

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

### **March 2014 Update**

In September 2013, a calculation problem was noted for the following Apnea-Hypopnea Index variables in the released MESA Sleep dataset: **oahi35, oahi45, oahi3pa5, and oahi4pa5**. The incorrect calculation underestimated the true values for these indices. The Sleep Reading Center fixed the calculations and transmitted a new MESA Sleep dataset to the MESA Coordinating Center on September 30, 2013. **To all MESA investigators using these variables: Please ensure you are using data released in October 2013 or later.**

Additional efforts are currently ongoing as of March 2014 to check and clean the self-reported sleep times from the MESA Sleep Questionnaire. Calculated average sleep durations (i.e. the time between going to bed and waking up) identified some implausible values in the MESA Sleep dataset (e.g. typical sleep durations of less than 2 hours or more than 16 hours). The questions required participants to indicate AM/PM for typical times they went to bed and woke up, which may have led to some errors, particularly in distinguishing times that fell at midnight (12:00 **AM**) or noon (12:00 **PM**). The self-reported times will be compared with the bed and wake times derived from the PSG and actigraphy data in order to tease out and correct some of these transcription errors (by either the participant or data entry staff).

The Sleep Reading Center also plans to release a large number of additional actigraphy-derived variables sometime in April 2014. These variables will include data on napping patterns, sleep fragmentation, and interday stability/variability, to mention a few new actigraphy-related areas of exploration.

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

**Data Set name :** MESAe5\_SleepPolysomn\_20150630  
**Principal Investigator :** Susan Redline  
**Contact Information :** [sredline1@rics.bwh.harvard.edu](mailto:sredline1@rics.bwh.harvard.edu)

Order	Variable	Variable Description	Value Labels	Domain
1	idno	PARTICIPANT ID NUMBER		ADMINISTRATIVE
2	havepsg5	MESA SLEEP: HAS PSG DATA (PASSED OVERNIGHT STUDY)	0 = NO 1 = YES	ADMINISTRATIVE
3	haveact5	MESA SLEEP: HAS ACTIGRAPHY DATA (5+ VALID NIGHTS)	0 = NO 1 = YES	ADMINISTRATIVE
4	match5	MESA SLEEP: PSG/ACTIGRAPHY START DATES MATCH (I.E. NO FAILURES; TESTS WERE CONCURRENT)	0 = NO 1 = YES	ADMINISTRATIVE
5	siteid5	PSG QS: SITE ID	3 = WFU 4 = COL 5 = JHU 6 = UMN 7 = NWU 8 = UCLA	ADMINISTRATIVE
6	stdy5dyc	PSG QS: DAYS FROM EXAM 5 TO STUDY DATE		PSG
7	status_psg5	PSG QS: PASS/FAIL STATUS	1 = PASSED 2 = FAILED AT RC 3 = FAILED - STUDY NOT SENT	PSG
8	rsnco5	PSG QS: REASON FOR STUDY FAILURE	1 = OXIMETRY 2 = EEG 3 = SHORT RECORDING 4 = OTHER 5 = NO SIGNALS 6 = PARTICIPANT 7 = MISSING FILES	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
9	scorerid5	PSG REPORT: SCORER ID		PSG
10	inhomepsgyn5	PSG: TEST WAS CONDUCTED IN-HOME 1=YES	0 = NO 1 = YES	PSG
11	e1dur5	PSG QS: E1 (EOGL) SIGNAL DURATION (HOURS)		PSG
12	e2dur5	PSG QS: E2 (EOGR) SIGNAL DURATION (HOURS)		PSG
13	chindur5	PSG QS: CHIN (LCHIN-CCHIN) SIGNAL DURATION (HOURS)		PSG
14	fzm1dur5	PSG QS: FZ-CZ SIGNAL DURATION (HOURS) EEG		PSG
15	c4dur5	PSG QS: CZ-OZ SIGNAL DURATION (HOURS) EEG		PSG
16	o2m1dur5	PSG QS: C4-M1 SIGNAL DURATION (HOURS) EEG		PSG
17	ecgdur5	PSG QS: ECG SIGNAL DURATION (HOURS)		PSG
18	limbdur5	PSG QS: LIMB SIGNAL DURATION (HOURS)		PSG
19	airdur5	PSG QS: AIRFLOW SIGNAL DURATION (HOURS)		PSG
20	xflowdur5	PSG QS: CANNULA FLOW SIGNAL DURATION (HOURS)		PSG
21	chestdur5	PSG QS: CHEST SIGNAL DURATION (HOURS)		PSG
22	abdodur5	PSG QS: ABDO SIGNAL DURATION (HOURS)		PSG
23	oximdur5	PSG QS: SPO2 SIGNAL DURATION (HOURS)		PSG
24	plethdur5	PSG QS: PLETH SIGNAL DURATION (HOURS)		PSG
25	casndur5	PSG QS: CANNULA SNORE SIGNAL DURATION (HOURS)		PSG

**MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

Order	Variable	Variable Description	Value Labels	Domain
26	que15	PSG QS: E1 SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
27	que25	PSG QS: E2 SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
28	quchin5	PSG QS: CHIN SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
29	qufzm15	PSG QS: FZ-CZ SIGNAL QUALITY - EEG - MISMATCHED VARIABLE NAME AND LABEL. CONFIRMED AS "FZ-CZ" SIGNAL.	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
30	quc45	PSG QS: CZ-OZ SIGNAL QUALITY-EEG MISMATCHED VARIABLE NAME AND LABEL. CONFIRMED AS "CZ-OZ" SIGNAL.	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
31	quo2m15	PSG QS: C4-M1 SIGNAL QUALITY-EEG MISMATCHED VARIABLE NAME AND LABEL. CONFIRMED AS "C4-M1" SIGNAL.	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG

**MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

Order	Variable	Variable Description	Value Labels	Domain
32	quecg5	PSG QS: ECG SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
33	qulimb5	PSG QS: LIMB SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
34	quair5	PSG QS: AIRFLOW SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG

**MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

Order	Variable	Variable Description	Value Labels	Domain
35	quxflow5	PSG QS: CANNULA FLOW SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
36	quchest5	PSG QS: CHEST SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
37	quabdo5	PSG QS: ABDO SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
38	quoxim5	PSG QS: SPO2 SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
39	qupleth5	PSG QS: PLETH SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
40	qucasn5	PSG QS: CANNULA SNORE SIGNAL QUALITY	1 = SIGNAL GOOD FOR < 25% OF SLEEP TIME 2 = SIGNAL GOOD FOR 25-49% OF SLEEP TIME 3 = SIGNAL GOOD FOR 50-74% OF SLEEP TIME 4 = SIGNAL GOOD FOR 75-94% OF SLEEP TIME 5 = SIGNAL GOOD >= 95% OF SLEEP TIME	PSG
41	m15	PSG QS: SIGNAL QUALITY ISSUES FOUND ON M1 SIGNAL	0 = NO 1 = YES	PSG
42	fpz5	PSG QS: SIGNAL QUALITY ISSUES FOUND ON FPZ SIGNAL	0 = NO 1 = YES	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
43	ref5	PSG QS: SIGNAL QUALITY ISSUES FOUND ON REFERENCE / GROUND SIGNAL	0 = NO 1 = YES	PSG
44	posn5	PSG QS: SIGNAL QUALITY ISSUES FOUND ON POSITION SIGNAL	0 = NO 1 = YES	PSG
45	overall5	PSG QS: OVERALL STUDY QUALITY GRADE	2 = FAILED 3 = FAIR 4 = GOOD 5 = VERY GOOD 6 = EXCELLENT 7 = OUTSTANDING	PSG
46	slewake5	PSG QS: STUDY SCORED SLEEP / WAKE ONLY (ALL SLEEP SCORED AS N2 AND NO AROUSALS SCORED DUE TO POOR QUALITY EEG)	0 = NO 1 = YES	PSG
47	ahiov505	PSG QS: ABNORMAL REFERRAL - AHI > 50	0 = NO 1 = YES	PSG
48	sao2lt855	PSG QS: URGENT REFERRAL - O2SAT < 85% FOR >10% TOTAL SLEEP TIME	0 = NO 1 = YES	PSG
49	unuhrou5	PSG QS: URGENT REFERRAL - UNUSUAL HR/ECG (CATEGORICAL)	0 = NO HEART RATE ISSUES 1 = ABNORMALITIES SEEN - NOT CLINICALLY SIGNIFICANT 2 = POTENTIAL URGENT - A-FIB/FLUTTER HR 4 = URGENT REFERRAL - HEART RATE (NO A-FIB)	PSG
50	unuhrou4a5	PSG QS: URGENT REFERRAL - UNUSUAL HR: 2ND OR 3RD DEGREE BLOCK	0 = NOT CHECKED 1 = CHECKED	PSG
51	unuhrou4b5	PSG QS: URGENT REFERRAL - UNUSUAL HR: ACUTE ST SEGMENT	0 = NOT CHECKED 1 = CHECKED	PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

<b>Order</b>	<b>Variable</b>	<b>Variable Description</b>	<b>Value Labels</b>	<b>Domain</b>
52	unuhrou4c5	PSG QS: URGENT REFERRAL - UNUSUAL HR: NSVT 3-BEAT RUN	0 = NOT CHECKED 1 = CHECKED	PSG
53	unuhrou4d5	PSG QS: URGENT REFERRAL - UNUSUAL HR: HR ABOVE 150 BPM FOR >= 2 MIN	0 = NOT CHECKED 1 = CHECKED	PSG
54	unuhrou4e5	PSG QS: URGENT REFERRAL - UNUSUAL HR: HR < 30 BPM FOR >= 2 MIN	0 = NOT CHECKED 1 = CHECKED	PSG
55	unuhrou4f5	PSG QS: URGENT REFERRAL - UNUSUAL HR: OTHER	0 = NOT CHECKED 1 = CHECKED	PSG
56	recbeaw5	PSG QS: DATA LOST - RECORDING ENDED BEFORE WAKE	0 = NO 1 = YES	PSG
57	losbeg5	PSG QS: DATA LOST AT BEGINNING OF STUDY	0 = NO 1 = YES	PSG
58	losend5	PSG QS: DATA LOST AT END OF STUDY	0 = NO 1 = YES	PSG
59	losoth5	PSG QS: DATA LOST DURING STUDY	0 = NO 1 = YES	PSG
60	wakslepr5	PSG QS: SCORING STAGE WAKE/SLEEP UNRELIABLE	0 = NO 1 = YES	PSG
61	stg1stg2pr5	PSG QS: SCORING STAGE1/STAGE2 UNRELIABLE	0 = NO 1 = YES	PSG
62	stg2stg3pr5	PSG QS: SCORING STAGE2/DEEP SLEEP UNRELIABLE	0 = NO 1 = YES	PSG
63	remnrempr5	PSG QS: SCORING REM/NREM UNRELIABLE	0 = NO 1 = YES	PSG
64	arunrel5	PSG QS: SCORING AROUSALS UNRELIABLE	0 = NO 1 = YES	PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

<b>Order</b>	<b>Variable</b>	<b>Variable Description</b>	<b>Value Labels</b>	<b>Domain</b>
65	remarunrel5	PSG QS: SCORING AROUSALS IN REM (ONLY) UNRELIABLE	0 = NO 1 = YES	PSG
66	respevpr5	PSG QS: SCORING RESPIRATORY EVENTS (RDI) UNRELIABLE	0 = NO 1 = YES	PSG
67	apnhyppr5	PSG QS: SCORING APNEA/HYPOPNEA UNRELIABLE	0 = NO 1 = YES	PSG
68	abnoreeg5	PSG QS: ABNORMAL AWAKE EEG	0 = NO 1 = YES	PSG
69	alpdel5	PSG QS: PHYSIOLOGIC ALPHA INTRUSION	0 = NO 1 = YES	PSG
70	period5	PSG QS: PERIODIC BREATHING >=10 MIN	0 = NO 1 = YES	PSG
71	lagbreath5	PSG QS: PERIODIC LARGE BREATHS	0 = NO 1 = YES	PSG
72	npflow5	PSG QS: FLOW LIMITATION	0 = NO 1 = YES	PSG
73	plmwake5	PSG QS: LEG MOVEMENTS IN WAKE	0 = NO 1 = YES	PSG
74	unustgou5	PSG QS: UNUSUAL STAGING	0 = NO 1 = YES	PSG
75	arsl3ou5	PSG QS: AROUSAL INDEX < 3 VERIFIED	0 = NO 1 = YES	PSG
76	maxresou5	PSG QS: LONG RESPIRATORY EVENTS VERIFIED	0 = NO 1 = YES	PSG
77	plmou5	PSG QS: PLM > 100 VERIFIED	0 = NO 1 = YES	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
78	scorid5	PSG QS: SCORER ID		PSG
79	lighoff5	PSG QS: PARTICIPANT REPORTED TIME TO BED		PSG
80	stloutp5	LIGHTS OUT TIME (HH:MM:SS)		PSG
81	stonsetp5	SLEEP ONSET TIME (HH:MM:SS)		PSG
82	remlaip5	REM LATENCY II - EXCLUDING WAKE (MINUTES)		PSG
83	slprdp5	TOTAL SLEEP TIME (MINUTES)	TOTAL TIME FROM LIGHTS OUT TO LIGHTS ON THAT IS SCORED AS SLEEP (ROUNDED TO NEAREST MINUTE)	PSG
84	ststartp5	STUDY START TIME (HH:MM:SS)		PSG
85	stendp5	STUDY END TIME (HH:MM:SS)		PSG
86	stdurm5	STUDY LENGTH (EPOCH 1 TO LAST EPOCH- MINUTES)		PSG
87	stlonp5	LIGHTS ON SET BY SCORER (HH:MM:SS) (NOT SCRIPT VARIABLE)		PSG
88	stonset15	SLEEP ONSET (START OF SLEEP- HH:MM:SS) - SCORER		PSG
89	timebedm5	TIME IN BED (MINUTES .5)		PSG
90	time_bed5	CALCULATED - TIME IN BED (MINUTES)		PSG
91	slp_eff5	CALCULATED - SLEEP EFFICIENCY %		PSG
92	rem_lat15	CALCULATED - REM LATENCY I IN MINUTES SLP ONSET TO FIRST REM		PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

