Irwin Gross, Founder and CEO, ARC Devices

Changing the way the world takes temperature

Instant. Easy. ARC Accurate.
Our History

ARC Devices Ltd. was founded upon the determination to revolutionize vital sign measurement at home and in clinical settings. Since inception, we have partnered with some of the best minds in the medical and communication fields, including Ireland’s Tyndall National Institute, to develop and bring to market the most accurate non-touch vital sign measurement devices in the world.
Our Mission

ARC Devices aims to provide efficient solutions that improve patient outcomes through a unique brand of non-touch and network-integrated devices. Our suite of consumer and clinical thermometers is only the beginning. With the support of international partners, we are already hard at work developing the next generation of non-touch vital sign sensor technology.
FACT

Thermometers are the oldest and most widely used medical devices ever invented.

Over 1 Million temperature readings are taken each year at a 500+ bed hospital.

ARC Devices, Ltd. holds the only patent for a digital thermometer with a Digital Infrared Sensor (Patent #8950935).
The Accurate, Non-touch Clinical Solution for Taking Temperature

- Non-touch: instant, point-and-click readings
- System on Chip (S.O.C) proprietary digital infrared sensor technology eliminates analog measurement drift
- Clinically proven to measure core body temperature
- Enhanced 0.1 sensitivity digital sensor
- Accuracy +/- 0.4°F (0.2°C)
- No expensive probe covers or consumables
- Minimal risk of cross contamination
- Backlight LCD screen
- Fahrenheit or Celsius
- Battery-saving auto-off feature
Clinical Trials

Objective: Accurately match the temperature readings of the InstaTemp MD to Core Body Temperature as measured by in patients with an in-dwelling bladder catheter.

Study Design:

• Study designed, executed, and analysis provided by Cork University Hospital Clinical Research Facility, Cork Ireland – A government sub agency of Ireland’s state funded Health Research Board of Ireland.

• Principal Investigator – Professor Joseph Eustace MB, BAO, BCh, MHS (Clinical Epidemiology), FRCPI

• Surface temperature readings taken from the patients forehead were compared to simultaneous readings generated by the in-dwelling bladder catheter. A Bland Altman plot was generated with a 95% confidence interval for the mean difference.

• 267 readings obtained in the ICU setting to validate the relationship between measurements calculated by the InstaTemp MD vs. temperature measured by the in-dwelling bladder catheter.
Clinical Trials

ARC InstaTemp MD™
Core Body Temp vs. ARC InstaTemp MD™ Correlation (F°)

Pearson’s Correlation Coefficient = 0.89
Industry Report: Significantly Reduced Risk of In-Hospital Infectious Agent Transmission

- Industry Report indicates: “Current Probe Cover sensors carry both virulent and non-virulent microorganisms."
- "Improper handling by the hospital staff may result in direct contact and can lead to contamination."
- “Microorganisms deposited on these thermometers may be transmitted to other patients through the reusable probe and the electronic housing.”

CHALLENGES TO BE ADDRESSED WITH SMART NETWORKS AND CONNECTED HEALTH

• CONNECTED DEVICES TO COLLECT DATA AND SENSOR TECHNOLOGY TO MEASURE VITAL SIGNS

• SMARTER HEALTH TO REMOVE INFORMATION BARRIERS AND SEAMLESSLY INTEGRATE DATA AND ANALYTICAL INSIGHTS

• MOBILE AND HOME BASED DEVICES TO MONITOR VITAL SIGNS IN REAL TIME

• INTELLIGENT SYSTEMS TO GATHER AND ANALYZE DATA IN REAL TIME

• ANALYTICS TO BETTER PREDICT HEALTH AND CREATE NEW RULES FOR TREATMENT AND MEDICATION