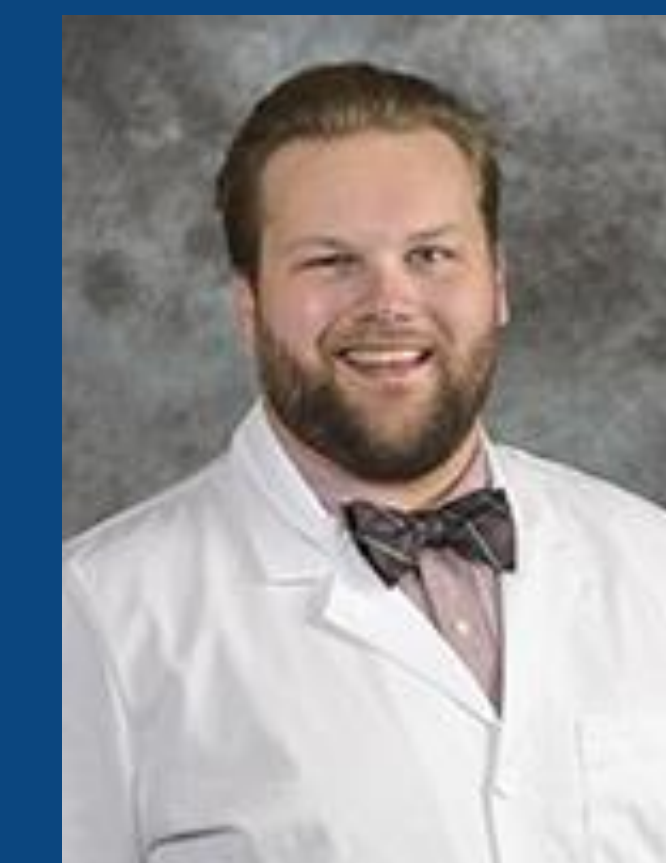


Sleep: A Public Health Nightmare

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BACKGROUND

The CDC states that insufficient sleep is a public health epidemic for both adults and children. Children need more sleep than adults, and between 10% and 30% of children and infants are affected by behavioral sleep problems. It is well known that lack of adequate restorative sleep in children can interfere with normal growth and development and can have wide ranging negative effects.

Sleep is critical to prevent:



There are many contributing factors to inadequate sleep, including health problems and sleep disorders themselves. Poor “sleep hygiene,” however, is a more widespread, yet nebulous problem that can be more difficult to address. Sleep hygiene is a set of behaviors conducive to restorative sleep. These behaviors include a consistent bedtime preceded by a nightly “bedtime routine,” a consistent wake time, a quiet, dark, and cool bedroom, avoiding large meals and caffeine before bed, being active during the day, and **no electronic devices right before bed or in the bedroom.**

The American Academy of Pediatrics recommends that all screens be turned off at least 30 minutes before bedtime and that no screens be allowed in bedrooms.