Order	Variable	Variable Description	Value Labels	Domain
93	slp_maint_eff5	PSG: SLEEP MAINTENANCE EFFICIENCY	PERCENTAGE OF TIME BETWEEN SLEEP ONSET AND LIGHTS ON THAT WAS SPENT SLEEPING [100*(TOTAL SLEEP TIME)/(TOTAL TIME BETWEEN SLEEP ONSET AND LIGHTS ON)]	PSG
94	arrembp5	# OF AROUSALS (REM, BACK, ALL DESATS)		PSG
95	arremop5	# OF AROUSALS (REM, OTHER, ALL DESATS)		PSG
96	arnrembp5	# OF AROUSALS (NREM, BACK, ALL DESATS)		PSG
97	arnremop5	# OF AROUSALS (NREM, OTHER, ALL DESATS)		PSG
98	ahrembp5	AROUSALS PER HOUR (REM, BACK, ALL DESATS)		PSG
99	ahremop5	AROUSALS PER HOUR (REM, OTHER, ALL DESATS)		PSG
100	ahnrembp5	AROUSALS PER HOUR (NREM, BACK, ALL DESATS)		PSG
101	ahnremop5	AROUSALS PER HOUR (NREM, OTHER, ALL DESATS)		PSG
102	ai_all5	CALCULATED - OVERALL AROUSAL INDEX		PSG
103	ai_rem5	CALCULATED - AROUSAL INDEX REM SLEEP		PSG
104	ai_nrem5	CALCULATED - AROUSAL INDEX NON-REM		PSG
105	waso5	CALCULATED - WAKE AFTER SLEEP ONSET (MINUTES)		PSG
106	timest1p5	CALCULATED - PCT TIME STAGE 1		PSG
107	timest15	CALCULATED - TIME STAGE 1 MINUTES		PSG
108	timest2p5	CALCULATED - PCT TIME STAGE 2		PSG
109	timest25	CALCULATED - TIME STAGE 2 MINUTES		PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
110	times34p5	CALCULATED - PCT TIME STAGE 3-4		PSG
111	timest345	CALCULATED - TIME STAGE 3-4 MINUTES		PSG
112	timeremp5	CALCULATED - PCT TIME REM		PSG
113	timerem5	CALCULATED - TIME REM MINUTES		PSG
114	svpulse5	PSG QS: MANUAL PULSE AT TIME OF HOOKUP FROM SV FORM	VALUE <30 INDICATED ALERT VALUE FOR SITE	PSG
115	bpmavg5	AVERAGE HEART RATE (BPM) DURING SLEEP		PSG
116	bpmmin5	LOWEST HEART RATE (BPM) DURING SLEEP		PSG
117	bpmmax5	HIGHEST HEART RATE (BPM) DURING SLEEP		PSG
118	apnea35	# OF APNEA EVENTS WITH >= 3% DESAT		PSG
119	ahiu35	RDI - APNEA/AASM RECOMMENDED HYPOPNEA/AASM ALTERNATIVE HYPOPNEAS WITH >= 3% DESAT AS USED ON SHORT REPORT SENT TO SITES		PSG
120	rdirbp5	AASM RECOMMENDED HYPOPNEA PER HOUR (REM, BACK, ALL DESATS)		PSG
121	rdrop5	AASM RECOMMENDED HYPOPNEA PER HOUR (REM, OTHER, ALL DESATS)		PSG
122	rdinbp5	AASM RECOMMENDED HYPOPNEA PER HOUR (NREM, BACK, ALL DESATS)		PSG
123	rdinop5	AASM RECOMMENDED HYPOPNEA PER HOUR (NREM, OTHER, ALL DESATS)		PSG
124	cardrbp5	CENT. APNEA PER HOUR (REM, BACK, ALL DESATS)		PSG
125	cardrop5	CENT. APNEA PER HOUR (REM, OTHER, ALL DESATS)		PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
126	cardnbp5	CENT. APNEA PER HOUR (NREM, BACK, ALL DESATS)		PSG
127	cardnop5	CENT. APNEA PER HOUR (NREM, OTHER, ALL DESATS)		PSG
128	oardrbp5	OBS. APNEA PER HOUR (REM, BACK, ALL DESATS)		PSG
129	oarop5	# OF OBS. APNEA (REM, OTHER, ALL DESATS)		PSG
130	oardnbp5	OBS. APNEA PER HOUR (NREM, BACK, ALL DESATS)		PSG
131	oardnop5	OBS. APNEA PER HOUR (NREM, OTHER, ALL DESATS)		PSG
132	mxdrbp5	MAX. DESAT (REM, BACK, ALL DESATS)		PSG
133	mxdrop5	MAX. DESAT (REM, OTHER, ALL DESATS)		PSG
134	mxdnbp5	MAX. DESAT (NREM, BACK, ALL DESATS)		PSG
135	mxdnop5	MAX. DESAT (NREM, OTHER, ALL DESATS)		PSG
136	avdrbp5	AVG. DESAT (REM, BACK, ALL DESATS)		PSG
137	avdrop5	AVG. DESAT (REM, OTHER, ALL DESATS)		PSG
138	avdnbp5	AVG. DESAT (NREM, BACK, ALL DESATS)		PSG
139	avdnop5	AVG. DESAT (NREM, OTHER, ALL DESATS)		PSG
140	rdirba5	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (REM, BACK, ALL DESATS)		PSG
141	rdiroa5	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (REM, OTHER, ALL DESATS)		PSG
142	rdinba5	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (NREM, BACK, ALL DESATS)		PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

<b>Order</b>	<b>Variable</b>	<b>Variable Description</b>	<b>Value Labels</b>	<b>Domain</b>
143	rdinoa5	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (NREM, OTHER, ALL DESATS)		PSG
144	cardrba5	CENT. APNEA PER HOUR W/ AROUSALS (REM, BACK, ALL DESATS)		PSG
145	cardroa5	CENT. APNEA PER HOUR W/ AROUSALS (REM, OTHER, ALL DESATS)		PSG
146	cardnba5	CENT. APNEA PER HOUR W/ AROUSALS (NREM, BACK, ALL DESATS)		PSG
147	cardnoa5	CENT. APNEA PER HOUR W/ AROUSALS (NREM, OTHER, ALL DESATS)		PSG
148	oardrba5	OBS. APNEA PER HOUR W/ AROUSALS (REM, BACK, ALL DESATS)		PSG
149	oardroa5	OBS. APNEA PER HOUR W/ AROUSALS (REM, OTHER, ALL DESATS)		PSG
150	oardnba5	OBS. APNEA PER HOUR W/ AROUSALS (NREM, BACK, ALL DESATS)		PSG
151	oardnoa5	OBS. APNEA PER HOUR W/ AROUSALS (NREM, OTHER, ALL DESATS)		PSG
152	rdirba35	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (REM, BACK, 3% DESAT)		PSG
153	rdiroa35	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (REM, OTHER, 3% DESAT)		PSG
154	rdinba35	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (NREM, BACK, 3% DESAT)		PSG
155	rdinoa35	AASM RECOMMENDED HYPOPNEA PER HOUR W/ AROUSALS (NREM, OTHER, 3% DESAT)		PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
156	cardrba35	CENT. APNEA PER HOUR W/ AROUSALS (REM, BACK, 3% DESAT)		PSG
157	cardroa35	CENT. APNEA PER HOUR W/ AROUSALS (REM, OTHER, 3% DESAT)		PSG
158	cardnba35	CENT. APNEA PER HOUR W/ AROUSALS (NREM, BACK, 3% DESAT)		PSG
159	cardnoa35	CENT. APNEA PER HOUR W/ AROUSALS (NREM, OTHER, 3% DESAT)		PSG
160	oardrba35	OBS. APNEA PER HOUR W/ AROUSALS (REM, BACK, 3% DESAT)		PSG
161	oardroa35	OBS. APNEA PER HOUR W/ AROUSALS (REM, OTHER, 3% DESAT)		PSG
162	oardnba35	OBS. APNEA PER HOUR W/ AROUSALS (NREM, BACK, 3% DESAT)		PSG
163	oardnoa35	OBS. APNEA PER HOUR W/ AROUSALS (NREM, OTHER, 3% DESAT)		PSG
164	pctsthyp5	% SLEEP TIME IN AASM RECOMMENDED HYPOPNEA		PSG
165	pcstahar5	% SLEEP TIME IN APNEA+AASM RECOMMENDED HYPOPNEA WITH AROUSAL		PSG
166	pcstah3d5	% SLEEP TIME IN APNEA+AASM RECOMMENDED HYPOPNEA WITH >3% DESAT		PSG
167	pcstahda5	% SLEEP TIME IN APNEA+AASM RECOMMENDED HYPOPNEA WITH > 3% DESAT OR AROUSAL		PSG
168	longap5	LONGEST APNEA (SECONDS)		PSG
169	longhyp5	LONGEST AASM RECOMMENDED HYPOPNEA (SECONDS)		PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

