty design, poor engineering and inadequate software
  - Re-Built the IT infrastructure & app (software)
  - Re-engineered breath sensor to be able to undertake a research study
  - Commenced building the 2018 breath sensor (hardware)
4. Undertook a successful independent clinical research study at the University of Chicago
5. Completed additional consumer research with positive results
6. Received global regulatory approvals
7. Developed global collaborative opportunities and relationships
8. Established respected relationships with leading clinicians, health care professionals and peak asthma bodies

# TIME TO MARKET : Global tech products take time

## Technology developments 2014-2017

The technology to develop a robust and innovative mobile medical product for over the counter sales requires a world class team of scientists, engineers and software developers with a commitment to a rigorous product development process. **This required time and there are no shortcuts.**

It is usually approximately a 10 year process, as it was for companies such as Dexcom. However, the share price upside from a successful launch process is usually substantial.

### 2007 - Apple iPhone debuts creating new digital health opportunities

#### Dexcom | Continuous Glucose Monitoring

1967 - research on implanted glucose sensors

1999 - Dexcom founded

2015 - G5 launch, the first fully mobile CGM system

#### Adherium | Smart Inhaler

2001 - Founded as Nexus6

2015 - Changes name to Adherium/ partners with Astra Zeneca

#### AliveCor | ECG

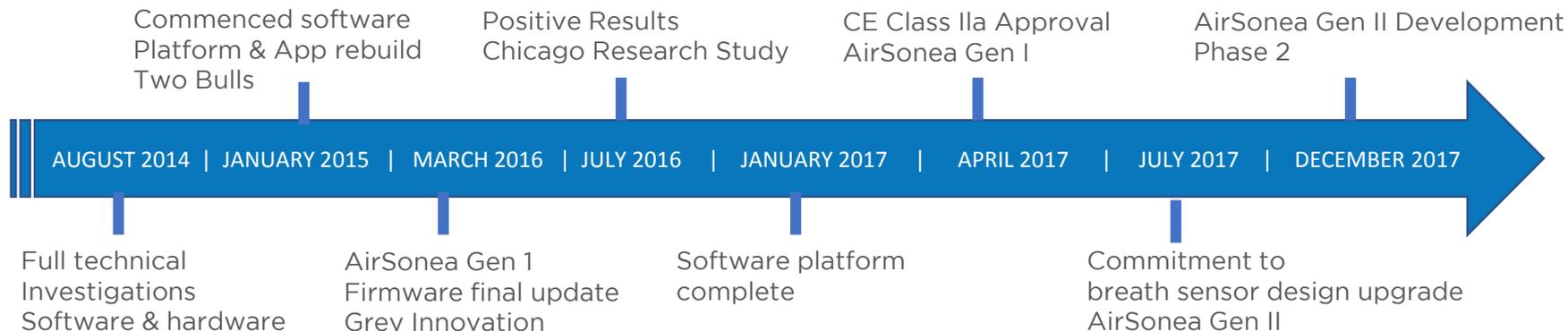
2002 - Alive Technologies founded

2011 - AliveCor (AUS/US) founded to distribute heart monitor (Kardia)

# TIME TO MARKET : Global tech products take time

For personal use only

## Development milestones



AirSonea Gen I clinically proven to measure wheeze with new software platform, but further development required:

- 50% of units non-functional
- More robust design
- Better ergonomics
- Best in class components
- Improved noise cancellation properties
- More reliable performance

# MARKET OVERVIEW AND CURRENT TRENDS

For personal use only

1. **Major health authorities are now recognising the importance of measuring wheeze** in Asthma sufferers and the value of digital technology. Respi delivers self-management tools to monitor wheeze and its triggers.
2. The path to market, as with any global consumer product today, involves a **multi-channel approach** including online, mobile, big and small speciality store retailers, healthcare systems, insurers, government bodies and big data organisations.
3. The largest medical device companies, are now **collaborating with multiple partners**, and providing greater but more complex opportunities for Respi.



