

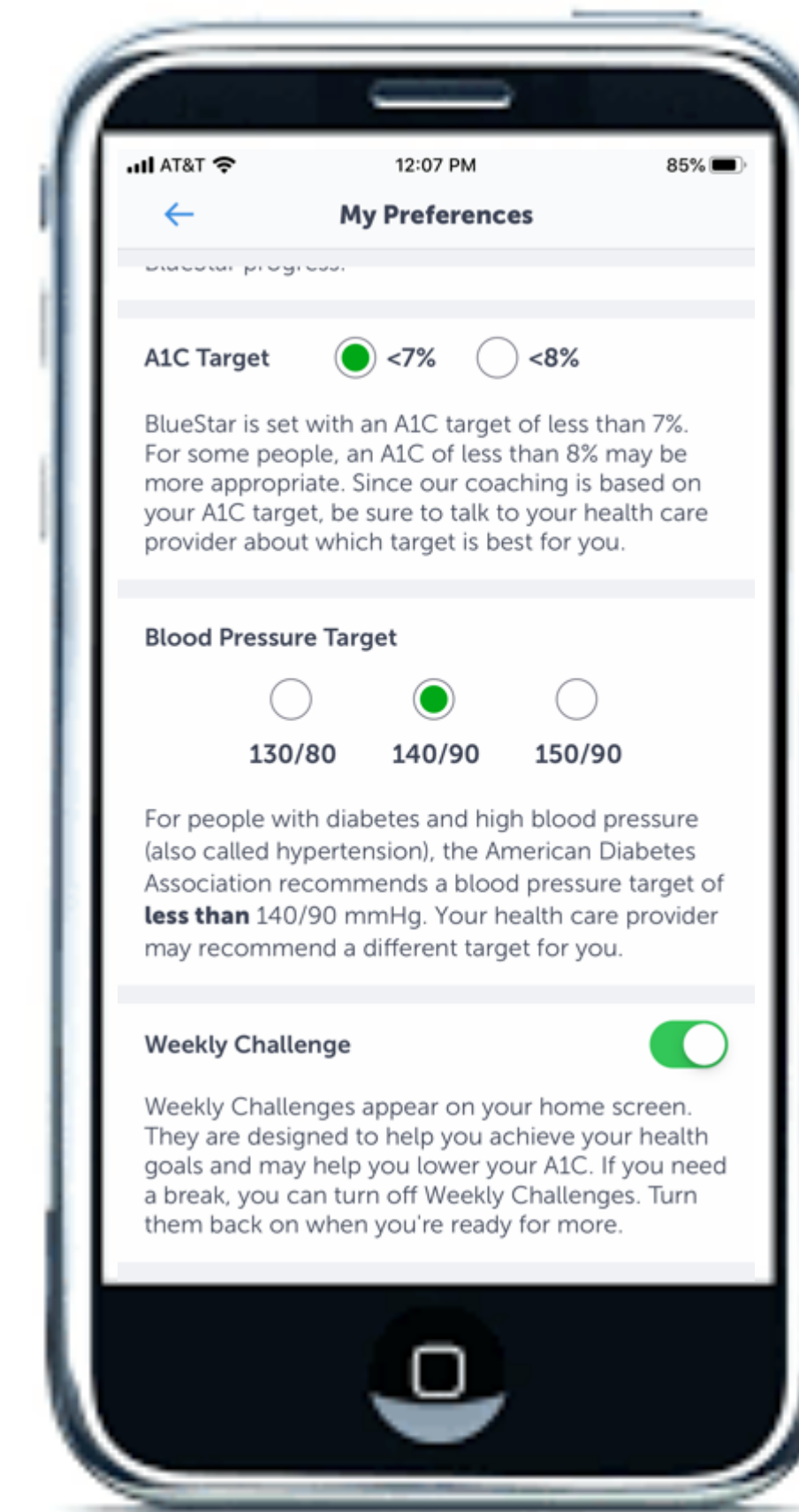
Enhancing Mobile Health to Achieve Both Hypertension and Diabetes Goals

