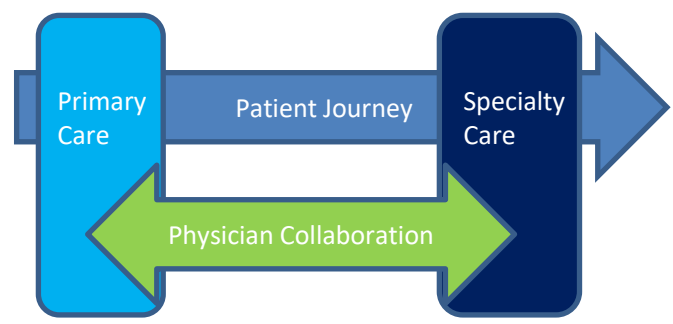




# Disruptive Sleep Health Management Using SleepImage Technology

## Clinical Value Proposition

Sleep disorders are highly prevalent with estimated 1 billion sufferers in the world. Sleepimage enables low costs digital access for sleep diagnostics under an integrated care model comprising of Primary and Specialty Care to people who need to address sleep disorders and medical conditions/wellness that are closely associated with sleep disorders.



## Methodology

The clinical validated SleepImage System is an FDA-cleared Software as a Medical Device (SaMD) system, which provides automated analysis and output to establish sleep quality; and to evaluate, diagnose, and manage sleep disorders. Children as young as two years old can already benefit from this system.

## Results

What do you get out of the SleepImage test?

- Determine whether you have good quality sleep, a foundational pillar of good health. Only FDA approved sleep quality index in the world.
- If you do not have good quality sleep, the diagnosis will differentiate between types of sleep apnea from insomnia.
- Provide risk biomarkers for medical conditions associated with sleep disorders (such as CV health, night hypertension, and brain health).
- Referral to medical consultation if treatment or further diagnosis is warranted.