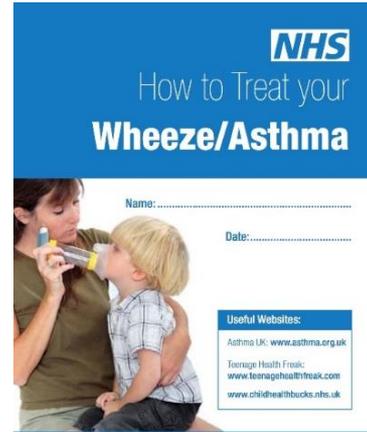
# HEALTH BODY (NHS) HIGHLIGHTS WHEEZE MEASUREMENT

For personal use only

Under the NHS, the Healthy London Partnership set up an Asthma Leadership Group resulting in the publication of a set of standards for Children & Young People (CYP). Organisations were asked to undertake a baseline assessment against these standards and a number of gaps were identified.

These standards highlight diagnostic **wheeze measurement** to determine severity of the condition, for proactive **self-management and monitoring**.

Respiri's AirSonea home monitoring product provides objective wheeze measurement and digital diary features, stored in the cloud for review by carers and clinicians, can fill a critical gap.



## Respiri Delivers on London Asthma Standards

Proactive care | **self-management**

Accessible care | **severity of wheeze**

Co-ordinated care | **asthma management plan**  
**share clinical information**

# UK HEALTH SYSTEM RESTRUCTURE PROVIDES A NEW OPPORTUNITY

For personal use only

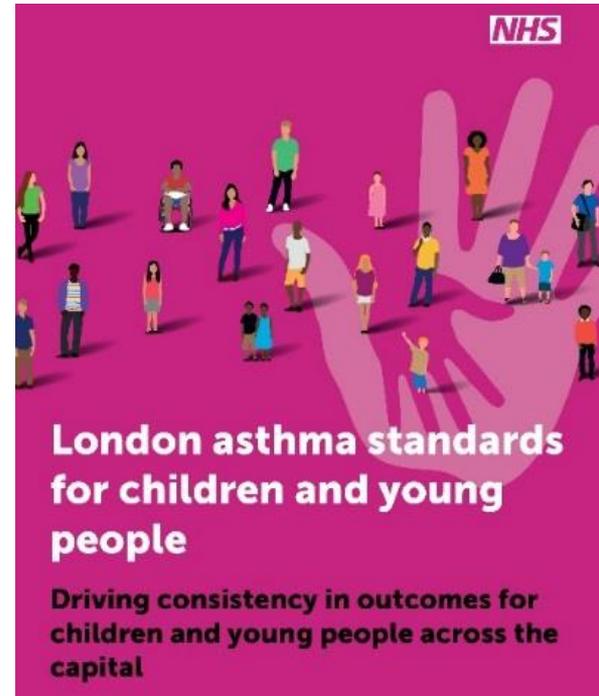
## Clinical Commissioning Groups (CCG) are the cornerstone of the new health system.

Each of the 8,000 GP practices in England is now part of a CCG. There are more than 200 CCGs altogether commissioning care for an average 226,000 people each.

There are 32 CCGs in London with a commissioned advisory group called Healthy London Partnership.

It is estimated that 75% of UK hospital admissions for asthma and 90% of deaths related to the condition are preventable with optimal care.

Respiri can work with the CCGs to help provide optimal care for asthma patients.



# RESPIRI FILLS THE GAP BETWEEN PATIENT VISITS

Respiri delivers asthma self-management tools to monitor wheeze and its triggers

**'The evidence in favour of supported self-management for asthma is overwhelming'.**

Prof. Hilary Pinnock, University of Edinburgh.  
Connected asthma: how technology will transform care. Asthma UK

**'Systems need to be implemented to facilitate asthma self-management'.**

The Global Strategy for Asthma Management and Prevention.  
GINA 2014

Extract from Independent Consumer Market Research | October 2016

- Parents 'crying out' for greater support and understanding to proactively manage child's asthma.
- Parents often can't remember all the asthma sign/triggers details leading up to an asthma episode - they are stressed, living busy lives.
- They would like asthma period/historical data and trends that they are able to discuss with GP to enhance management.
- They would like a tool that they can send with child to grandparents, on sleepovers and on holidays to monitor child's asthma status.