Malinda Peeples¹, Vinayak Shenoy,¹ Richard Katz³, and Mansur Shomali^{1,2}

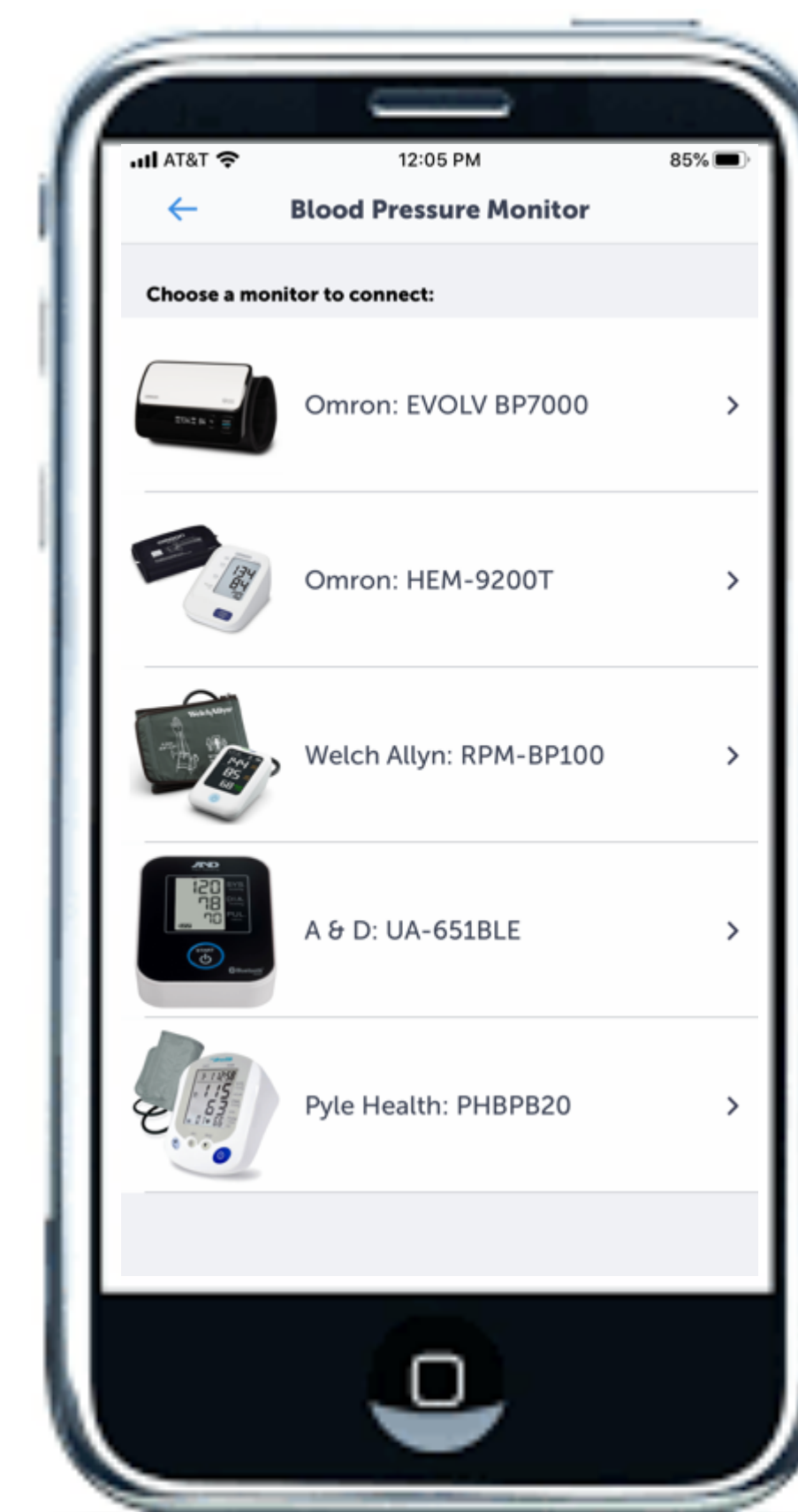
¹WellDoc, Inc., Columbia, MD, ²MedStar Health, Baltimore, MD, and ³The George Washington University, Washington, D.C.
2019 American Heart Association's Scientific Sessions, Philadelphia, PA, Abstract Control Number: 15146