<b>Order</b>	<b>Variable</b>	<b>Variable Description</b>	<b>Value Labels</b>	<b>Domain</b>
170	cavgdur5	AVG. CENT. APNEA LENGTH (SECONDS)		PSG
171	oavgdur5	AVG. OBS. APNEA LENGTH (SECONDS)		PSG
172	apavgdur5	AVG. APNEA LENGTH (SECONDS)		PSG
173	havgdur5	AVG. AASM RECOMMENDED HYPOPNEA LENGTH (SECONDS)		PSG
174	hurbp5	# AASM ALTERNATIVE HYPOPNEA PER HOUR (REM, BACK, ALL DESATS)		PSG
175	hurop5	# AASM ALTERNATIVE HYPOPNEA PER HOUR (REM, OTHER, ALL DESATS)		PSG
176	hunrbp5	# AASM ALTERNATIVE HYPOPNEA PER HOUR (NREM, BACK, ALL DESATS)		PSG
177	hunrop5	# AASM ALTERNATIVE HYPOPNEA PER HOUR (NREM, OTHER, ALL DESATS)		PSG
178	hurbpa5	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (REM, BACK, ALL DESATS)		PSG
179	huropa5	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (REM, OTHER, ALL DESATS)		PSG
180	hunrbpa5	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (NREM, BACK, ALL DESATS)		PSG
181	hunropa5	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (NREM, OTHER, ALL DESATS)		PSG
182	hurbp25	# AASM ALTERNATIVE HYPOPNEA PER HOUR (REM, BACK, 2% DESAT)		PSG
183	hurbpa35	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (REM, BACK, 3% DESAT)		PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
184	huropa35	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (REM, OTHER, 3% DESAT)		PSG
185	hunrbpa35	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (NREM, BACK, 3% DESAT)		PSG
186	hunropa35	# AASM ALTERNATIVE HYPOPNEA WITH AROUSAL PER HOUR (NREM, OTHER, 3% DESAT)		PSG
187	rdi3p5	CALCULATED - OVERALL RDI AT 3% DESAT		PSG
188	rdi4p5	CALCULATED - OVERALL RDI AT 4% DESAT		PSG
189	rdi3pa5	CALCULATED - OVERALL RDI AT 3% DESAT OR AROUSAL		PSG
190	rdi4pa5	CALCULATED - OVERALL RDI AT 4% DESAT OR AROUSAL		PSG
191	oahi35	CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); AASM RECOMMENDED AND ALTERNATIVE HYPOPNEA (3% DESAT) INDEX	$\text{oahi3} = 60 * (\text{hrembp3} + \text{hrop3} + \text{hnrp3} + \text{hnrop3} + \text{oarp3} + \text{oarop3} + \text{oanbp3} + \text{oanop3} + \text{urp3} + \text{urop3} + \text{unrbp3} + \text{unrop3}) / \text{slpprdp}$	PSG
192	oai0p5	CALCULATED - OBSTRUCTIVE APNEA INDEX ALL DESATS		PSG
193	cai0p5	CALCULATED - CENTRAL APNEA INDEX ALL DESATS		PSG
194	longhypb5	PSG: FILTERED - LONGEST HYPOPNEA (SECONDS)	LONGEST HYPOPNEA (ENTIRE RECORDING). VARIABLE CONTAINS BOTH HYPOPNEAS.	PSG
195	pcoslp5	PSG: FILTERED - % SLEEP TIME IN APNEA [CA+OA]		PSG
196	phbslp5	PSG: FILTERED - % SLEEP TIME IN HYPOPNEA	VARIABLE CONTAINS BOTH HYPOPNEAS.	PSG
197	pcohbwaslp5	PSG: FILTERED - % SLEEP TIME IN APNEA [CA+OA]+HYPOPNEA WITH AROUSAL	VARIABLE CONTAINS BOTH HYPOPNEAS.	PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

<b>Order</b>	<b>Variable</b>	<b>Variable Description</b>	<b>Value Labels</b>	<b>Domain</b>
198	pcohb3slp5	PSG: FILTERED - % SLEEP TIME IN APNEA [CA+OA]+HYPOPNEA WITH >3% DESAT	VARIABLE CONTAINS BOTH HYPOPNEAS.	PSG
199	pcohb3waslp5	PSG: FILTERED - % SLEEP TIME IN APNEA [CA+OA]+HYPOPNEA WITH > 3% DESAT OR AROUSAL	VARIABLE CONTAINS BOTH HYPOPNEAS.	PSG
200	hbavgdur5	PSG: FILTERED - AVG. HYPOPNEA LENGTH (SECONDS)	VARIABLE CONTAINS BOTH HYPOPNEAS.	PSG
201	svspo25	PSG QS: SPO2 FROM SIGNAL VERIFICATION FORM - READING AT TIME OF HOOKUP	VALUE <88 INDICATED ALERT VALUE FOR SITE	PSG
202	mndrbp5	MIN. SAO2 (REM, BACK, ALL DESATS) (%)		PSG
203	mndrop5	MIN. SAO2 (REM, OTHER, ALL DESATS) (%)		PSG
204	mndnbp5	MIN. SAO2 (NREM, BACK, ALL DESATS) (%)		PSG
205	mndnop5	MIN. SAO2 (NREM, OTHER, ALL DESATS) (%)		PSG
206	ndes2ph5	# OF DESAT WITH >= 2% DESAT (DURING TOTAL RECORDING)	DURING RECORDING TIME -- NOT LIMITED TO SLEEP. LOOK TO 'ODI3' AND 'ODI4' FOR OXYGEN DESATURATION INDECES DURING SLEEP.	PSG
207	ndes3ph5	# OF DESAT WITH >= 3% DESAT (DURING TOTAL RECORDING)	DURING RECORDING TIME -- NOT LIMITED TO SLEEP. LOOK TO 'ODI3' AND 'ODI4' FOR OXYGEN DESATURATION INDECES DURING SLEEP.	PSG
208	ndes4ph5	# OF DESAT WITH >= 4% DESAT (DURING TOTAL RECORDING)	DURING RECORDING TIME -- NOT LIMITED TO SLEEP. LOOK TO 'ODI3' AND 'ODI4' FOR OXYGEN DESATURATION INDECES DURING SLEEP.	PSG