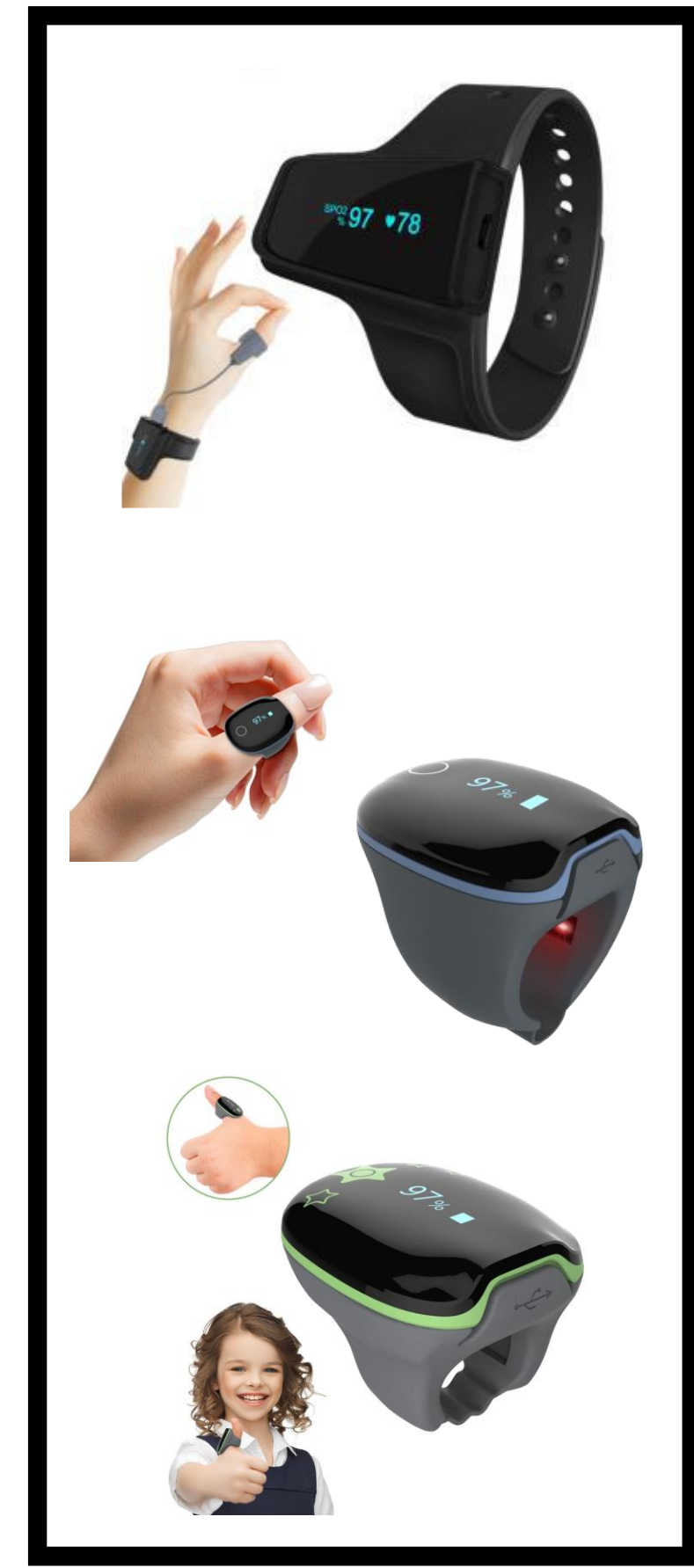
## Discussion

SleepImage FDA-clearance is based on comparison to 1,500 PSG studies from prospective clinical trials. In health and disease management, SleepImage's role is to provide accurate and actionable information.

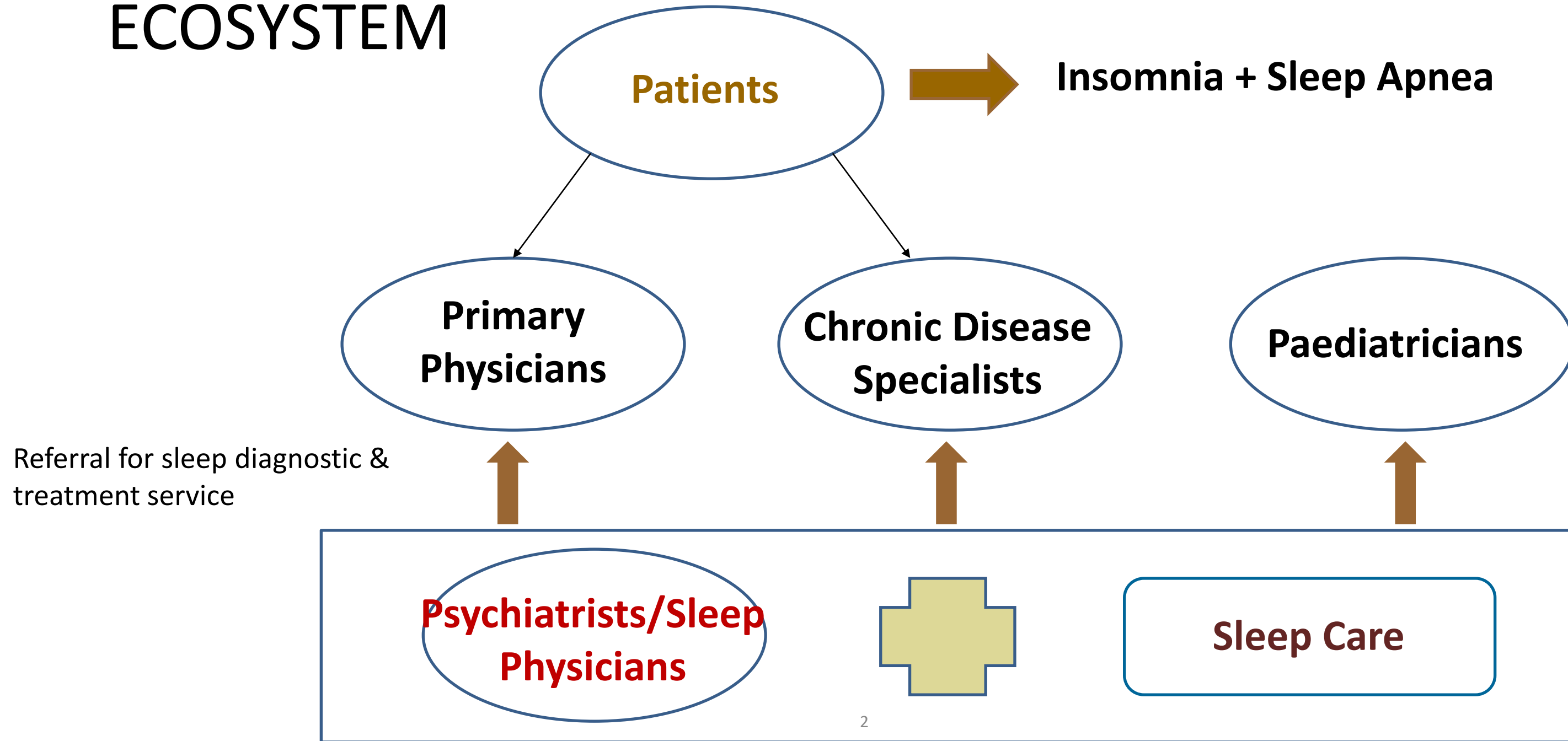
Screen: Test asymptomatic populations to objectively assess sleep complaints, monitor disease prevalence, aid in prevention and triage patients.

