

Technology Applications Center for Healthful Lifestyles Quarterly Report in Remote Patient Monitoring



Report 2. Peripheral Devices for Weight Management

This report is intended to serve as a quick guide for clinicians, researchers, and innovators who are interested in using mobile-based weight monitoring devices in their research or practice. Access to key references and information relating to FDA clearance, validation data, Bluetooth capability, and other parameters is helpful toward navigating decisions about what devices may have the most utility. Peripheral devices and accompanying apps are typically developed for iPhone (iOS) users but data suggest that 65% of MUSC patients are Android users, indicating a need for devices that function well with both operating systems. For more information on how these devices could be used in your clinic/research, please feel free to contact the Director of TACHL, Dr. Frank Treiber, at treiberf@musc.edu.

Our next report, which we will make available in April 2017, will address Remote Patient Blood Glucose Monitoring.

| Device | os | Native App | Max Weight (lbs) | BMI ¹ | Body Fat Percentage ² | BLE | SCTA Native App Integrated ³ | FDA Cleared ⁴ | Multiple Users |
|------------------------------|----|------------------------------|---------------------|------------------|-------------------------------------|--------------|--|--------------------------|----------------|
| A&D UC-352BLE | | A&D Connect | 450 | ✓ | ✓ | \checkmark | \checkmark | \checkmark | ✓ |
| Fitbit Aria FB201B | | Fitbit | 350 | ✓ | ✓ | X | ✓ | \checkmark | ✓ |
| Withings Body WBS05 | | Health Mate | 400 | ✓ | ✓ | \checkmark | \checkmark | \checkmark | ✓ |
| QardioBase B100-IOW | | Qardio App | 396 | ✓ | ✓ | \checkmark | X | X | ✓ |
| iHealth Core HS6 | | iHealth; Apple Health Kit | 400 | ✓ | ✓ | X | X | \checkmark | ✓ |
| Garmin Index 010-01591-00 | | Garmin Connect | 400 | ✓ | ✓ | \checkmark | X | X | ✓ |
| Polar Balance 91058057 | | Polar Flow | 397.8 | ✓ | X | \checkmark | X | X | ✓ |
| Omron HN-290T | | OMRON Connect | 550 | ✓ | ✓ | \checkmark | X | X | ✓ |

Note. OS = Mobile Operating System; BMI = Body Mass Index; BLE = Bluetooth Low Energy Enabled; SCTA = South Carolina Telehealth Association; 1 = BMI based on manual entry of height; 2 = Validation data not available; 3 = The scale has been used and integrated with apps developed by TACHL and collaborating investigators; 4 = 510(k) are no longer mandated; however, those checked have successfully received FDA clearance; BMI and body fat percentage available via mobile application unless otherwise indicated – not all scales include these as a standalone feature; All scales on this list are Wi-Fi enabled with the exception of the Omron HN-290T.