## **MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE**

<b>Order</b>	<b>Variable</b>	<b>Variable Description</b>	<b>Value Labels</b>	<b>Domain</b>
209	ndes5ph5	# OF DESAT WITH >= 5% DESAT (DURING TOTAL RECORDING)	DURING RECORDING TIME -- NOT LIMITED TO SLEEP. LOOK TO 'ODI3' AND 'ODI4' FOR OXYGEN DESATURATION INDECES DURING SLEEP.	PSG
210	pctsa95h5	% SLEEP TIME SAO2 IS < 95%		PSG
211	pctsa90h5	% SLEEP TIME SAO2 IS < 90%		PSG
212	pctsa85h5	% SLEEP TIME SAO2 IS < 85%		PSG
213	pctsa80h5	% SLEEP TIME SAO2 IS < 80%		PSG
214	avsao2rh5	AVG. SAO2 % DURING REM SLEEP		PSG
215	avsao2nh5	AVG. SAO2 % DURING NREM SLEEP		PSG
216	mnsao2rh5	MIN. SAO2 % DURING REM SLEEP		PSG
217	mnsao2nh5	MIN. SAO2 % DURING NREM SLEEP		PSG
218	mxsao2rh5	MAX. SAO2 % DURING REM SLEEP		PSG
219	mxsao2nh5	MAX. SAO2 % DURING NREM SLEEP		PSG
220	dsrem25	# OF DESATS PER HOUR (REM, >= 2%)		PSG
221	dsrem35	# OF DESATS PER HOUR (REM, >= 3%)		PSG
222	dsrem45	# OF DESATS PER HOUR (REM, >= 4%)		PSG
223	dsrem55	# OF DESATS PER HOUR (REM, >= 5%)		PSG
224	dsnr25	# OF DESATS PER HOUR (NREM, >= 2%)		PSG
225	dsnr35	# OF DESATS PER HOUR (NREM, >= 3%)		PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
226	dsnr45	# OF DESATS PER HOUR (NREM, >= 4%)		PSG
227	dsnr55	# OF DESATS PER HOUR (NREM, >= 5%)		PSG
228	dssao905	# OF DESATS WITH SAO2 DROPS BELOW 90% IN SLEEP		PSG
229	pctlt905	CALCULATED - PCT TIME < 90% DESAT		PSG
230	pctlt855	CALCULATED - PCT TIME < 85% DESAT		PSG
231	pctlt805	CALCULATED - PCT TIME < 80% DESAT		PSG
232	pctlt755	CALCULATED - PCT TIME < 75% DESAT		PSG
233	sao2rem5	CALCULATED - AVG SAO2 REM		PSG
234	sao2nrem5	CALCULATED - AVG SAO2 NREM		PSG
235	losao2r5	CALCULATED - MIN SAO2 REM		PSG
236	losao2nr5	CALCULATED - MIN SAO2 NREM		PSG
237	avgsat5	CALCULATED - AVG SAO2 IN SLEEP		PSG
238	minsats5	PSG REPORT: CALCULATED - MIN SAO2 IN SLEEP		PSG
239	odi35	PSG: FILTERED - OXYGEN DESATURATION INDEX AT 3% (DURING SLEEP TIME)	$((DSREM3 * MINREMP) + (DSNR3 * (SLPPRDP - MINREMP))) / SLPPRDP;$	PSG
240	odi45	PSG: FILTERED - OXYGEN DESATURATION INDEX AT 4% (DURING SLEEP TIME)	$((DSREM4 * MINREMP) + (DSNR4 * (SLPPRDP - MINREMP))) / SLPPRDP;$	PSG
241	supinep5	CALCULATED - PCT TIME SUPINE		PSG
242	nsupinep5	CALCULATED - PCT TIME NON-SUPINE		PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
243	avgplm5	# OF PLM PER HOUR OF SLEEP		PSG
244	avgnplm5	# OF PLM PER HOUR OF NREM SLEEP		PSG
245	avgrplm5	# OF PLM PER HOUR OF REM SLEEP		PSG
246	nopl5	# OF PLM DURING SLEEP		PSG
247	plmaslp5	# PLMS WITH AROUSAL (SLEEP)		PSG
248	rdi0p5	CALCULATED - OVERALL RDI AT 0% DESAT	$\text{rdi0p} = 60 * (\text{hrembp} + \text{hrop} + \text{hnrbp} + \text{hnrop} + \text{carbp} + \text{carop} + \text{canbp} + \text{canop} + \text{oarbp} + \text{oarop} + \text{oanbp} + \text{oanop} + \text{urbp} + \text{urop} + \text{unrbp} + \text{unrop}) / \text{slpprdp}$	PSG
249	rdi2p5	CALCULATED - OVERALL RDI AT 2% DESAT	$\text{rdi2p} = 60 * (\text{hrembp2} + \text{hrop2} + \text{hnrbp2} + \text{hnrop2} + \text{carbp2} + \text{carop2} + \text{canbp2} + \text{canop2} + \text{oarbp2} + \text{oarop2} + \text{oanbp2} + \text{oanop2} + \text{urbp2} + \text{urop2} + \text{unrbp2} + \text{unrop2}) / \text{slpprdp}$	PSG
250	rdi5p5	CALCULATED - OVERALL RDI AT 5% DESAT	$\text{rdi5p} = 60 * (\text{hrembp5} + \text{hrop5} + \text{hnrbp5} + \text{hnrop5} + \text{carbp5} + \text{carop5} + \text{canbp5} + \text{canop5} + \text{oarbp5} + \text{oarop5} + \text{oanbp5} + \text{oanop5} + \text{urbp5} + \text{urop5} + \text{unrbp5} + \text{unrop5}) / \text{slpprdp}$	PSG
251	rdi0pa5	CALCULATED - OVERALL RDI AT 0% DESAT OR AROUSAL	$\text{rdi0pa} = 60 * (\text{hremba} + \text{hroa} + \text{hnrba} + \text{hnroa} + \text{carba} + \text{caroa} + \text{canba} + \text{canao} + \text{oarba} + \text{oaroa} + \text{oanba} + \text{oanoa} + \text{urbpa} + \text{uopa} + \text{unrbpa} + \text{unropa}) / \text{slpprdp}$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
252	rdi2pa5	CALCULATED - OVERALL RDI AT 2% DESAT OR AROUSAL	$\text{rdi2pa} = 60 * (\text{hremba2} + \text{hroa2} + \text{hnrba2} + \text{hnroa2} + \text{carba2} + \text{caroa2} + \text{canba2} + \text{canao2} + \text{oarba2} + \text{oaroa2} + \text{oanba2} + \text{oanoa2} + \text{urbpa2} + \text{uroa2} + \text{unrbpa2} + \text{unropa2}) / \text{slpprdp}$	PSG
253	rdi5pa5	CALCULATED - OVERALL RDI AT 5% DESAT OR AROUSAL	$\text{rdi5pa} = 60 * (\text{hremba5} + \text{hroa5} + \text{hnrba5} + \text{hnroa5} + \text{carba5} + \text{caroa5} + \text{canba5} + \text{canao5} + \text{oarba5} + \text{oaroa5} + \text{oanba5} + \text{oanoa5} + \text{urbpa5} + \text{uroa5} + \text{unrbpa5} + \text{unropa5}) / \text{slpprdp}$	PSG
254	rdi0ps5	CALCULATED - OVERALL SUPINE RDI AT 0% DESAT	$\text{rdi0ps} = 60 * (\text{hrembp} + \text{hnrbp} + \text{carbp} + \text{canbp} + \text{oarbp} + \text{oanbp} + \text{urbp} + \text{unrbp}) / (\text{remepbp} + \text{nremepbp})$	PSG
255	rdi2ps5	CALCULATED - OVERALL SUPINE RDI AT 2% DESAT	$\text{rdi2ps} = 60 * (\text{hrembp2} + \text{hnrbp2} + \text{carbp2} + \text{canbp2} + \text{oarbp2} + \text{oanbp2} + \text{urbp2} + \text{unrbp2}) / (\text{remepbp} + \text{nremepbp})$	PSG
256	rdi3ps5	CALCULATED - OVERALL SUPINE RDI AT 3% DESAT	$\text{rdi3ps} = 60 * (\text{hrembp3} + \text{hnrbp3} + \text{carbp3} + \text{canbp3} + \text{oarbp3} + \text{oanbp3} + \text{urbp3} + \text{unrbp3}) / (\text{remepbp} + \text{nremepbp})$	PSG
257	rdi4ps5	CALCULATED - OVERALL SUPINE RDI AT 4% DESAT	$\text{rdi4ps} = 60 * (\text{hrembp4} + \text{hnrbp4} + \text{carbp4} + \text{canbp4} + \text{oarbp4} + \text{oanbp4} + \text{urbp4} + \text{unrbp4}) / (\text{remepbp} + \text{nremepbp})$	PSG
258	rdi5ps5	CALCULATED - OVERALL SUPINE RDI AT 5% DESAT	$\text{rdi5ps} = 60 * (\text{hrembp5} + \text{hnrbp5} + \text{carbp5} + \text{canbp5} + \text{oarbp5} + \text{oanbp5} + \text{urbp5} + \text{unrbp5}) / (\text{remepbp} + \text{nremepbp})$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
259	rdi0pns5	CALCULATED - OVERALL NON-SUPINE RDI AT 0% DESAT	$rdi0pns = 60 * (hrop + hnrop + carop + canop + oarop + oanop + urop + unrop) / (remepop + nremepop)$	PSG
260	rdi2pns5	CALCULATED - OVERALL NON-SUPINE RDI AT 2% DESAT	$rdi2pns = 60 * (hrop2 + hnrop2 + carop2 + canop2 + oarop2 + oanop2 + urop2 + unrop2) / (remepop + nremepop)$	PSG
