



# Virtual Rehab

PITCH DECK



# Virtual Rehab

## COMPANY PURPOSE

Evidence-Based Solution Using Virtual Reality,  
Artificial Intelligence, & Block chain Technology for Pain  
Management, Prevention of Substance Use Disorders, and  
Rehabilitation of Repeat Offenders.



# Global Problem

Alcohol and Substance Use account for 5.4% of world's total percentage of disease

Globally, 39 deaths per 100 000 population are attributable to Alcohol and illicit Drug use

Drug & Alcohol relapse statistics may reach up to 90% following a period of recovery

In the U.S. alone, 116 million adults struggle with chronic pain at a cost of \$635 billion in lost productivity and treatment

In 2012, healthcare providers wrote 259 million prescriptions for painkillers. Note that 100 people die every day due to opioid drug overdoses

In the U.S. alone, 66% of released offenders recidivize within 3 years and 77% within 5 years

Lack of focus on mental health & psychological well-being







# Research Results

Among 244 children (2-16 yrs. old) receiving vaccination, using VR resulted in **45% to 74% decrease** in pain <sup>1</sup>

Burn patients reported a **35% to 50% decrease** in perceived pain when using VR with standard pharmacologic treatment <sup>1</sup>

Researchers at Duke University are showing that when recovering people **develop strategies to avoid relapse** in a virtual world, they are able to take those strategies and use them in real-world situations <sup>2</sup>

VR **significantly reduced** the amount of opioid medication administered during painful wound care procedures <sup>3</sup>

VR can be used as a **treatment tool** for enhancing behavior modification goals to support healthy eating habits by reinforcing these goals in life-like situations <sup>4</sup>

<sup>1</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5729140/>

<sup>2</sup> <https://teens.drugabuse.gov/blog/post/virtual-reality-and-drug-abuse-treatment>

<sup>3</sup> <https://www.ncbi.nlm.nih.gov/pubmed/28570305>

<sup>4</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3125915/>

# Solution

## A Comprehensive Prevention And Treatment Program



### Virtual Reality

A virtual simulation of the real world using cognitive behavior and exposure therapy to trigger and to cope with temptations



### Artificial Intelligence

A unique expert system to identify areas of risk, to make treatment recommendations, and to predict post-therapy behavior



### Blockchain

A secure network to ensure privacy and decentralization of all data and all information relevant to vulnerable populations



### VRH Token

An ERC-20 utility token that empowers users to purchase services and to be rewarded for seeking help through Virtual Rehab's online portal

# Why Now



**\$ 80  
Billion**

Virtual and  
Augmented Reality  
Projected Revenues  
by 2025 <sup>1</sup>

**Use  
Cases**

Diagnostics  
& Planning



**\$ 5.1  
Billion**

Worldwide Market  
for Virtual and  
Augmented Reality  
in Healthcare by  
2025 <sup>2</sup>

Training

Treatment



**73%**

CAGR in Healthcare  
Driven by Training  
and Simulation  
Apps & Services <sup>3</sup>

Rehabilitation

<sup>1</sup> According to Goldman Sachs (2016)

<sup>2</sup> According to Global Industry Analysts (2016)

<sup>3</sup> According to Allied Market Research (2016)

# Market Size

Size

**261  
Million +**

Global Substance  
Use Addiction

**175  
Million**

Prevention &  
Treatment Patients

Cap

**\$136  
Billion +**

Global Spend on  
Prevention & Treatment

**\$90  
Billion**

Global Spend on  
Virtual Rehab Market

1 According to the International Centre for Prison Studies (October 2016)

2 According to the U.S. Department of Justice FY 2016 Budget Request

3 According to the Surgeon General's Report on Alcohol, Drugs, and Health (2016)

4 According to the National Institute on Drug Abuse – Healthcare Costs Only (2016)

5 According to the Society for the Study of Addiction (SSA)

6 According to Reuters (2015)

# Competition

	<b>Dr. Phil's Path to Recovery</b>	<b>appliedVR</b>	<b>NEOFECT</b>	<b>Virtual Rehab</b>
VR	✓	✓	✓	✓
AI	✗	✗	✗	✓
Blockchain	✗	✗	✗	✓
B2C	✗	✗	✓	✓



# Competitive Advantage

First Mover Advantage (Addiction & Corrections)

Market Leader Status

Strong Brand Recognition

Unique Expert System (Identifies Areas of Risk, Makes Treatment Recommendations in Addition to Any Prescribed Medication, Predicts Future Behavior)

\$VRH Token to Incentivize Patients to Seek Help & Counseling



# Product

## ASSESSMENT

## PROCESS

## TREATMENT

### INPUT

CBT & Exposure  
Therapy Scenarios

Physiological Metrics,  
BCI, Eye-Tracking, User  
actions, time intervals,  
etc.

Gathered Data from  
Assessment & Predictive  
Analysis

### MACHINE LEARNING

Curriculum Rules Engine

Coursework results,  
stimuli / response  
dynamics, therapist and  
patient feedback

Adaptive course work  
recommendations

### ARTIFICIAL INTELLIGENCE

Analysis of individual and  
group behavior patterns,  
identifies areas of deeper  
therapeutic focus

Single and multi-point  
blind, data set derived  
from metrics sampling

Predict area of risk and  
refine treatment options  
and recommendations

### OUTPUT

Data Points Based on  
Action & Reactions

Extensive Data Points  
Allowing Prediction of  
Future Behavior

Tailored Treatment  
Programs & Medication

# Business Model

## B2B



## B2C





# Team

## LEADERSHIP



[Dr. Raji Wahidy](#)  
Founder & CEO



[Amal Azzeh](#)  
Co-Founder & CFO



[Jean Speville](#)  
Chief Mind Technologist

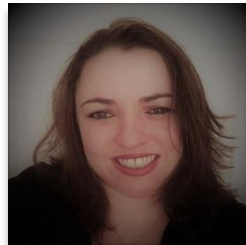
## ADVISORY BOARD



[Donald Cox](#)



[Karen Hurst](#)



[Dr. Bobbie Ticknor](#)



[Dr. Larry Wray](#)



[Dr. Jeffrey Pfeifer](#)



[Philip Fasano](#)



[Paul Mears](#)



[Binod Nirvan](#)



[Ethan Gilmore](#)

# Recognition & Awards

- Evidence-based solution with proven efficacy results approved by physicians, psychologists, and therapists
- 87% of participating patients have shown an overall improvement across various metrics
- Described by US Digital Government Head as a “capability that is very very promising for public services”
- Only VR/AI company included in the US Department of Justice, Institute of Corrections Environmental Scan report
- Partnership agreements in-place across the North America, Europe, Middle East, and APAC regions
- Only company to represent Canada as part of the Canadian Delegation to Arab Health
- Selected as one of Canada's most promising high-growth life sciences companies (Dose of the Valley, CA)
- Featured by Microsoft's leadership team at the Microsoft Inspire Innovation Session
- Nominated by The Wall Street Journal for the WSJ D.LIVE Startup Showcase (Laguna Beach, CA)
- Ranked by Spanish media as the first option for training correctional officers and rehabilitation of offenders using virtual reality
- Featured by the media across 28 countries worldwide





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THANKS