INTRODUCTION

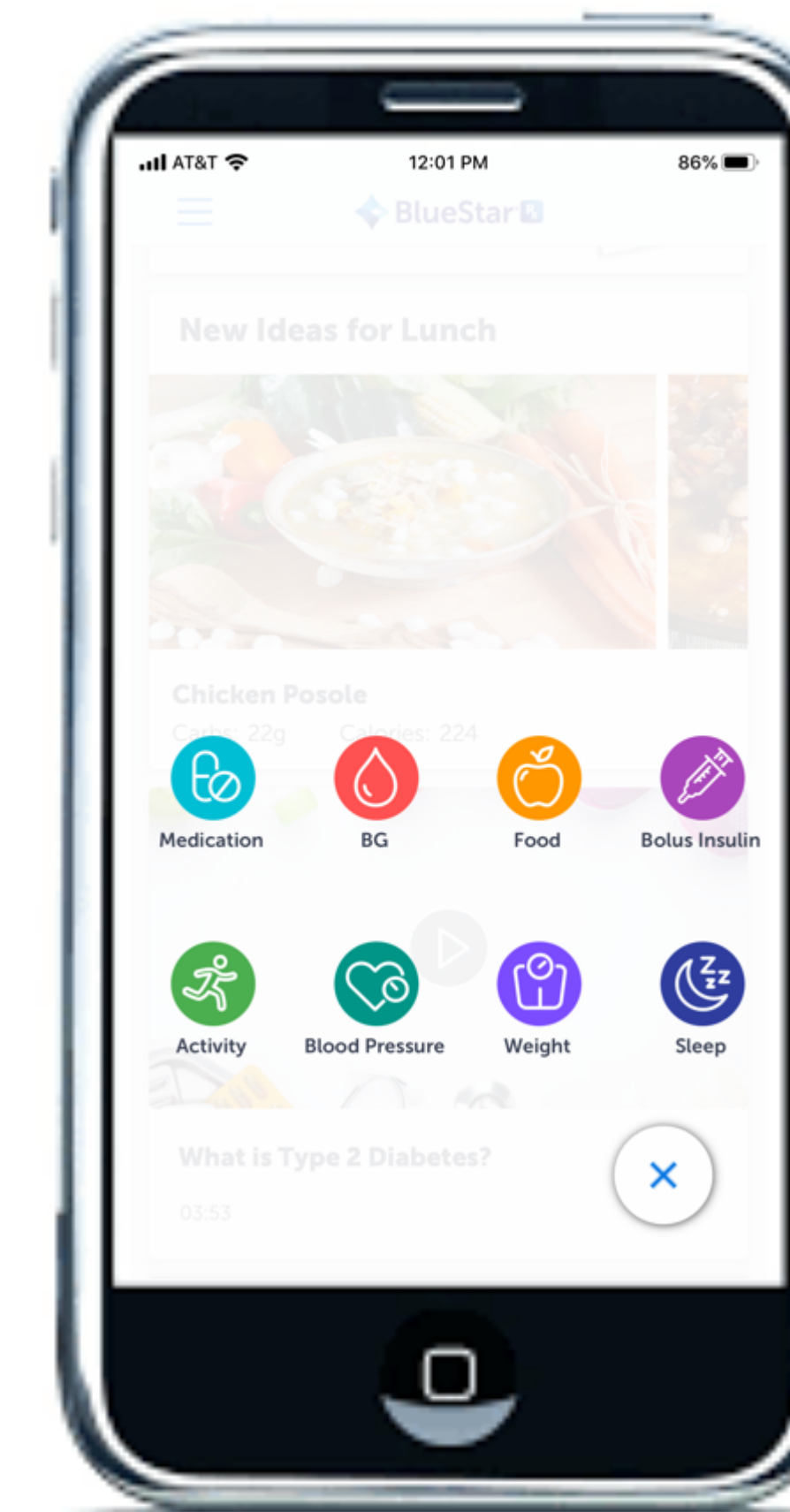
Meeting goals for hypertension (HTN), a common co-morbidity with type 2 diabetes (DM2), is frequently not achieved. Starting in late 2018, blood pressure (BP) tracking was added as a feature to an FDA cleared, diabetes digital solution (BlueStar, Welldoc, Columbia, MD). This BP module includes connectivity with BP cuffs, BP goal setting with feedback, automated lifestyle coaching, and provider reporting. This study analyzes initial utilization of this optional feature.