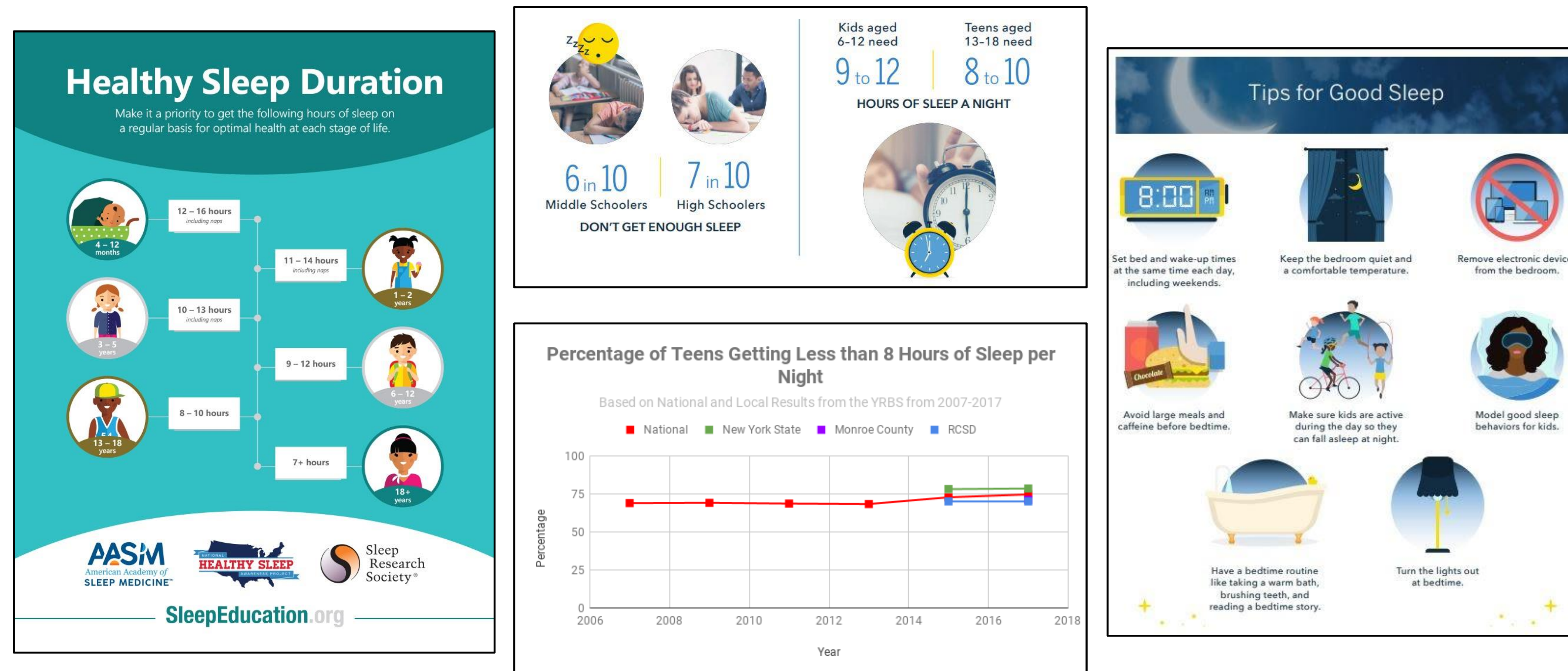
GOALS

- Improve children’s health by increasing their amount of sleep
- Improve sleep hygiene by decreasing bedtime screen use

OBJECTIVES

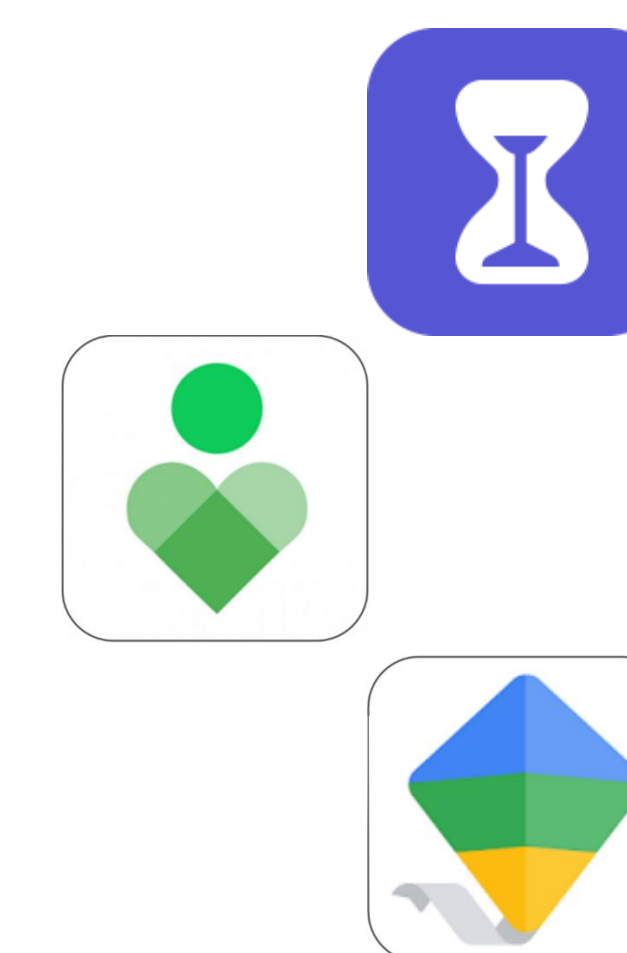
- Empower parents and physicians to use technology to parent more effectively on screen time
- Develop teaching materials and handouts on how to utilize this technology

