We are excited to work you on this collaboration to ensure that your child's asthma/recurrent wheezing is well-controlled. Together we can minimize the negative impact of asthma and keep your child healthy!

Please contact us if you have any questions about your child’s asthma care. Remember to check out our special “asthma/wheezing” website page on the Hirsch Pediatrics website under “appointments.”

The following questions are discussed in detail in this handout:

1. Does my child have asthma and, what exactly is asthma?
2. What is causing my child’s asthma/wheezing?
3. What medications are used to treat asthma?
4. How do I assess if my child’s asthma is under control and if he/she needs medications?
5. I took the tests and my child’s asthma is under good control. What do I do now?
6. I took the tests and my child’s asthma is NOT under good control. What do I do now?
7. How do we create a personalized “Asthma Action Plan?”
8. When should my child see a specialist for his/her asthma?
1. **Does my child have asthma and, what exactly is asthma?**
   - Great question! Asthma is a disease of the lungs that causes **recurrent** wheezing as well as recurrent coughing and difficulty breathing.
   - Other names for asthma can also be called **viral asthma, cough variant asthma, reactive airways disease, and exercise induced bronchospasm**.
   - Asthma symptoms are due to **two issues that cause reduced air flow** in the lungs:
     1. **airway muscle constriction**
     2. **airway swelling due to inflammation and mucous production**.
   - Symptoms due to asthma **respond very well to medications** that treat each of these two areas.
   - Many children **outgrow their asthma symptoms**. If your child has not had any wheezing or use of albuterol for over 1 year then it is likely he/she has outgrown his/her asthma.
   - Please check out the "asthma/wheezing“ page under appointments on the **Hirsch Pediatrics website for short videos** about asthma.

2. **What is causing my child’s asthma/wheezing?**
   - Most asthma flares are **triggered by common items**.
     - upper respiratory infection/colds
     - outdoor allergens (especially Spring/Fall)
     - smoke exposure (both direct and second hand)
     - dust
     - pets
     - exercise
   - It is important to identify the causes so Dr. Hirsch can work with you to **develop strategies to avoid triggers and prevent flares**.

3. **What medications are used to treat asthma?**
   - Fortunately there are very **safe and effective medications** to treat asthma.
   - Most asthma medications are in **meter dosed inhaler** (MDI) or **nebulizer form**.
   - There are several **advantages to the MDI over the nebulizer**:
     - Though it may seem that the nebulizer delivers medication better than the MDI, studies have shown that in most situations the **MDI when used with a spacer device is equally or more effective than the nebulizer**.
     - The MDI is much **faster and easier to give**.
     - The only downside to using an MDI is that it **requires proper technique**. One of our primary goals at your Hirsch Pediatrics personalized asthma
Hirsch Pediatrics Personalized Asthma Appointment
Quality Initiative (QI) Collaboration
with Children’s National Health Network

appointment is to train and demonstrate proper MDI technique.

- Asthma medications are divided into **two groups**:
  - **Rescue (fast acting when sick)**
    - Function by **temporarily relaxing the airway muscles**.
    - Can **work within minutes** and be **given as needed every 4-6 hours**.
    - Relaxes muscle constriction but will **not decrease or prevent the swelling (inflammation and mucous production)**.
    - Names of rescue medications include **Albuterol (Ventolin, Proventil)** and **Lev-albuterol (Xopenex)**
  - **Controller (slower acting to prevent sickness)**
    - Functions by **decreasing the airway swelling (inflammation and mucous production)**.
    - Can **prevent and reverse asthma attacks**.
    - Medication type is an **inhaled corticosteroid (ICS)** – Note: Unlike steroids that come in pill or liquid form, ICS risk of long-term side effects is very minimal.
    - Must be **used every day** to be effective.
    - Names of controller medications include **Fluticasone (Flovent)**, **Beclomethasone (Qvar)**, and **Budesonide (Pulmicort)**.
    - For **significant asthma flares** that do not improve with inhaled steroids, a stronger course of oral steroids for 3 – 5 days is often needed to bring the flare under control.

**4. How do I assess if my child’s asthma under control and if he/she needs medications?**
- Hirsch Pediatrics is pleased to offer the **Pediatric Asthma Control and Communication Instrument (PACCI)** through your CHADIS account.
- 12 question test which rates overall asthma control and severity.

**5. I took the tests and my child’s asthma is under good control. What do I do now?**
- **Congratulations**! That is a great update. Let’s review your child’s medication use and see if we can reduce the medications. We will schedule a follow-up appointment in 3-6 months to monitor control and further adjust medications if needed.

**6. I took the tests and my child’s asthma is NOT under good control. What do I do now?**
- **Don’t worry**! Our goal at this appointment is to get your child’s asthma under great control through a personalized "Asthma Action Plan."

**7. How do we create a personalized “Asthma Action Plan?”**
- **STEP 1: Using the PACCI, we will first classify the control level of asthma.**
  (Note: Our goal is to have every child in the “good control” category):
  - **good control = intermittent symptoms**
o not good control = persistent symptoms
  ▪ mild persistent symptoms are “partly controlled”
  ▪ moderate persistent symptoms are “uncontrolled”
  ▪ severe persistent symptoms are “poorly controlled”

o **STEP 2:** Based on your control level, we can now design your personalized Asthma Action Plan.
  o The goal of the Asthma Action Plan is to **give you knowledge and expertise** to manage your child’s asthma at all times even during an asthma flare.
  o The Asthma Action Plan will have personalized instructions on how to manage asthma in **three different situations**:
    ▪ **GREEN zone (good control)** - breathing is good, no cough or wheeze, can exercise/play without limitations
    ▪ **YELLOW zone (caution zone)** – has cough or cold symptoms, wheezing, tight chest or shortness of breath, cough at night, may or may not have some exercise/play limitations
    ▪ **RED zone (emergency zone)** - medication is not helping within 15-20 minutes, breathing is fast and difficult (nasal flaring or intercostal retractions), trouble walking or talking

  o A successfully managed Asthma Action Plan will **minimize missed school/work** and keep your child out of the Emergency Room! Hooray!
  o Make sure a copy is **kept at home on the refrigerator and at childcare/school** if needed.

o **STEP 3:** Follow-up
  o If **new therapy is initiated**, schedule follow-up office **appointment in 2-6 weeks** to assess success.
  o If **no new therapy is initiated**, then schedule follow-up **telephone or office appointment in 3-6 months**.
  o Of course please contact us sooner if you have any questions or concerns.

8. **When should my child see a specialist for his/her asthma?**
  o Fortunately the vast majority of children with asthma can be managed effectively without a referral.
  o Dr. Hirsch often recommends a referral to a specialist if your has been in the ICU for asthma, asthma is uncontrolled despite several attempts, or your child has required more than 2 courses of oral steroids in the last 12 months. Note: Oral steroid courses are significantly stronger and involve much higher
steroid doses compared to the daily inhaled corticosteroid used to treat persistent symptoms.