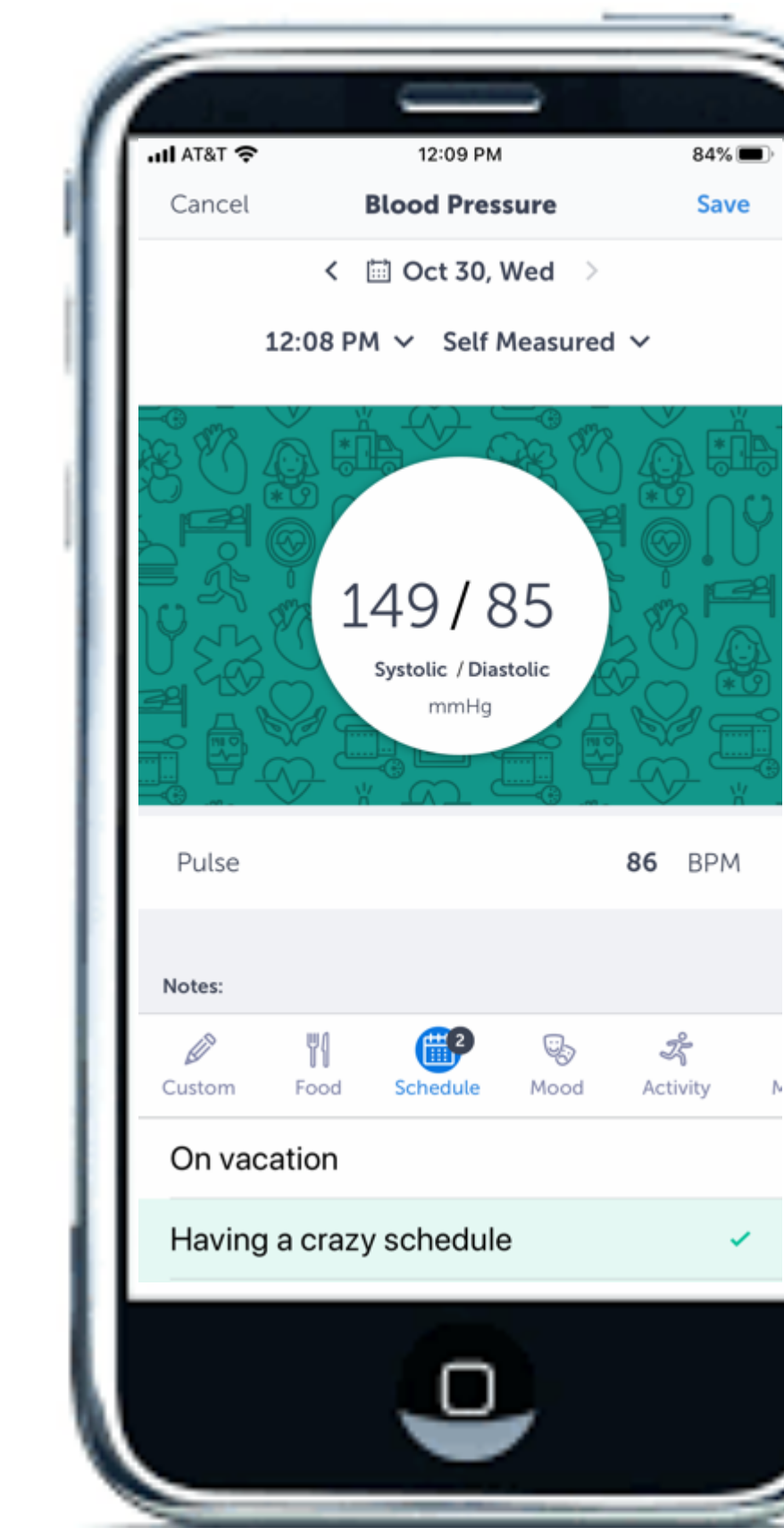
Providers can select customized BP target for users.