Diagnose: Test symptomatic patients suspected of having sleep apnea to confirm the presence and type of apnea to determine the appropriate clinical pathway.

Monitor: Test patients undergoing sleep disorder treatment by monitoring the progress of, or response to the intervention to be able to adjust treatment as needed.



# ECOSYSTEM



# SleepImage comparison to Polysomnography (PSG)

The Reference Standard for Evaluation of New Methods

	SleepImage-children	SleepImage-adults	WatchPAT	NightOwl
Publication	<a href="#">Sleep and Breathing</a>	<a href="#">ATS Journal</a>	<a href="#">Journal of Clinical Sleep Medicine</a>	<a href="#">Journal of Clinical Sleep Medicine</a>
	N=805	N=974	N=500*/n=90**	N=101
Mild Moderate Severe	<b>Agreement:</b> 91.4% [CI95%:89.5-93.4%] 96.7% [CI95%:95.4-97.9%] 98.6% [CI95%:97.8-99.4%]	<b>Agreement:</b> 98.5% [CI95%:97.6-99.3%] 96.4% [CI95%:95.3-97.5%] 98.6% [CI95%:98.2-99.2%]	<b>Agreement:*</b> 42% 41% 83%	
Mild Moderate Severe	<b>AUC:</b> 94.9% [CI95%:93.3-96.5%] 98.3% [CI95%:97.4-99.2%] 99.4% [CI95%:98.9-99.9%]	<b>AUC:</b> 92.3% [CI95%:89.4-95.2%] 91.6% [CI95%:89.7-93.5%] 93.5% [CI95%:91.8-95.3%]	<b>AUC:**</b> 84% [CI95%:74-93%] 87% [CI95%:79-94%] 91% [CI95%:85-97%]	<b>Sensitivity:</b> 98% 97% 90%
Mild Moderate Severe	<b>Specificity:</b> 84.4% [CI95%:99.7-88.4%] 99.2% [CI95%:98.2-99.7%] 99.6% [CI95%:98.8-99.9%]		*Ioachimescu et al. 2020.DOI:10.5664/jcsm.8620 **Yuceege et al. 2013. DOI: 10.5664/jcsm.2584	<b>Specificity:</b> 80% 83% 97%



		SleepImage	PSG	HSAT
Patient Populations	Asymptomatic	✓		
	Symptomatic	✓	✓	✓
	Children	✓	✓	✓
	Adults	✓	✓	✓
Type of Testing	Screening	✓		
	Diagnosis	✓	✓	✓
	Management	✓		
Test Output	Sleep Quality	✓	✓	
	Sleep Duration	✓	✓	
	NREM / REM	✓	✓	
	OSA vs. CSA	✓	✓	