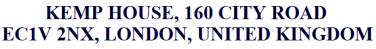
#### OLAMUM RACETT NIGERIA LTD.



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**EL ELYON** 

## OLAWUYI RACETT NIGERIA LTD. WELLINGTON SQUARE, OXFORD, OX1 2JD, UNITED KINGDOM RC14668218

#### STUDY SUMMARY

MEDLINK is a pocket-sized, verbally interactive, programmable medical device that allows physicians to select which medical measurements they would like to take for a specific patient. The Physiological Parameters that can be measured by MEDLINK include, but is not limited to: Electrocardiography (ECG), Blood Pressure, Heart Rate, Blood Glucose, Pulse Rate, Blood Oxygen Saturation (SPO<sub>2</sub>), Electromyography (EMG) body temperature, and Respiratory Data. After programming of the device by the Physician, MEDLINK can be given to the desired patient to take home for Remote Patient Monitoring (RPM).

When the patient switches on the device at home, MEDLINK verbally guides the patient to acquire the measurements requested by his or her Physician. This information is automatically and wirelessly transmitted to the Physician's Mobile Phone and Email Address for medical analysis, check up, and/or follow up. MEDLINK has its own software application that allows the Physician to view and analyse the measured Physiological Parameters for any Patient. MEDLINK also has the potential to allow Patient-Physician Communication during the RPM Period.

One of the key innovations of MEDLINK is that it is able to acquire a diverse range of physiological parameters. This makes it useful to physicians in different areas of specialization in the medical field. In addition to this, MEDLINK also accurately measures all Physiological Parameters of the Patient through a single digit finger being inserted into the appropriate position in the pocket-device, making it extremely easy to use. MEDLINK is the first medical device that performs blood glucose measurement using Infrared Technology, as opposed to the standardized lancet finger-pricking technology.

MEDLINK allows Physicians in any specialization to monitor patients outside of the hospital setting for as long as is needed. It can be used to monitor patients after they have been discharged from the hospital. It also allows individuals to have quality access to basic health care. Once programmed by a Physician and given to an individual, MEDLINK can be used to provide regular health care check up and coverage for the individual for as long as they want, and so in this sense provides basic health coverage for the individual.

During Physician Programming of the device, MEDLINK collects the patient's information by verbally interacting with the Physician to obtain them. Once this is done, MEDLINK takes the

patient's measurements and transmits them to the Physician when it is used by the patient. MEDLINK does abide by the US HIPAA Regulations by transmitting the Patient's ID, known by the Requesting Physician ONLY, and so the patient's identity is concealed from everyone except the Physician to whom the Patient is seeking medical coverage from.

To our knowledge, MEDLINK is the first portable device that can be used to provide RPM coverage by measuring a wide range of Physiological Parameters. Because of this, MEDLINK can be easily integrated into the RPM Market in any country regardless of the specialization it sits in in the medical field. MEDLINK will increase the use of RPM across the medical field, and so will reduce the number and cost of ER visits and hospitalizations, as has been proven already.

The pocket-sized MEDLINK device can be used to provide health care access to those with disabilities, because it is easy to use, provides verbal instructions to the user and can be operated with the placement of a single finger. It can certainly be used by individuals that are unconnected to the medical field and are unable to obtain medical coverage, be it due to their remote access location or a lack of a financial means. This is possible because the device is remotely operated and requires little input from the Physician to provide access to basic health care, and it can be operated by the user from any location they reside in.

MEDLINK allows for easy Patient-Physician Communication during the Health Care Coverage Monitoring period. Not only is it easy for the Patient's data to be rapidly transmitted to the MEDLINK software on the Physician's phone and/or email, MEDLINK also allows the Physicians to send messages to the Patient during the RPM period, informing them that their measurements are okay, or requiring them to come to the hospital for further check up if abnormalities are detected in their measured data, either by the MEDLINK software, or by the Physician himself. Instructions from the Physician to the Patient are relayed verbally by the MEDLINK Device to Patient and so effective exchange of information is accomplished.

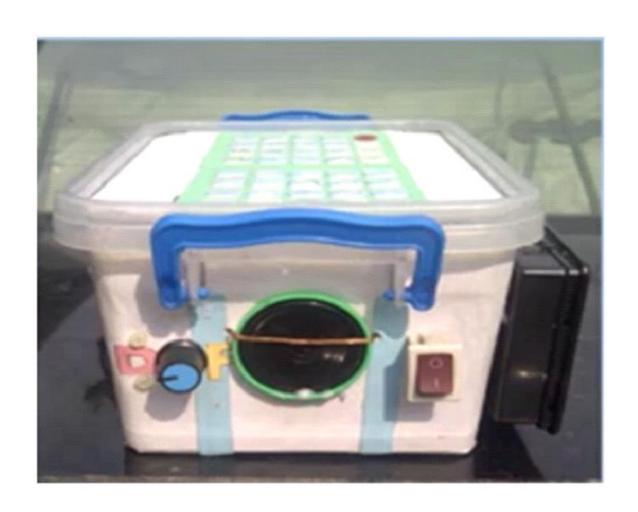
OLAWUYI RACETT NIGERIA LTD., UNITED KINGDOM,RC14668218 has been trained by the Food and Drug Administration (FDA), and United States Patent and TradeMark Office (USPTO) in 2023 on how to conduct Clinical Trials for Medical Products. The USA PATENT for MEDLINK has been filed by OLAWUYI RACETT NIGERIA LTD., UNITED KINGDOM RC14668218 with the United States Patent and TradeMark Office (USPTO) in 2023 (www.uspto.gov)