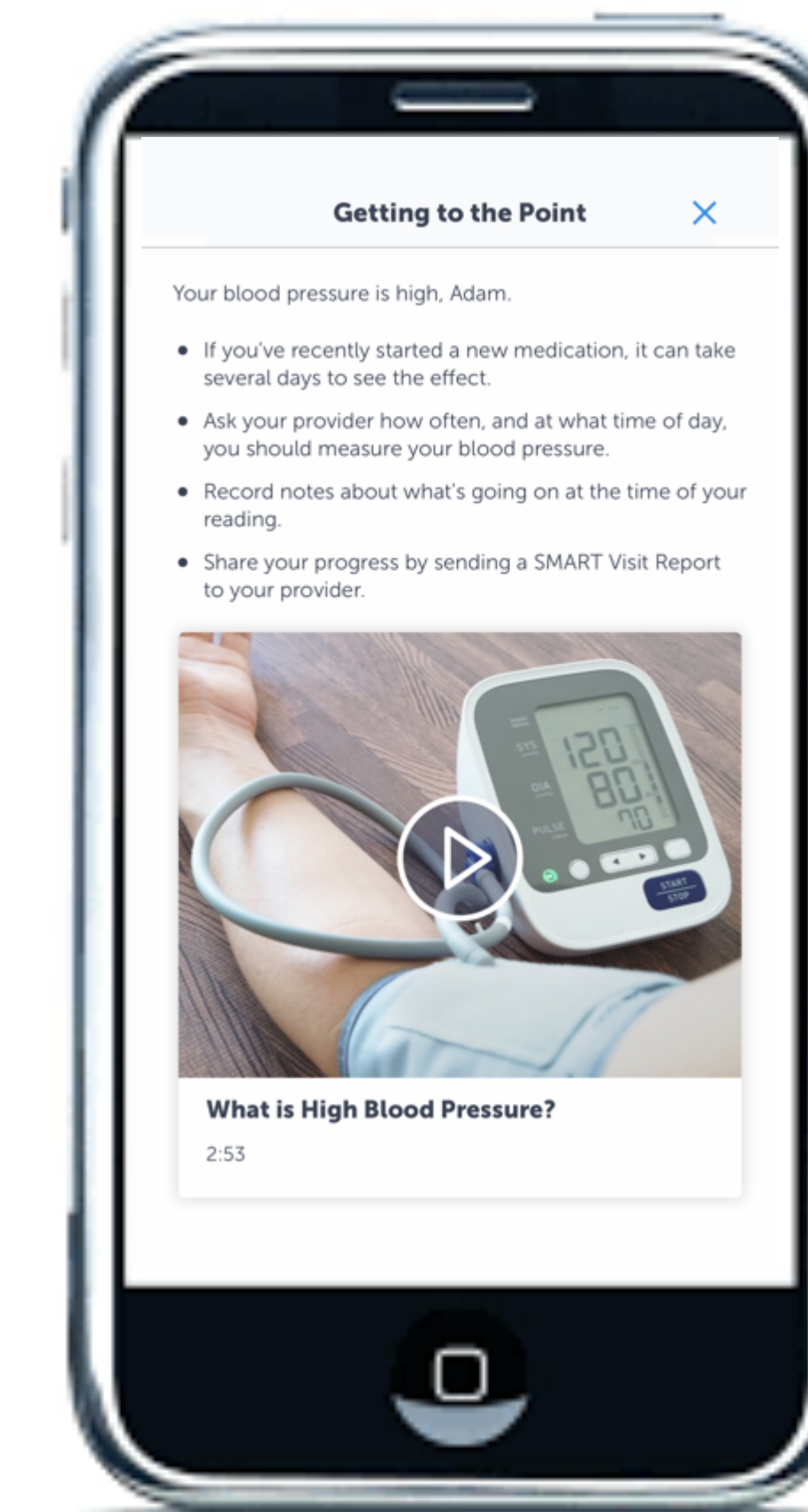
Product integrates via Bluetooth with BP monitors, weight scales, and activity trackers.



