

# Predictors of Retention Rates in the Active Living After Cancer Program at MD Anderson: A Comparison of Classes During and Before COVID-19

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# **Background**

- As an overlooked aspect of cancer, survivorship often begs the question of "what's next?" once treatment is complete.
- Physical activity has been shown to improve quality of life and decrease rates of recurrence among cancer survivors.
- The Active Living After Cancer (ALAC) program has recruited 900+ cancer survivors and caregivers since its establishment in 2013.
- Since the COVID-19 pandemic, ALAC has transitioned to virtual classes. The success of virtual classes has not been closely analyzed.

## **Research Questions**

- 1. Is there a significant difference in retention rates between in person and virtual ALAC classes?
- 2. Between virtual and in person classes, does education level or insurance status have varying predictive value on class completion likelihood?

## **Methods**

**Retrospective study** of baseline surveys completed by participants (N=860), excluding those currently enrolled in ongoing ALAC classes.

- **Chi-square test**: to determine whether completion rates were significantly different between in person and virtual classes.
- **Bivariate regression model**: to determine whether participant demographics varied between virtual and in person classes, based on insurance status and education level.
- Logistic regression: to investigate whether these factors were predictors of retention in either class.

Participants ranged from 20 to 91 years old. The most common race was Hispanic White (62.7%), followed by Black/African American (18.0%), and White (15.1%). 56.3% of participants were married. 86.9% of participants were cancer survivors, and 13.1% were caregivers.

# **Results**



Medicare insurance was the most common insurance type among participants of in person classes, while private insurance was the most common among virtual classes. Uninsured participants (essentially the Harris Health, Uninsured, and Health Options groups) also comprised a larger proportion of virtual classes, while privately and publicly insured participants comprised a smaller portion, compared to in person classes. (P=0.014).

### Figure 2A. Highest Education Level Among In Person Classes



Never received high school diploma nor GED was the most common highest education level among both classes. However the second highest education level differed: for in person classes it was high school diploma/GED, while for virtual classes it was Bachelor's degree. Additionally, overall more virtual participants have Bachelor's or more advanced degrees (34% total) than in person participants (21%) (P=0.001).

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21%



Some college/2 year degree



11%

Technical/vocational degree

		in person	virtual	Total		
program complete	drop out	147 (22.8%)	26 (12.1%)	173		
	complete	498 (77.2%)	189 (87.9%)	687		
Total		645	215	860		

Retention rates significantly differed between virtual (77.2%) and in person (87.9%) classes (P=0.001).

### Table 1B. Logistic regression

	В	S.E.	Wald	df	Sig.	Exp(B)
Class type: virtual	.889	.243	13.353	1	.000	2.433
Insurance: Uninsured			1.570	2	.456	
Insurance: Public	.394	.315	1.564	1	.211	1.483
Insurance: Private	.355	.347	.933	1	.334	1.398
Edu: High school or less			.702	2	.704	
Edu: Some colleges or	.151	.213	.499	1	.480	1.163
Technical/Vocational						
degree						
Edu: University or higher	.162	.234	.478	1	.489	1.176
Constant	.778	.304	6.545	1	.011	2.178

Participants of virtual classes are two times as likely to complete the program compared to their in-person counterparts (P=0.00). Those publicly insured are 48.3% more likely to complete the program compared to those uninsured (P=0.21).

### Discussion

- weak predictors of retention.
- limitations of ALAC.

### References

Basen-Engquist, K, Liao, Y, Active Living After Cancer: Converting a Group Physical Activity Intervention for Cancer Survivors to a Virtual Format in Response to the Coronavirus Pandemic, J Clin Oncol., 2020; 38(29)

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### **Results Continued**

### Table 1A. Retention Between In Person and Virtual Classes

class type: in person vs. virtual

Between Retention a	nd Education a	and Insurance
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• Greater retention rates demonstrate the utility of virtual classes. Having insurance and completion of some higher education are

 Medicare is the most common insurance type among in person but not virtual classes. Because most Medicare beneficiaries are older. inaccessibility to technology may explain the decline in virtual classes, though it is unclear whether recruitment methods of virtual classes had an effect. Future research is merited on possible

• Maintaining a virtual aspect of future ALAC classes, such as a hybrid program, may improve survivor outreach by increasing retention and identifying potentially overlooked groups.