261	rdi3pns5	CALCULATED - OVERALL NON-SUPINE RDI AT 3% DESAT	$rdi3pns = 60 * (hrop3 + hnrop3 + carop3 + canop3 + oarop3 + oanop3 + urop3 + unrop3) / (remepop + nremepop)$	PSG
262	rdi4pns5	CALCULATED - OVERALL NON-SUPINE RDI AT 4% DESAT	$rdi4pns = 60 * (hrop4 + hnrop4 + carop4 + canop4 + oarop4 + oanop4 + urop4 + unrop4) / (remepop + nremepop)$	PSG
263	rdi5pns5	CALCULATED - OVERALL NON-SUPINE RDI AT 5% DESAT	$rdi5pns = 60 * (hrop5 + hnrop5 + carop5 + canop5 + oarop5 + oanop5 + urop5 + unrop5) / (remepop + nremepop)$	PSG
264	rdirem0p5	CALCULATED - OVERALL REM RDI AT 0% DESAT	$rdirem0p = 60 * (hrembp + hrop + carbp + carop + oarbp + oarop + urbp + urop) / minremp$	PSG
265	rdirem2p5	CALCULATED - OVERALL REM RDI AT 2% DESAT	$rdirem2p = 60 * (hrembp2 + hrop2 + carbp2 + carop2 + oarbp2 + oarop2 + urbp2 + urop2) / minremp$	PSG
266	rdirem3p5	CALCULATED - OVERALL REM RDI AT 3% DESAT	$rdirem3p = 60 * (hrembp3 + hrop3 + carbp3 + carop3 + oarbp3 + oarop3 + urbp3 + urop3) / minremp$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
267	rdirem4p5	CALCULATED - OVERALL REM RDI AT 4% DESAT	$rdirem4p = 60 * (hrembp4 + hrop4 + carbp4 + carop4 + oarbp4 + oarop4 + urbp4 + urop4) / minremp$	PSG
268	rdirem5p5	CALCULATED - OVERALL REM RDI AT 5% DESAT	$rdirem5p = 60 * (hrembp5 + hrop5 + carbp5 + carop5 + oarbp5 + oarop5 + urbp5 + urop5) / minremp$	PSG
269	rdinr0p5	CALCULATED - OVERALL NON-REM RDI AT 0% DESAT	$rdinr0p = 60 * (hnrbp + hnrop + canbp + canop + oanbp + oanop + unrbp + unrop) / (slpprdp - minremp)$	PSG
270	rdinr2p5	CALCULATED - OVERALL NON-REM RDI AT 2% DESAT	$rdinr2p = 60 * (hnrbp2 + hnrop2 + canbp2 + canop2 + oanbp2 + oanop2 + unrbp2 + unrop2) / (slpprdp - minremp)$	PSG
271	rdinr3p5	CALCULATED - OVERALL NON-REM RDI AT 3% DESAT	$rdinr3p = 60 * (hnrbp3 + hnrop3 + canbp3 + canop3 + oanbp3 + oanop3 + unrbp3 + unrop3) / (slpprdp - minremp)$	PSG
272	rdinr4p5	CALCULATED - OVERALL NON-REM RDI AT 4% DESAT	$rdinr4p = 60 * (hnrbp4 + hnrop4 + canbp4 + canop4 + oanbp4 + oanop4 + unrbp4 + unrop4) / (slpprdp - minremp)$	PSG
273	rdinr5p5	CALCULATED - OVERALL NON-REM RDI AT 5% DESAT	$rdinr5p = 60 * (hnrbp5 + hnrop5 + canbp5 + canop5 + oanbp5 + oanop5 + unrbp5 + unrop5) / (slpprdp - minremp)$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
274	oahi45	CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS), AASM RECOMMENDED AND ALTERNATIVE HYPOPNEA (4% DESAT) INDEX	$oahi4 = 60 * (hrembp4 + hrop4 + hnrbp4 + hnrop4 + oarbp + oarop + oanbp + oanop + urbp4 + urop4 + unrbp4 + unrop4)$ / slpprdp	PSG
275	oai4p5	CALCULATED - OBSTRUCTIVE APNEA INDEX 4% DESATS	$oai4p = 60 * (oarbp4 + oarop4 + oanbp4 + oanop4)$ / slpprdp	PSG
276	cai4p5	CALCULATED - CENTRAL APNEA INDEX 4% DESATS	$cai4p = 60 * (carbp4 + carop4 + canbp4 + canop4)$ / slpprdp	PSG
277	cai4pa5	CALCULATED - CENTRAL APNEA INDEX 4% OR AROUSAL	$cai4pa = 60 * (carba4 + caroa4 + canba4 + canoa4)$ / slpprdp	PSG
278	a0h3ai5	ALL APNEAS + HYPOPNEAS WITH >=3% DESAT OR AROUSAL – INDEX (AHI)	$a0hi3pa = 60 * (hremba3 + hroa3 + hnrba3 + hnroa3 + carbp + carop + canbp + canop + oarbp + oarop + oanbp + oanop + urbpa3 + uropa3 + unrbpa3 + unropa3)$ / slpprdp.	PSG
279	pctle925	CALCULATED - PCT TIME SLEEP <= 92% DESAT	If havepsg then do; $pctle92 = 100 * ((slpprdp - sao92slp) / slpprdp);$ if pctle92 < 0 then pctle92 = 0	PSG
280	oahi3pa5	CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS) AASM RECOMMENDED AND ALTERNATIVE HYPOPNEA (3% DESAT OR AROUSAL) INDEX	$oahi3pa = 60 * (hremba3 + hroa3 + hnrba3 + hnroa3 + oarbp + oarop + oanbp + oanop + urbpa3 + uropa3 + unrbpa3 + unropa3)$ / slpprdp	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
281	oahi4pa5	CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS) AASM RECOMMENDED AND ALTERNATIVE HYPOPNEA (4% DESAT OR AROUSAL) INDEX	$oahi4pa = 60 * (hremba4 + hroa4 + hnrba4 + hnroa4 + oarbp + oarop + oanbp + oanop + urbpa4 + uropa4 + unrbpa4 + unropa4) / slpprdp$	PSG
282	avgplma5	NUMBER OF PLM WITH AROUSALS PER HOUR OF SLEEP	$avgplma = 60 * (plmaslp / slpprdp)$	PSG
283	ahi4pa5	(PREVIOUSLY AASM2013AHI5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT OR AROUSAL)	If slewake ne 1 and slpprdp gt 0 then do; $ahi4pa = 60 * (hremba4 + hroa4 + hnrba4 + hnroa4 + carbp + carop + canbp + canop + oarbp + oarop + oanbp + oanop + urbpa4 + uropa4 + unrbpa4 + unropa4) / slpprdp$	PSG
284	ahi4p5	(PREVIOUSLY MEDICAREAHI5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT)	If slpprdp gt 0 then do; $ahi4p = 60 * (hrembp4 + hrop4 + hnrbp4 + hnrop4 + carbp + carop + canbp + canop + oarbp + oarop + oanbp + oanop + urbp4 + urop4 + unrbp4 + unrop4) / slpprdp$	PSG
285	oahi3_rem5	(PREVIOUSLY OAH3P_REM5) CALCULATED - OBSTRUCTIVE APNEA ( ALL DESATS); 30% AND 50% HYPOPNEA ( 3% DESAT) INDEX IN REM	If slpprdp gt 0 and slewake ne 1 then do; $oahi3\_rem = 60 * (hrembp3 + hrop3 + oarbp + oarop + urbp3 + urop3) / minremp$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
286	oahi3_nrem5	(PREVIOUSLY OAHI3P_NREM5) CALCULATED - OBSTRUCTIVE APNEA ( ALL DESATS); 30% AND 50% HYPOPNEA ( 3% DESAT) INDEX IN NREM	If slewake ne 1 and minremp ne slpprdp and slpprdp gt 0 then do;  oahi3_nrem = 60 * ( hnrbp3 + hnrop3 + oanbp + oanop + unrbp3 + unrop3 ) / ( slpprdp – minremp )	PSG
287	oahi3_sup5	(PREVIOUSLY OAHI3P_SUP5) CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); 30% AND 50% HYPOPNEA (3% DESAT) INDEX SUPINE	If slpprdp gt 0 and supinep gt 0 then do;  oahi3_sup = 60 * ( hrembp3 + hnrbp3 + oarbp + oanbp + urbp3 + unrbp3 ) / ( remepbp + nremepbp )	PSG
288	oahi3_nsup5	(PREVIOUSLY OAHI3P_NSUP5) CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); 30% AND 50% HYPOPNEA (3% DESAT) INDEX NON SUPINE	If slpprdp gt 0 and nsupinep gt 0 then do;  oahi3_nsup = 60 * ( hrop3 + hnrop3 + oarop + oanop + urop3 + unrop3 ) / ( remepop + nremepop )	PSG
289	oahi3pa_rem5	OBSTRUCTIVE APNEA/HYPOPNEA 3% INDEX (OR AROUSAL) IN REM: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=3% DESAT OR AROUSAL	if slpprdp gt 0 and slewake ne 1 then do;  oahi3pa_rem = 60 * ( hremba3 + hroa3 + oarbp + oarop + urbpa3 + uropa3 ) / minremp	PSG
290	oahi3pa_nrem5	OBSTRUCTIVE APNEA/HYPOPNEA 3% INDEX (OR AROUSAL) IN NREM: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=3% DESAT OR AROUSAL	If slewake ne 1 and minremp ne slpprdp and slpprdp gt 0 then do;  oahi3pa_nrem = 60 * ( hnrba3 + hnroa3 + oanbp + oanop + unrbpa3 + unropa3 ) / ( slpprdp – minremp )	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