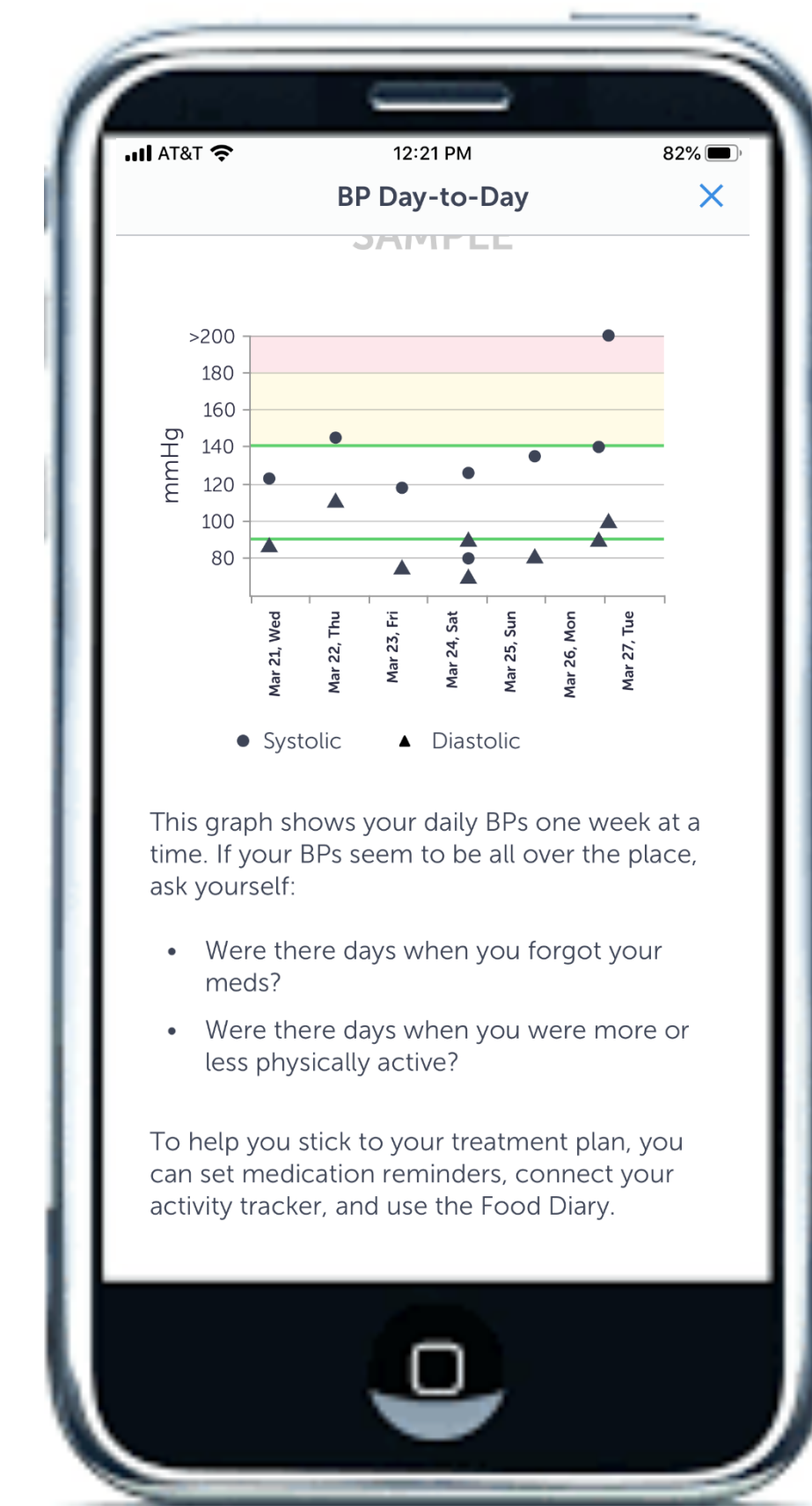
All entries can be made using Fast Action Buttons on the home screen.



Users can annotate BP entries with comments, symptoms, and notes.



After each entry, users receive real-time feedback with videos, articles, and resources.



Users can review BP data and share reports with providers.

