Introduction

Sleep disorders affect a very large segment of population especially the senior citizens (some estimates are well over 50%). Our product diagnoses patients in sleep centers through automatic activity video recognition by identifying indicators of sleep disorders. Initial market entry would be in regional sleep centers with a potential home-use product to follow with home sleep monitoring capabilities. It has also been suggested by medical professionals that this diagnosis tool may have significant value in the evaluation of seizure disorders such as epilepsy. There is also immense potential in pediatric sleep monitoring as it accounts for 46% of the total market and has an annual growth of 7-12% growth in revenue every year.

Factors Affecting Sleep Disorders

- **Mortality/Morbidity**
  - Sleep Apnea
  - Periodic Limb Movement in Sleep (PLMS)

- **Sex**
  - Above 70 years - 35% of women have sleep disorders
  - Above 70 years - 12% of men have sleep disorders

- **Age**
  - 64 years - 50% of people living in home have sleep disorders
  - 64 years - 67% of people living in care facilities have sleep disorders

### Market

- **Sleep Apnea** - 50%, Periodic leg movement syndrome - 45% and others - 5%.
- **Periodic leg movement syndrome** - 1-12% of US population ~ 36 million Americans.
- **Prevalence of Restless Leg Syndrome** is approximately 10% of the US Population. This equates to a $350 million market size.
- **Market Size of Parkinson’s** – US$ 2.9 billion worldwide, US$ 150 million in the US.
- **Restless Leg Syndrome** associated with 50% of Parkinson’s disease (1 million individuals in the US, 20 million worldwide)

From all sleep disorders, sleep apnea market is well established, other disorders are difficult to measure, thus encompasses a large market potential.

The pediatric sleep monitoring market accounted for 46 percent of the total U.S. sleep diagnostics and monitoring market revenues in 1998 and revenue in 1998 was $ 30.6 million.
FACTS – Sleep Disorders

- Sleep disorder treatment sales in 2004 – $2.03 billion.
- Projected market for sleep diagnostic (world) – $4.4 billion.
- 50 million people in the US take some form of sleep medication.
- Seizure diagnostic market estimated to be $44 million per annum.
- Less than 20% of people suffering from RLS have sought medical attention.
- Sleep Monitoring revenue distribution by provider type in the US –
  - Hospital owned and contract sleep labs - 77%
  - Private practice sleeps labs - 21%
  - Independent sleep labs - 2%

Road to Market

- Clinics – provide diagnosis for apnea which is well established market.
- RLS & others which constitute a major chunk of sleep disorders have insufficient products for diagnosis.
- On the basis of ‘Time to Market’ a large portion of clinical diagnosis of elderly and pediatrics apnea can be transferred to the home market.
- 12000 companies in US Home healthcare market – combined revenue of $40 billion.
- Revenues for pediatric sleep products and services were expected to reach 30.6 million in 1998, expected growth around 10% each year.

Product

- Automatic Diagnostic assistance in sleep disorder diagnosis.
- Automatically analyzes and evaluates sleep disorder.
- Customer Value (Hospital) – Saves Human Labor, time, money.
- High efficiency because of more evidence, automation, better analysis and evaluation.
- Customer Value (Home) – Saves time, money

Competition

- Respironics 50% of the sleep diagnostic market
- 45% of all primary sleep disorders are PLMS
- Competition in the sleep diagnostic industry is aimed at the clinical market, but there is a lot of potential in the home market.
- No major players in pediatric sleep diagnostic market