291	oahi3pa_sup5	OBSTRUCTIVE APNEA/HYPOPNEA 3% INDEX (OR AROUSAL) IN SUPINE POSITION: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=3% DESAT OR AROUSAL	If slpprdp gt 0 and supinep gt 0 then do;  $\text{oahi3pa\_sup} = 60 * ( \text{hremba3} + \text{hnrba3} + \text{oarbp} + \text{oanbp} + \text{urbpa3} + \text{unrbpa3} ) / ( \text{remepbp} + \text{nremepbp} )$	PSG
292	oahi3pa_nsup5	OBSTRUCTIVE APNEA/HYPOPNEA 3% INDEX (OR AROUSAL) IN NON-SUPINE POSITION: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=3% DESAT OR AROUSAL	If slpprdp gt 0 and nsupinep gt 0 then do;  $\text{oahi3pa\_nsup} = 60 * ( \text{hroa3} + \text{hnroa3} + \text{oarop} + \text{oanop} + \text{uropa3} + \text{unropa3} ) / ( \text{remepop} + \text{nremepop} )$	PSG
293	oahi4_rem5	(PREVIOUSLY OAH4P_REM5) CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); 30% AND 50% HYPOPNEA (4% DESAT) INDEX IN REM	If slpprdp gt 0 and slewake ne 1 then do;  $\text{oahi4\_rem} = 60 * ( \text{hrembp4} + \text{hrop4} + \text{oarbp} + \text{oarop} + \text{urbp4} + \text{urop4} ) / \text{minremp}$	PSG
294	oahi4_nrem5	(PREVIOUSLY OAH4P_NREM5) CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); 30 % AND 50% HYPOPNEA (4% DESAT) INDEX IN NREM	If slewake ne 1 and minremp ne slpprdp and slpprdp gt 0 then do;  $\text{oahi4\_nrem} = 60 * ( \text{hnrbp4} + \text{hnrop4} + \text{oanbp} + \text{oanop} + \text{unrbp4} + \text{unrop4} ) / ( \text{slpprdp} - \text{minremp} )$	PSG
295	oahi4_sup5	(PREVIOUSLY OAH4P_SUP5) CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); 30% AND 50% HYPOPNEA ( 4% DESAT) INDEX SUPINE	If slpprdp gt 0 and supinep gt 0 then do;  $\text{oahi4\_sup} = 60 * ( \text{hrembp4} + \text{hnrbp4} + \text{oarbp} + \text{oanbp} + \text{urbp4} + \text{unrbp4} ) / ( \text{remepbp} + \text{nremepbp} )$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
296	oahi4_nsup5	(PREVIOUSLY OAH4P_NSUP5) CALCULATED - OBSTRUCTIVE APNEA (ALL DESATS); 30% AND 50% HYPOPNEA (4% DESAT) INDEX NON SUPINE	If slpprdp gt 0 and nsupinep gt 0 then do;  $\text{oahi4\_nsup} = 60 * ( \text{hrop4} + \text{hnrop4} + \text{oarop} + \text{oanop} + \text{urop4} + \text{unrop4} ) / ( \text{remepop} + \text{nremepop} )$	PSG
297	oahi4pa_rem5	OBSTRUCTIVE APNEA/HYPOPNEA 4% INDEX (OR AROUSAL) IN REM: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=4% DESAT OR AROUSAL	If slpprdp gt 0 and slewake ne 1 then do;  $\text{oahi4pa\_rem} = 60 * ( \text{hremba4} + \text{hroa4} + \text{oarbp} + \text{oarop} + \text{urbpa4} + \text{uropa4} ) / \text{minremp}$	PSG
298	oahi4pa_nrem5	OBSTRUCTIVE APNEA/HYPOPNEA 4% INDEX (OR AROUSAL) IN NREM: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=4% DESAT OR AROUSAL	If slewake ne 1 and minremp ne slpprdp and slpprdp gt 0 then do;  $\text{oahi4pa\_nrem} = 60 * ( \text{hnrba4} + \text{hnroa4} + \text{oanbp} + \text{oanop} + \text{unrbpa4} + \text{unropa4} ) / ( \text{slpprdp} - \text{minremp} )$	PSG
299	oahi4pa_sup5	OBSTRUCTIVE APNEA/HYPOPNEA 4% INDEX (OR AROUSAL) IN SUPINE POSITION: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=4% DESAT OR AROUSAL	If slpprdp gt 0 and supinep gt 0 then do;  $\text{oahi4pa\_sup} = 60 * ( \text{hremba4} + \text{hnrba4} + \text{oarbp} + \text{oanbp} + \text{urbpa4} + \text{unrbpa4} ) / ( \text{remepbp} + \text{nremepbp} )$	PSG
300	oahi4pa_nsup5	OBSTRUCTIVE APNEA/HYPOPNEA 4% INDEX (OR AROUSAL) IN NON-SUPINE POSITION: ALL OBSTRUCTIVE APNEAS AND HYPOPNEAS WITH A >=4% DESAT OR AROUSAL	If slpprdp gt 0 and nsupinep gt 0 then do;  $\text{oahi4pa\_nsup} = 60 * ( \text{hroa4} + \text{hnroa4} + \text{oarop} + \text{oanop} + \text{uropa4} + \text{unropa4} ) / ( \text{remepop} + \text{nremepop} )$	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
301	ahi4pa_rem5	(PREVIOUSLY AASM2013AHI_REM5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT OR AROUSAL) INDEX IN REM	If slpprdp gt 0 and slewake ne 1 then do;  ahi4pa_rem = 60 * ( hremba4 + hroa4 + carbp + carop + oarbp + oarop + urbpa4 + uropa4 ) / minremp	PSG
302	ahi4pa_nrem5	(PREVIOUSLY AASM2013AHI_NREM5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT OR AROUSAL) INDEX IN NREM	If slewake ne 1 and minremp ne slpprdp and slpprdp gt 0 then do;  ahi4pa_nrem = 60 * ( hnrba4 + hnroa4 + canbp + canop + oanbp + oanop + unrbpa4 + unropa4 ) / ( slpprdp – minremp )	PSG
303	ahi4pa_sup5	(PREVIOUSLY AASM2013AHI_SUP5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT OR AROUSAL) INDEX SUPINE	If slpprdp gt 0 and supinep gt 0 then do;  ahi4pa_sup = 60 * ( hremba4 + hnrba4 + carbp + canbp + oarbp + oanbp + urbpa4 + unrbpa4 ) / ( remepbp + nremepbp )	PSG
304	ahi4pa_nsup5	(PREVIOUSLY AASM2013_NSUP5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT OR AROUSAL) INDEX NON SUPINE	If slpprdp gt 0 and nsupinep gt 0 then do;  ahi4pa_nsup = 60 * ( hroa4 + hnroa4 + carop + canop + oarop + oanop + uropa4 + unropa4 ) / ( remepop + nremepop )	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
305	ahi4p_rem5	(PREVIOUSLY MEDICAREAHI_REM5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT) INDEX IN REM	If slpprdp gt 0 and slewake ne 1 then do;  ahi4p_rem = 60 * ( hrembp4 + hrop4 + carbp + carop + oarbp + oarop + urbp4 + urop4 ) / minremp	PSG
306	ahi4p_nrem5	(PREVIOUSLY MEDICAREAHI_NREM5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT) INDEX IN NREM	If slewake ne 1 and minremp ne slpprdp and slpprdp gt 0 then do;  ahi4p_nrem = 60 * ( hnrbp4 + hnrop4 + canbp + canop + oanbp + oanop + unrbp4 + unrop4 ) / ( slpprdp - minremp )	PSG
307	ahi4p_sup5	(PREVIOUSLY MEDICAREAHI_SUP5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT) INDEX SUPINE	If slpprdp gt 0 and supinep gt 0 then do;  ahi4p_sup = 60 * ( hrembp4 + hnrbp4 + carbp + canbp + oarbp + oanbp + urbp4 + unrbp4 ) / ( remepbp + nremepbp )	PSG
308	ahi4p_nsup5	(PREVIOUSLY MEDICAREAHI_NSUP5) AHI: OBSTRUCTIVE AND CENTRAL APNEAS (ALL DESATS); 30% AND 50% HYPOPNEAS (4% DESAT) INDEX NON SUPINE	If slpprdp gt 0 and nsupinep gt 0 then do;  ahi4p_nsup = 60 * ( hrop4 + hnrop4 + carop + canop + oarop + oanop + urop4 + unrop4 ) / ( remepop + nremepop )	PSG
309	cai0p_rem5	CENTRAL APNEA INDEX IN REM: ALL CENTRAL APNEAS	If slpprdp gt 0 and slewake ne 1 then do;  cai0p_rem = 60 * ( carbp + carop ) / minremp	PSG

