ASTHMA APPS
&
VIDEOS FOR CHILDREN

Lisa de Ybarrondo, MD
McGovern Medical School
The University of Texas Health Science Center at Houston
Learning Objectives:

- To learn about Asthma Apps that can record and track your patient’s symptoms, triggers, teach inhaler technique and much more.
- To learn how Apps can enhance managing asthma for the patient, family and provider.
- To learn about Asthma Apps that can be educational tools through games.
- What videos are available for asthma education depending on age of the child.
- What videos demonstrate proper inhaler use with a spacer +/- face mask, washing the spacer and priming the inhaler.
- What videos are available in Spanish.
ASTHMA APPS & GAMES
ASTHMAMD

- Compatible with the AsthmaMD peak flow meter
- Tracks medications, asthma triggers, and asthma action plan.
- Charts asthma activity onto a colorful, easy-to-read graph.
- Asthma diary and graph can be shared with the doctor and added to medical records
- Useful for older children if using peak flow meter
- Drawbacks: common rescue meds and controller meds need to be custom added.
ASTHMATRACK

- Part asthma diary, part information collector
- Log asthma symptoms and medication doses
- Creates graphs of asthma activity that can be emailed directly to the doctor.
- Customizable: e.g. if multiple family members have asthma, it allows multiple profiles to be created and track all the information within the one app.
- Useful for older children if using peak flow meter
- Drawbacks: Costs $1.99
- There is no asthma action plan
AAP ASTHMA TRACKER FOR ADOLESCENTS

- Developed by @Point of Care, re-branded by the American Academy of Pediatrics (AAP).
- The @Point of Care version is called Asthma Manager.
- Integrates patient-reported health data to foster greater patient adherence and learning, provides patient-specific clinical decision support.
- Both versions of the app contain a journal tool to track symptoms and spirometry.
- Both versions contain a patient education section, with the Asthma Manager version linking directly to the American Lung Association website.
- AAP version is pre-populated with pediatric relevant educational content, instructions and videos.
- AAP version has a My Action Plan section where users can create a personalized asthma action plan with their provider’s help with action steps based on their daily peak flow readings.
- Downside: Could not register into AAP version (glitch in system?)
Propeller is FDA-cleared technology that works with existing asthma inhalers to help people understand their symptoms and gain control.

Small sensors clip onto current inhalers. The sensors determine when inhalers are used and sends this information to the Propeller app.

- Generates personalized insights and reminders
- Identifies triggers and tracks symptoms
- Customizes a schedule for controller medications
- Rates asthma control over the last month with the Asthma Control Test (ACT).
- Checks Daily Asthma Forecast including pollutant, humidity and temperature details.
- Inhaler use, triggers, symptoms and progress can be shared with family and doctor.

**Drawback:** requires an access code provided by Express Scripts to enroll and receive inhaler sensors.
ASSIST ME WITH INHALERS

- Provides pictures of asthma medications and directions in both English and Spanish on how (and when) to take them.
- Can set a reminder to take the medications
- Step-by-step instructions for each inhaler to help deliver the medication properly.
- Can choose to use the MDI with or without a spacer
- Drawback: Can only add scheduled controller medications and there is no asthma action plan.
- Costs $0.99
THE AMAZINGS

➢ The Amazings features fast-paced, runner-style gameplay to help kids recognize and avoid asthma triggers like pollen, cigarette smoke and pollution, and stay vigilant about their health.

➢ The intended audience is children with asthma aged seven to 12 years old.

➢ Gameplay quite simple, fun and addictive!
7 KEYS TO MANAGE CHILDHOOD ASTHMA

➢ Helps parents manage their child’s asthma by providing education about important aspects of asthma care including allergen avoidance, lifestyle modification, symptom relief, controller medications, action plan and response monitoring.

➢ Videos of cartoon characters demonstrating the proper medication administration technique for different devices.

➢ Tracking features to maintain a detailed medical record.

➢ Downside: costs $2.99
ASTHMAxCEL ADVENTURES

➢ Increases asthma knowledge and improves asthma control through several chapters and fun, animated videos and games.

➢ Teaches some of the triggers that make asthma worse, environmental control, key asthma facts and how to manage asthma.

➢ Animated videos demonstrate how to prime an inhaler, how to use with a spacer, reviews the pathophysiology of asthma, controller & rescue inhalers

➢ Children playing the games answer questions during the games to advance.

