## **Supplementary Online Content**

Widome R, Berger AT, Iber C, et al. Association of delaying school start time with sleep duration, timing, and quality among adolescents. *JAMA Pediatr*. Published online April 27, 2020. doi:10.1001/jamapediatrics.2020.0344

eFigure. Participant Flow Chart

**eTable 1.** Baseline Demographic Characteristics of START Full Cohort and Actigraphy Substudy Participants

**eTable 2.** Self-reported Baseline Sleep Duration by Wave of Entry Into Actigraphy Substudy and Wave of Observation of Actigraphy

This supplementary material has been provided by the authors to give readers additional information about their work.



START 2016-2018

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eTable 1. Baseline Demographic Characteristics of START Full Cohort and Actigraphy Substudy Participants								
	START full cohort	START substudy						
	No. (%) <sup>a</sup>	No. (%)ª						
Ν	2422	455						
Policy change school	1414 (58.4)	214 (47.0)						
Biological sex <sup>a</sup>								
Female	1224 (50.5)	225 (49.5)						
Male	1165 (48.1)	219 (48.1)						
Prefer not to answer	25 (1.0)	7 (1.5)						
Hispanic or Latino	93 (3.8)	13 (2.9)						
Race								
Native American	24 (1.0)	3 (0.7)						
Asian	154 (6.4)	20 (4.4)						
Native Hawaiian/Pacific Islander	5 (0.2)	0 (0)						
Black	94 (3.9)	7 (1.5)						
White	1914 (79.0)	396 (87.0)						
Multiracial	153 (6.3)	21 (4.6)						
Unknown/not reported	64 (2.6)	4 (0.9)						
Receive free/reduced price lunch: Yes	337 (13.9)	30 (6.6)						
Receive free/reduced price lunch: Don't know	444 (18.3)	78 (17.1)						
1+ parent completed college	1771 (73.1)	370 (81.3)						
START 2016-2018								
<sup>a</sup> Categories do not add to 100% due to missing responses								

## eTable 2. Self-reported Baseline Sleep Duration by Wave of Entry Into Actigraphy Substudy and Wave of Observation of Actigraphy

	Delayed-start adopting school			Comparison school		Difference-in-Differences Analysis				
	Baseline	Follow-up	Follow-up	Baseline	Follow-up	Follow-up	Baseline to	P-value	Baseline to	P-value
		1	2		1	2	Follow-up 1		Follow-up 2	
Wave of entry <sup>a</sup>	7:26 (7:25	7:30 (7:17	7:25 (7:09	7:26 (7:23	7:30 (7:22	7:37 (7:27	0:00 (-0:17 to	0.93	-0:11 (-0:31	0.25
	to 7:27)	to 7:44)	to 7:41)	to 7:30)	to 7:38)	to 7:47)	0:19)		to 0:08)	
N	118	77	7	147	63	6				
Wave of	7:26 (7:25	7:27 (7:18	7:30 (7:21	7:28 (7:25	7:31 (7:27	7:34 (7:34	-0:02 (-0:13	0.68	-0:02 (-0:13	0.57
observation <sup>a</sup>	to 7:27)	to 7:36)	to 7:38)	to 7:31)	to 7:36)	to 7:35)	to 0:08)		to 0:07)	
N	118	131	87	147	150	87				

## START 2016-2018

Abbreviation: H:MM – Hours, Minutes.

<sup>a</sup> Unadjusted generalized estimating equation clustered at school level. Self-reported sleep durations were reported <u>at baseline</u> and compared by wave of entry into the substudy (participants' baseline sleep duration is entered once) and wave of observation in the substudy (participants' baseline sleep duration may be included multiple times).