#### **IMAGES**









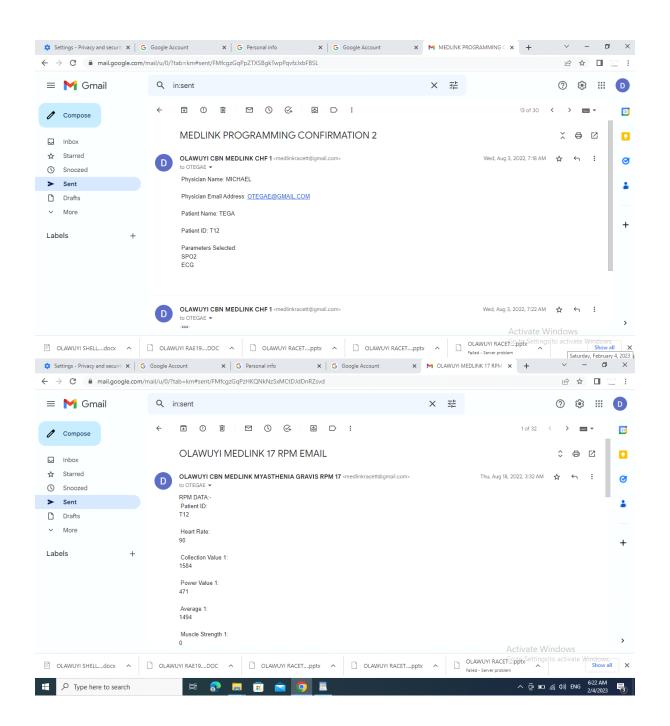


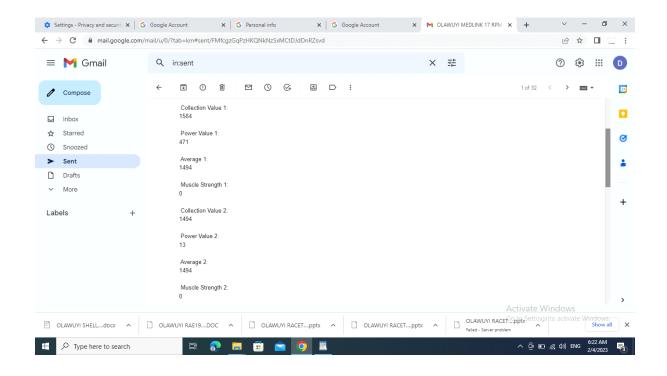
(a)



(b)









# 2023 IEEE SA Telehealth Tech Pitch Competition \*\*Bringing Hospital to the Home\*\*



#### PRESENTED TO:

#### **MEDLINK**

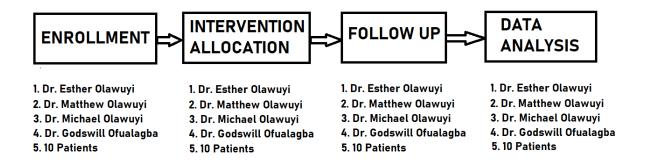
Esther Olawuyi CEO, Olawuyi Racett Nigeria LTD

Bruce Hecht Chair



Narendra Mangra <sub>Chair</sub>

#### **PARTICIPANT FLOW**



#### **BASELINE CHARACTERISTICS**

Enrolled 10 Patients Between the Ages of 10-80, both Male and Female.

#### PRIMARY OUTCOME MEASURES

FEV1: 2.82 Litres FVC: 3.51 Litres FEV1/FVC Ratio: 0.80

**HEART RATE: 111** 

**AVERAGE HEART RATE: 113.81** 

- SPO2 90% Heart Rate - 85.35
- SPO<sub>2</sub> 92 % Average Heart Rate - 88.65
- ECG Output:

Volts[V]: 1.38 1.32 1.24 1.15 1.07 0.99 0.93 0.87 0.81 0.75 0.70 0.67 0.64 0.61 0.58 0.58 0.59 0.56 0.53 0.52 0.53 0.58 0.65 0.76 0.90 1.06 1.23 1.39 1.52 1.62 1.73 1.75 1.71 1.62 1.52 1.37 1.21 1.05 0.91 0.81 0.66 0.49 0.29 0.03 0.00 0.00 0.00 0.00 0.00  $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00$  $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00$ 

Note: Each reading is acquired in 1.25ms

#### Blood Pressure Readings from IR Glucometer

165

169

168

167

167

167

Average Blood Glucose: 167.60

Average Blood Glucose in mmol/L: 5.82

#### HEART RATE: 68.20 bpm

Blood Pressure Readings from IR Glucometer

193

195

182

176

173

176

Average Blood Glucose: 187.40

Average Blood Glucose in mmol/L: 6.31

#### HEART RATE: 68.95 bpm

SPO<sub>2</sub> 93%

• PULSE: 74.80

**HEART RATE: 90** 

#### • SPO<sub>2</sub>: 96%

EMG DATA:

**COLLECTION VALUE 1: 1584** 

POWER VALUE1: 471 AVERAGE VALUE 1494 MUSCLE STRENGTH 1: 0 COLLECTION VALUE 2: 1

494

POWER VALUE 2: 13 AVERAGE VALUE 2: 1494 MUSCLE STRENGTH 2:0 • HEART RATE: 82

EMG DATA:

**COLLECTION VALUE 1: 1584** 

POWER VALUE1: 471 AVERAGE VALUE 1494 MUSCLE STRENGTH 1: 0 COLLECTION VALUE 2: 1494

POWER VALUE 2: 13 AVERAGE VALUE 2: 1494 MUSCLE STRENGTH 2:0

FEV1: 1.9L
 FVC: 2.5L

FEV1/FVC RATIO: 80%

ECG: 3.74V

#### **ADVERSE EVENTS**

There were no adverse events associated with this study.