BACKGROUND RESEARCH and INFOGRAPHICS



MATERIALS and METHODS

- Recently, screen-time use monitoring and parental control functionality has been integrated into the two main phone and tablet operating systems, iOS for Apple products and Android for Google / Android products
- Apple introduced Screen Time in iOS 12; rolled out to iPhones in September 2018
- Android introduced Digital Wellbeing and the Family Link app in Android Pie (9.0); rolled out to some devices in August 2018 (and reached most eligible devices by mid-2019)
- Both systems include a parental control feature that allows limiting device usage (Downtime on iOS and the Family Link app on Android)**
- Met with Community PCPs and Advocacy experts to discuss using this technology as a sleep hygiene intervention
- Used QR codes and Epic SmartPhrase functionality to craft handouts on how to use Screen Time / Downtime and Digital Wellbeing and the Family Link app



RESULTS and PROGRESS

iOS / iPhone / iPad Screen Time and Downtime Set-Up Instructions

The American Academy of Pediatrics recommends that children stop using all screens (phone, tablet, TV, computer, video games, etc.) **at least ONE HOUR before bed.**

All iPhones and iPads updated to iOS 12 or later now have a feature called **Screen Time**. This allows you to set a **Downtime** period, which blocks most apps (of your choosing) to promote sleep by minimizing evening screen time. This can be easily set up on your child’s device with a **Parent Passcode** that only you know.

Here is how to set it up (for the first time) on your child’s device:

→ Open **Settings** → Open **Screen Time**


→ Turn On **Screen Time** → Continue → This is My Child’s iPhone (or iPad)

→ Set **Start and End times** for your child’s **Downtime** → Set **Downtime**

→ You may now add time limits on one or multiple categories of apps → Continue once limits are set

→ Enter and re-enter a **Parent Passcode** that only you know → Exit the **Settings** app

Using your phone, scan the QR code to the right for a video and extensive **Screen Time** instructions, including how to customize **Parental Controls, Downtime, App Limits, Always Allowed** apps, and more.



Android Phones / Tablets Digital Wellbeing and Family Link Set-Up Instructions

The American Academy of Pediatrics recommends that children stop using all screens (phone, tablet, TV, computer, video games, etc.) **at least ONE HOUR before bed.**

Nearly all Android phones and tablets (i.e. Google Pixel, Samsung, Motorola, LG, etc.) updated to Android 9.0 (Pie) or later now have a feature called **Digital Wellbeing**. This allows you to view you and your child’s screen usage statistics. There is a separate app called **Family Link**, which runs on all devices with Android 7.0 or later (Nougat) that is a parental control app that allows you to set a period of down time for your child’s screen called **Bedtime**, during which the phone cannot be used except for calls. **Bedtime** can help promote sleep by minimizing evening screen time and can be easily set up on your child’s device using your Google account. Both you and your child will need Google accounts.

DISCLAIMER: parental controls can be “opted out” of by your child if they are over the age of 13

Check your phone’s compatibility with the Family Link app if you’re not sure

Download the **Family Link** (parent) app from the Google Play Store on your own phone

Download the **Family Link** (child) app from the Google Play Store on your child’s phone

Here is how to set it up (for the first time) on you and your child’s devices:

→ Download the **Family Link** parent and **Family Link** child apps using QR codes above

→ Follow prompts in both apps to link accounts (your child will need a Google account)

→ Once the accounts are linked, open the **Family Link** app on your phone and select **Your Child**


→ From there, follow the instructions below to set **App Limits, Bedtime, and Block/Allow Apps**:

→ **Daily Limits** → Tap **Set Up or Edit Limits** → Follow instructions to set **Daily Limits** on apps

→ **Bedtime** → Edit **Schedule** → Follow instructions to set a **Bedtime**

→ **Apps Installed** → More → Tap **App** you want to block/allow → **Allow App** (turn off/on)

Using your phone, scan the QR code to the right for a video and extensive **Family Link** instructions, including how to customize **Parental Controls, Bedtime, App Limits, Downloads**, and more.



NEXT STEPS

- Train URMCP Pediatrics and Med-Peds Residents on how to use these apps and how to set them up on patient’s devices (potentially present at noon conference/ advocacy afternoon)
- Partner with Panorama Pediatrics as a Community Partner to distribute and utilize these Screen Time materials
- Distribute and encourage use of the Epic Smart Phrase version of these materials to be used in both the URMCP and RRR systems
- Establish additional Community Partners to distribute material and/or hold workshops to teach community pediatricians/PCPs how to utilize and spread use of this technology
- Measure usage of smart phrase and measure frequency of handouts at community sites

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- L. Gerber. (2014). Sleep Deprivation in Children: A Growing Public Health Concern, *Nursing Management*, 45(8), 22-28. doi: 10.1097/01.NUMA.0000451997.95978.2f.
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