

Engagement With an AI-enabled Digital Health Tool by Individuals With Overweight or Obesity Enrolled in a Weight Management Program Differs by Use of Anti-obesity Medications

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OBJECTIVE

This poster provides an overview of engagement patterns with an AI-enabled digital health tool focused on weight loss. We hypothesize that individuals using anti-diabetic/anti-obesity medications (AOMs) will demonstrate different engagement from those not taking AOMs. Understanding these differences is key to optimizing digital health delivery to address diverse needs.

METHOD

The data is based on users of a digital health platform enrolled in a weight management program. The data were deidentified according to Welldoc's privacy policies and was stratified according to AOM use. Only individuals who recorded weight at baseline, 3 months, and 6 months were included in the analysis (N=4759).

RESULT

We identified 3604 users prescribed AOMs and 1155 users not prescribed AOMs. Most users were female in the 40 to 54 age group. The BMI improved significantly for both AOM and non-AOM groups.

Figure 1: Population demographics

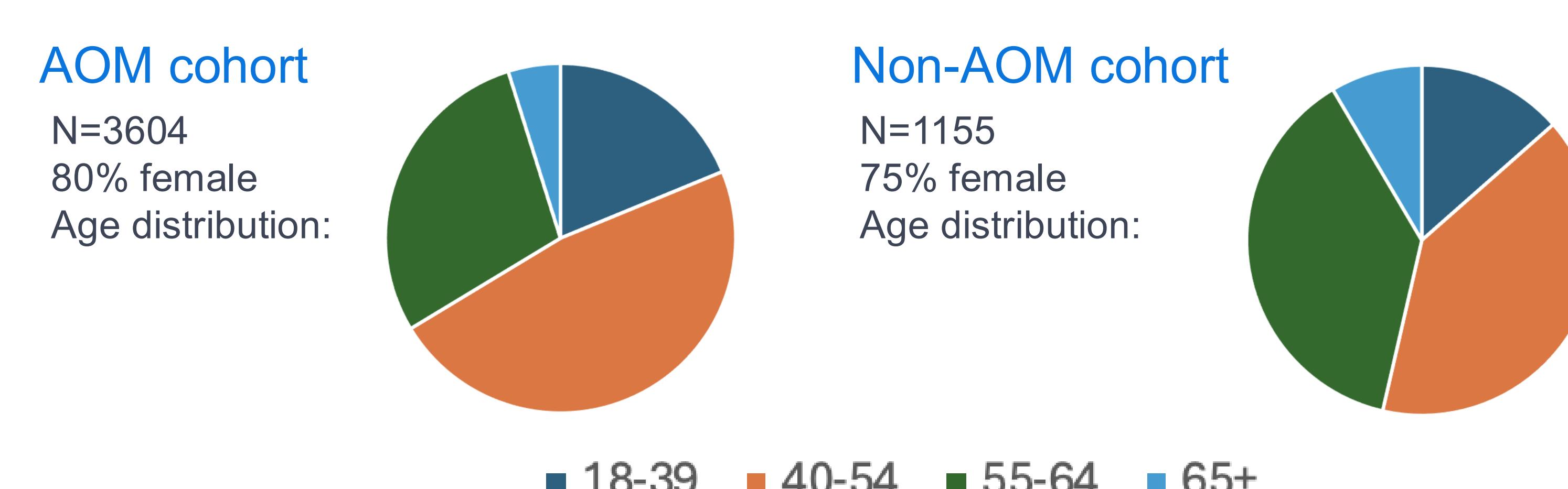
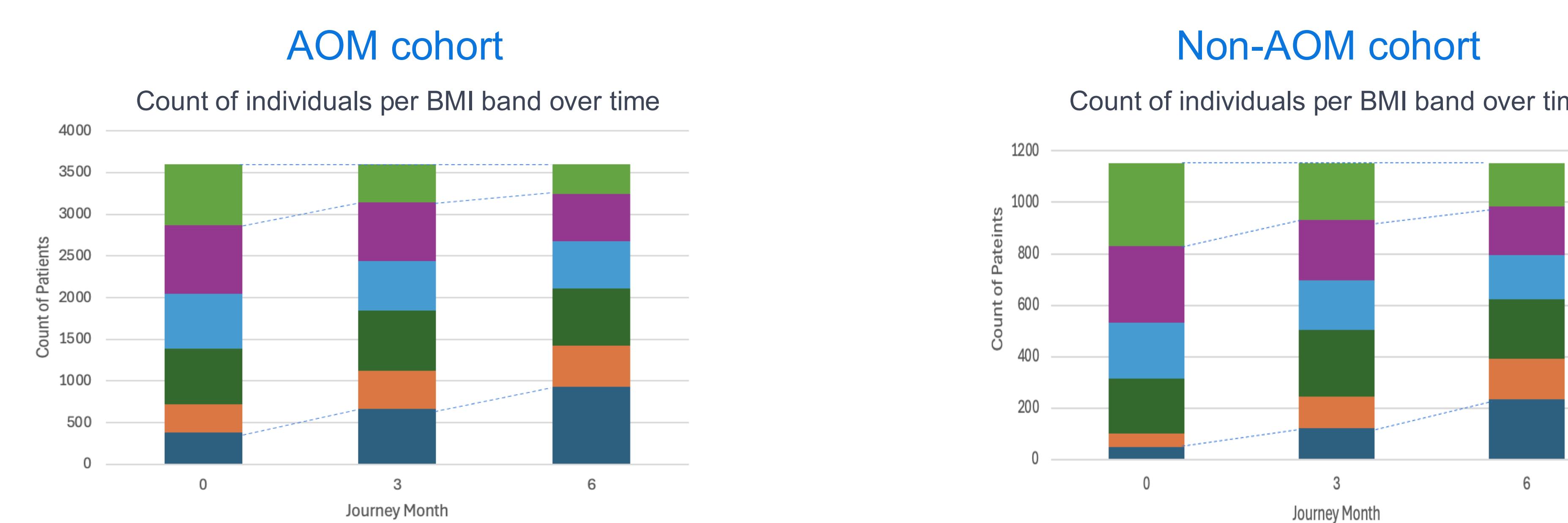