**Much of the coordination required for successful asthma management still takes place offline, throughout infrequent sharing of incomplete and imperfect information. Be it between doctor and patient or patient and parent.' Propeller Health 2014**

# PATH TO MARKET: SALES & DISTRIBUTION

The path to market, as with any global consumer product today, involves a **multi-channel** approach including online, mobile, big and small speciality store retailers, healthcare systems, insurers, government bodies and big data organisations.

All of these segments have potential distribution partners:

- **Major consumer channels** for sales & distribution include online, mobile, lifestyle and electronic stores and pharmacies.
- **Healthcare systems:** NHS and major insurers (Bupa, Medicare) are seeking to encourage self-management and reduce hospital visits through the subsidy of devices and educational initiatives.
- **Big Data:** Personal health and medical data are a valuable commodity for a number of sectors from public health agencies to academic researchers to pharmaceutical companies.
- **Technology partnerships:** AirSonea complements drug delivery products such as smart inhalers and offers useful data on drug efficacy in clinical trials.

Our healthcare technology is part of the health and wellness revolution where consumers seek products to empower them. There is increasing demand for more personalised care in health and wellness products.

# NEW COLLABORATION IN MHEALTH

For personal use only

## Philips Venture Capital Fund BV

### Baidu Injects \$40 Million Into Mobile Health Startup Quyi

Chinese mobile healthcare service Quyi announced that it has secured \$40 million USD in Series B funding led by Baidu with participation of existing investors of HighLight Capital and SB China Capital. The company received a

### iHealth Raises \$25 Million to Fuel Growth and Global Market Share

Venture Arm of One of China's Largest Electronics Companies Makes First Investment in Mobile Healthcare  
19 Sep, 2014, 15:37 ET from iHealth Lab, Inc.

### Teva snaps up Gecko and its 'smart inhaler' to pump up respiratory meds

by Beth Snyder Bulik | Oct 5, 2015 7:34am

Medtronic and Qualcomm collaborate to aim to improve care and health outcomes for people with type 2 diabetes

MedTech

### Philips, Teva venture firm looks to invest \$26M in Israeli med tech

Jan 27, 2016 10:23am

INDUSTRY NEWS | HEALTH CARE

### Medtronic teams up with Fitbit on diabetes-tracking app

Dec 7, 2016, 12:32pm CST

INDUSTRIES & TAGS Health Care, Medical Devices

### Propeller Health Completes \$21.5 Million Financing to Transform Respiratory Disease through Digitally-Guided Therapy

press release

10.20.16

press release



Funding comes from 3M Ventures, S.R. One, Limited, Hikma Ventures and existing investors Safeguard Scientifics and Social Capital.

# GLOBAL INTEREST IN OUR AIRSONEA PRODUCT

Respiri has been receiving ongoing interest from potential industry partners for some time now.

We have responded to over 20 enquiries and expressions of interest, met with participants in several countries and established good relationships for ongoing discussions. Our technology platform was well received and regarded as important given the multiple uses of data. So too was our over-the-counter approach as the vast majority have focused on Rx products.

It is our policy not to announce details of partnering progress that involves incomplete and uncertain outcomes and we will ensure that these commercially sensitive discussions will be tightly controlled.

We have received at least four proposals concerning China and announced one in May 2017. We subsequently advised shareholders in July 2017 that “the potential deal structure is complex, involves at least six parties and requires detailed negotiations over an extended period ranging over several months”. Accordingly, we sought professional independent advice who confirmed that the draft proposals were not in the best interests of shareholders. We advise shareholders today that we will not be pursuing these negotiations.