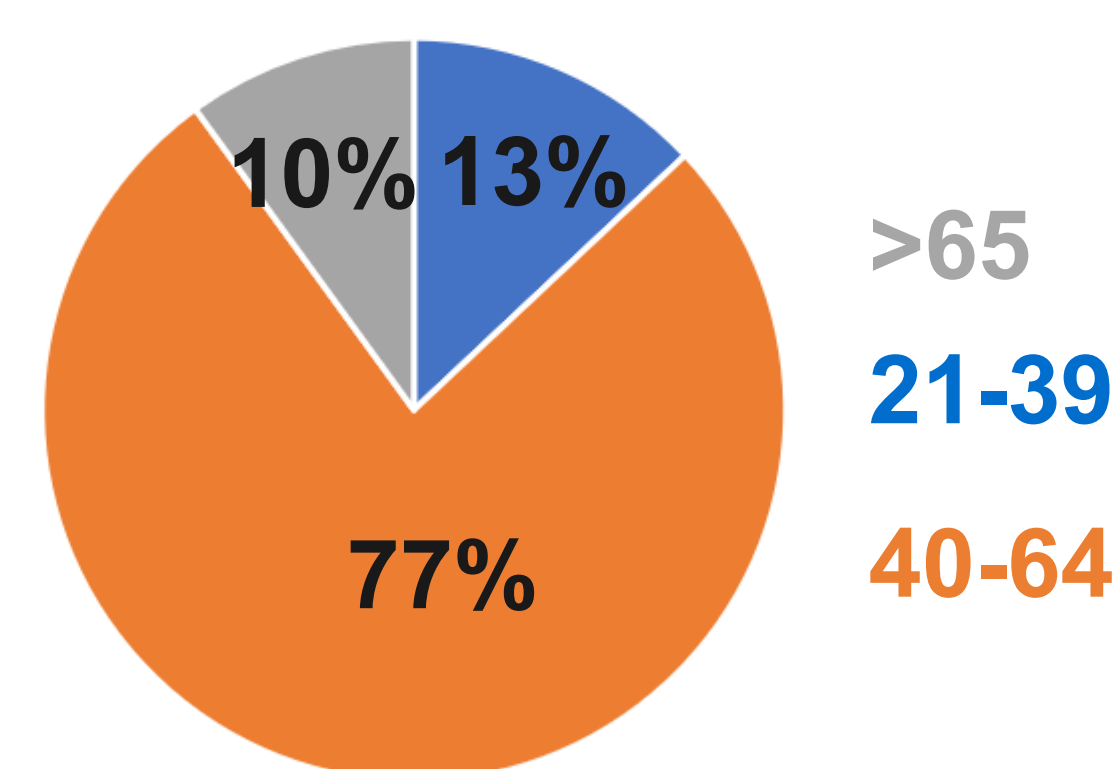
METHODS

Data from real-world, DM2 users, with or without baseline HTN, who activated BlueStar from 9/4/2018 to 5/23/2019 were reviewed. These data represent BP entries made by BlueStar users via a mobile app or a web portal. All data were sent to a secure server. For this study, patient identifiers were removed, and appropriate data privacy policies were followed. Data from users of less than 30 days were excluded.

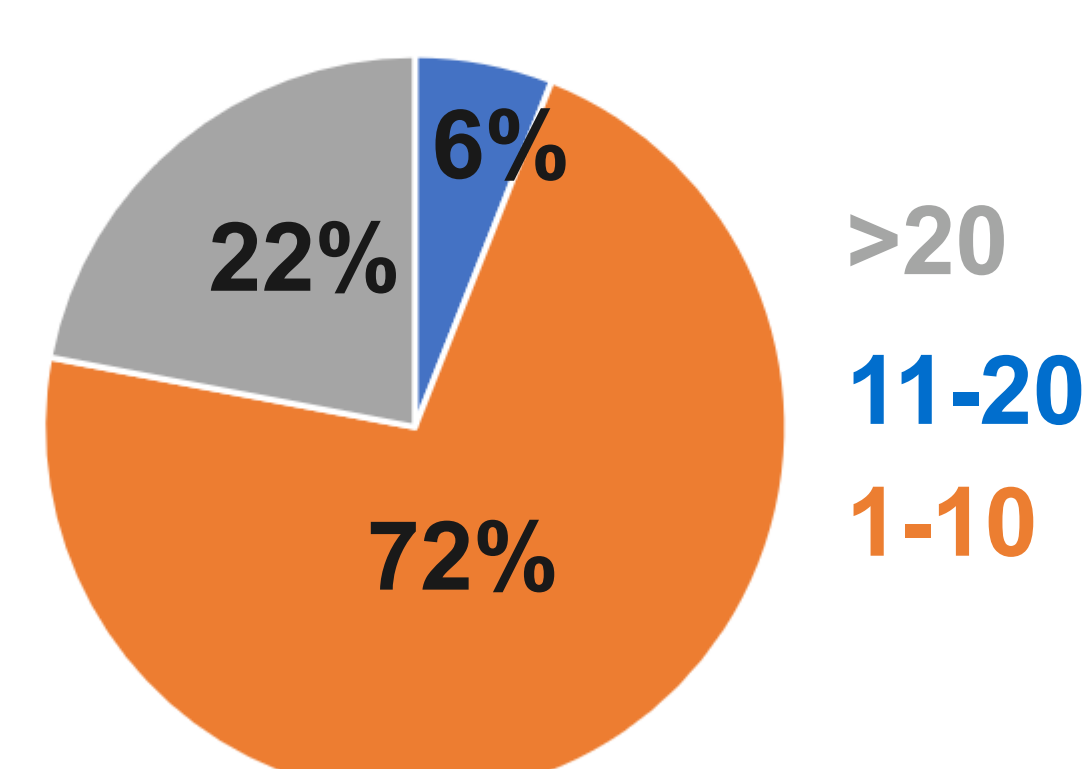
RESULTS

Of the 969 users that were identified, 47% were female. These users were active on the product for an average of 117 days (range 30 to 270 days). In the first 30 days of use, 1868 BP readings were entered by 118 (12%) of the users. Those who tracked their BP entered a mean of 16 readings during the 30-day period. The mean systolic BP was 127 mmHg (range 67 to 222 mmHg).