## MESA EXAM 5 ANCILLARY STUDY 113 SLEEP POLYSOMNOGRAPHY SET VARIABLE GUIDE

Order	Variable	Variable Description	Value Labels	Domain
310	cai0p_nrem5	CENTRAL APNEA INDEX IN NREM: ALL CENTRAL APNEAS	If slewake ne 1 and minrem ne slpprdp and slpprdp gt 0 then do;  $\text{cai0p\_nrem} = 60 * (\text{canbp} + \text{canop}) / (\text{slpprdp} - \text{minrem})$	PSG
311	cai0p_sup5	CENTRAL APNEA INDEX IN SUPINE POSITION: ALL CENTRAL APNEAS	If slpprdp gt 0 and supinep gt 0 then do;  $\text{cai0p\_sup} = 60 * (\text{carbp} + \text{canbp}) / (\text{remepbp} + \text{nremepbp})$	PSG
312	cai0p_nsup5	CENTRAL APNEA INDEX IN NON-SUPINE POSITION: ALL CENTRAL APNEAS	If slpprdp gt 0 and nsupinep gt 0 then do;  $\text{cai0p\_nsup} = 60 * (\text{carop} + \text{canop}) / (\text{remepop} + \text{nremepop})$	PSG
313	slp_lat5	SLEEP ONSET LATENCY (MINUTES): TIME BETWEEN GETTING IN BED AND FALLING ASLEEP	Missing if time bed could not be reliably determined	PSG