**The importance of having the best partner or collaborative relationships should not be underestimated**

# THE YEAR AHEAD

For personal use only

## 2018 Board & Medical/Scientific Advisory Group

We will continue to strengthen our Respi Board of Directors with a diverse skill set. In considering new director appointments, the Board's practice is to conduct a professional search for the best available candidates who possess the skills, experience, expertise, personal qualities and attributes to enhance the Board's effectiveness. This search is in progress.

We will expand our Medical/Scientific Advisory group with the best available global respiratory key opinion leaders. This will advance the understanding and adoption of home monitoring, importance of wheeze measurement and the role of AirSonea Gen II in the optimal management of asthma.

# TALENTED GROUP WITH GLOBAL SKILLS

## **Mario Gattino | New Chief Executive Officer Respiri**

Mario has over 25 years' experience in senior leadership positions within the medical industry. His track record in commercialising and managing sales of drugs, medical devices and diagnostic products in multiple countries will be invaluable in helping Respiri achieve its commercial milestones. Mr Gattino has held senior leadership positions at Pfizer, one of the world's largest pharmaceutical companies, in the USA and Europe. Mario is equally adept at applying his skills in a small company environment evidenced most recently at Ikaria Australia & NZ leading a team of less than 10 staff.

## **Dr Samaneh Sarraf | Chief Research Officer Respiri**

An experienced research and development biomedical engineer with specialist skills in the capture, detection and analysis of breath sounds with more than 9 years experience in biomedical signal processing. Dr Sarraf's academic and industrial experience include the design of signal acquisition devices including complex digital and analog electronics, microcontrollers, battery management systems, and algorithms for data analysis. Her experience in medical device product development process includes the design phase, regulatory requirements, testing and refinement, and quality control.

## **Two Bulls | Software Development Company**

Creative software development firm with offices in Melbourne, New York and Berlin servicing a select group of major global clients and leading startups. 'We don't just write code. And we don't design for design's sake. Our engineers are thinkers before builders and our designers are creators before doers. We weigh the strategic, social and cultural significance of every line of code and pixel. It's creative development, on every line.'

## **Grey Innovation | Hardware Development Company**

Commercialisation technology company with offices in Melbourne and Munich building next generation products and businesses in Medtech, Safety & Security and Environment. Grey Innovation develop innovative technologies in Health, Security & Safety and Environmental fields, encompassing Internet of Things and Big Data. They bring in house capabilities such as Industrial Design, Mechanical, Electronic, Software and System Engineering, Project Management, Manufacturing and Legal Counsel

## **The Wall Partnership | Product Management/Marketing Communications Company**

Decades of experience in marketing, communications, customer engagement and project management with local and international clients ranging from Health, Government and FMCG to Banking and Finance, Sport and Broadcasting.

# MAJOR MILESTONES & INFLECTION POINTS

For personal use only

AirSonea Generation II	2018
Initial functioning demonstration quality prototype for technology demonstration purpose with partner & investors.	Q2
Fully functional medical device quality prototype with design completed	Q3
Attend major industry tradeshows and healthcare conferences to showcase and generate interest for AirSonea Gen II with investors, customer and potential partners	ongoing
Initial manufacturing package and limited production of verification units by contract manufacturer	Q3
One or more Memoranda of Understanding (MOU) or Letters of Intent (LOI) for collaboration will be established with targeted development & commercialisation partners to advance AirSonea Gen 2	Q3
Final design updates and verification testing and Ideally handover to preferred manufacturing partners in key target regions.	Q4
Finalise planning and launch a significant pilot program in a major market (e.g. UK, Germany, USA) to establish value proposition of AirSonea Gen II.	Q4
Regulatory approvals processes	Q3/Q4

# MAJOR MILESTONES & INFLECTION POINTS

## AirSonea Generation II

2018

Develop broader Respiro portfolio and roadmap including consumer overnight monitoring and the clinical PulmoTrack & WHolter products.

2018/2019



CONCEPT RENDER



**THANK YOU**

***RESPIRI LIMITED***