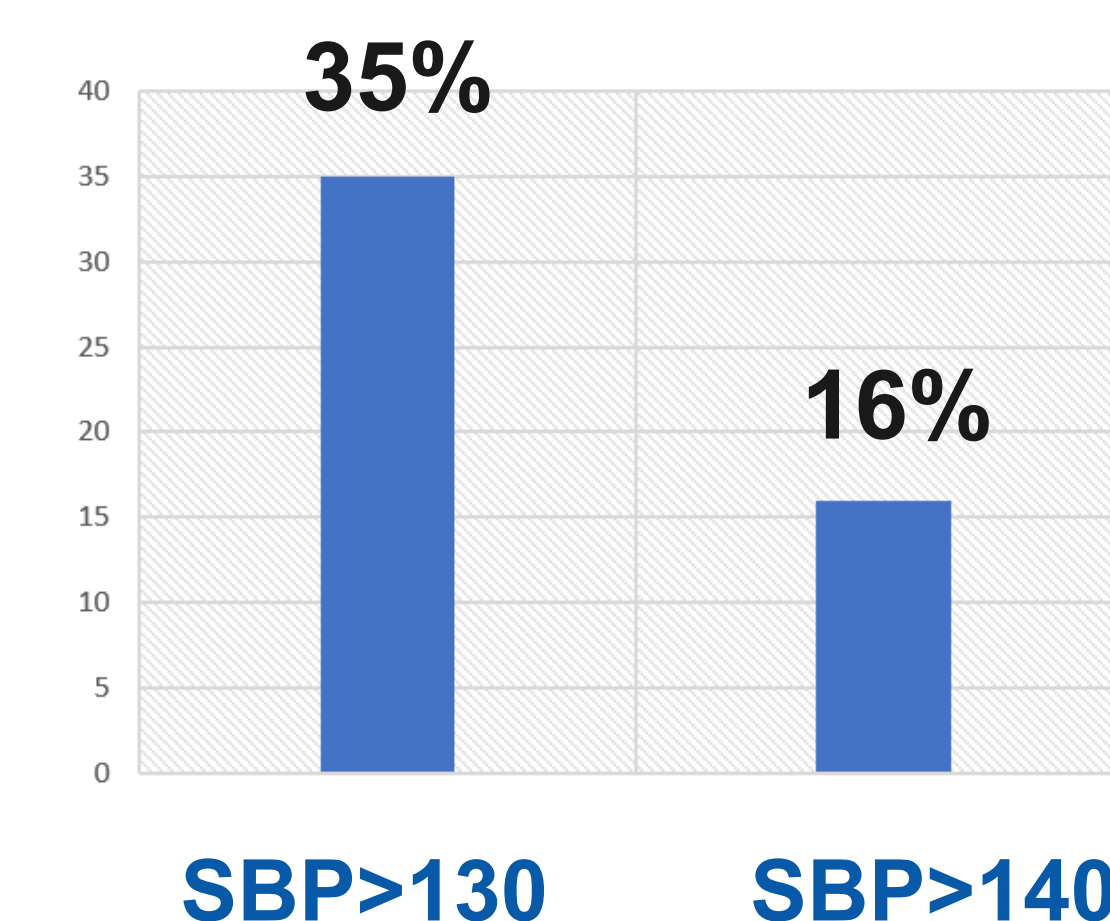
Age distribution of the 969 users



Number of BP entries in 30 days



Proportion of high entries



CONCLUSIONS

Though not required, a modest number of users of a DM2 digital product voluntarily self-reported BP data. Importantly, a significant proportion of the BP values (35%) were above the AHA target for systolic BP, in which case both the user and healthcare team would receive reports and could adjust treatments. These data illustrate the potential for digital solutions to support patients meeting goals for both DM2 and HTN and to facilitate patient-care team conversations.

REFERENCES

Quinn C et al. Cluster-Randomized Trial of a Mobile Phone Personalized Behavioral Intervention for Blood Glucose Control Diabetes Care September 2011; vol. 34 no. 9: 1934-1942