➢ Very engaging, fun and informative (and free)! One of my favorites for younger school aged.
ASTHMA ACTION HERO

- Mobile asthma action plan that helps patients manage asthma conditions through notifications.
- Guides physicians and families through the set up of a daily interactive plan including a detailed overview of how to identify moderate to severe symptoms of an asthma attack.
- Alerts users through pop up reminders of the actions to take at varying levels of symptom severity.
- Tracks severity of symptoms and progress. Can email progress to PCP.
- Very easy to use and understand
VIDEOS:
ASTHMA PATHOPHYSIOLOGY
AND GENERAL EDUCATION
CUTE VIDEO WITH BASIC ASTHMA EDUCATION FOR YOUNG CHILDREN (PRE-K/ EARLY ELEMENTARY SCHOOL). CHILDREN HAVE AN AUSTRALIAN ACCENT WITH A FEW WORDS MORE DIFFICULT TO UNDERSTAND.
PEDI UCSF PEDIATRIC PULMONARY ASTHMA TEACHING SPANISH 1 INTRODUCCIÓN

HTTPS://WWW.YOUTUBE.COM/WATCH?V=LROUV39M9G
GOOD TEACHING TOOL FOR SPANISH SPEAKING CHILDREN AND PARENTS
ASTHMA VIDEO SPANISH
HTTPS://WWW.YOUTUBE.COM/WATCH?V=QZZACXEXSEM&T=23S
SIMPLE AND EASY TO UNDERSTAND ASTHMA PATHOPHYSIOLOGY AND RESCUE VS CONTROLLER INHALERS
WHAT IS ASTHMA? - FOR KIDS WITH ASTHMA

HTTPS://WWW.YOUTUBE.COM/WATCH?V=ET_ALSGHEL8

GREAT EDUCATIONAL VIDEO FOR CHILDREN REGARDING ASTHMA PATHOPHYSIOLOGY, INHALERS: CONTROLLER VS RESCUE, ASTHMA EMERGENCIES AND TRIGGERS. A SERIES OF 5 EPISODES.
HOW DOES ASTHMA WORK? - CHRISTOPHER E. GAW

HTTPS://WWW.YOUTUBE.COM/WATCH?V=PFZFLD1-SL3W

VERY GOOD OVERVIEW OF ASTHMA, FOR OLDER KIDS (MIDDLE/ HIGH SCHOOL) AND PARENTS. DOES NOT EDUCATE ON PROPER INHALER TECHNIQUE BUT DISCUSSES RESCUE VS CONTROLLER MEDICATIONS AND EFFECTS ON THE AIRWAY.
ASTHMA

HTTPS://WWW.YOUTUBE.COM/WATCH?V=BHXWGFFX5DY&T=108S

BEAUTIFUL ANIMATED GRAPHICS. GOOD FOR OLDER KIDS AND PARENTS. SHOWS AN ADULT USING A RESCUE INHALER BUT WITHOUT A SPACER AND TECHNIQUE IS POOR
WHAT IS ASTHMA
HTTPS://WWW.YOUTUBE.COM/WATCH?V=TIZDSIKN1KG
SHORT, INFORMATIVE VIDEOS IN SPANISH AS WELL
VIDEOS:
HOW TO USE AN INHALER WITH A SPACER
USING AN INHALER WITH A SPACER MASK

HTTPS://WWW.YOUTUBE.COM/WATCH?V=VON7CYXJCJ2C

DEMONSTRATES HOW TO CLEAN SPACER AND MASK ALSO
SPACER FOR PARENTS (SPANISH)

HTTPS://WWW.YOUTUBE.COM/WATCH?V=ZENHYI2E--I

INSTRUCTIONAL VIDEO IN SPANISH DEMONSTRATING INHALER USE WITH A SPACER AND FACE MASK FOR A TODDLER. ALSO GIVES CLEANING INSTRUCTIONS FOR THE AEROCHAMBER.
ASTHMA SPACER AND ASTHMA INHALER - FOR KIDS WITH ASTHMA

ASTHMA HTTPS://WWW.YOUTUBE.COM/WATCH?V=IFES01R9K_S
FUN EDUCATIONAL VIDEO OF USING AN INHALER WITH A SPACER FOR ELEMENTARY/ MIDDLE SCHOOL AGED CHILDREN
HOW TO USE AN MDI WITH A SPACER

HTTPS://WWW.YOUTUBE.COM/WATCH?V=0BU6FCN44FA

EXCELLENT INSTRUCTIONAL VIDEO, INCLUDES PRIMING THE MDI, CLEANING AND COUNTING DOESES
HOW TO USE A METERED DOSE ASTHMA INHALER WITH A SPACER OR VALVED HOLDING CHAMBER

HTTPS://WWW.YOUTUBE.COM/WATCH?V=A8WT5MONJ0I

OTHER VIDEOS AVAILABLE ON HOW TO USE A DISKUS, FLEXHALER AND HOW TO USE A NEBULIZER, ALL AVAILABLE IN SPANISH.
HOW TO: USE A SPACER/CHAMBER WITH YOUR ASTHMA INHALER

HTTPS://WWW.YOUTUBE.COM/WATCH?V=4GZDT8HGQCQ

GREAT VIDEO FOR TEENS. INTRODUCES A PAPER SPACER- CAN ORDER ONLINE