Figure 2: Weight outcome summary: stacked bar view



Engagement with the app was categorized using the Welldoc® MEDALS framework (medication, education, diet, activity, labs/metabolic, symptoms/surveys). In general, engagement was much higher in the non-AOM group as compared to the AOM group and was statistically significant in the "M" and "E" and "D" and "L" engagement categories.

Table 1: Average Lifetime Engagements by AOM Cohort

Engagement type	AOM	Non-AOM	P value
M	12.5	23.9	9E-13
E	4.4	6.8	2E-6
D	113.5	221.0	2E-9
A	234.9	235.7	0.95
L	66.9	88.0	2E-11
S	1.7	3.4	0.08

- **Medication:** Nearly 2X engagement with medication functions (non-AOM vs. AOM)
- **Education:** Nearly 50% higher engagement with learn (courses), watch (videos), read (articles) (non-AOM vs. AOM)
- **Diet:** Nearly 2X engagement with food functions (non-AOM vs. AOM)
- **Labs:** 32% higher engagement with lab/metabolic features i.e. weight, BG, BP features (non-AOM vs. AOM)
- **Activity and Symptoms/Surveys:** non-significant

Table 2: Average Lifetime Engagements by BMI and AOM Cohort

BMI	AOM			Non-AOM		
	Total N	Engagements	P value*	Total N	Engagements	P value*
<27	388	309.5	5E-7	49	457.5	0.08
27-29	333	458.5	0.4	53	528.7	0.37
30-32	665	408.7	0.02	211	621.9	0.82
33-35	662	434.4	0.11	219	493.1	0.03
36-40	822	459.5	0.28	298	591.5	0.50
>40	734	498.3	--	325	639.7	--

*P value versus >40 BMI group

- In general, there was a trend for increasing engagements in the higher BMI groups

CONCLUSION

We observed that engagement with the digital health application was significantly higher for the non-Anti-Obesity Medication (AOM) group. This initial finding supports the idea that tracking and support needs may be greater for those not on an AOM. These data highlight the impact personalized digital health engagement can play as part of comprehensive weight management programs. Further research is necessary to better understand differential engagement across various segments (e.g., pre-AOM, post-AOM, and non-AOM users)