

# Abstract P346: Impact of the Changing Guidelines in the Classification of Patients: Insights from a Real Life mHealth Digital Registry

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## Abstract

**Background:** The recent updated AHA/ACC guidelines have spiked academic discussions on the changing prevalence of hypertensive subjects with the new thresholds.

**Aim:** To determine the changes in classification (hypertensive or not) on a real life and spontaneous mHealth digital registry, via mobile App and website.

**Population and Methods:** 7956 consecutive subjects (71% males; 53±11 years old) subscribed, spontaneously, a real-time BP -recording, - interpretation and -trend evaluation service (via smartphone-Health App and website platforms). Thru the digital platforms, each BP value, after consistency-checks, feeds a proprietary algorithm providing both individual BP value interpretation in comparison to the previous BP history, and BP trend and fluctuations assessments. These latter are fed back to users on their smartphone and computer screens instantly. The service complies with the most strict data privacy, safety and security requirements.

**Results:** We collected 176432 BP measurements, overall. BP were optimal according to the AHA-ACC guidelines values ( $\leq 120/80$ mmHg) were in 29% of instances, while either only the systolic or the diastolic BP values were optimal in 53% of instances. Conversely, according to the most commonly used normal thresholds of BP  $\leq 130/85$ mmHg 63% of both systolic and diastolic BP values were normal, while either only the systolic or the diastolic BP values were optimal in 39% of instances.

**Conclusion:** In a population of subjects, who subscribed a digital remote BP monitoring and evaluation service because they are so aware of the need of controlling their BP, the change of guidelines threshold for optimal and event reducing BP doubles the impact of non-controlled BP. This registry highlights the

wide gaps still existing in achieving target blood pressure levels in real-life subjects, even in the most aware hypertensive subjects.

## **Footnotes**

Author Disclosures: **G. Del Mauro:** A. Employment; Modest; AMICOMED. **T. Bordignon:** A. Employment; Modest; AMICOMED EUROPE SA. **M. Fabi:** A. Employment; Modest; AMICOMED EUROPE SA. **E. Colombo:** A. Employment; Modest; AMICOMED EUROPE SA. **D. Cianflone:** F. Ownership Interest (includes any stock, stock option, partnership, membership or other equity position in an entity regardless of the form of the entity, or any option or right to acquire such position, and any rights in any patent or other intellectu; Modest; Co-Founder, Chief Scientific Officer Amicommed.