


**Digital Health: Connecting, Communicating, and Supporting Patients Daily**

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Teresa Summe, today's speaker has no relevant financial relationships with ineligible companies and will disclose prior to presenting. In addition, none of the planners for this educational activity have a relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Teresa Summe is a board member of the Association of Asthma Educators and the Florida Asthma Coalition and has no conflict of interest.



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**Objectives**

- Attendee will understand the benefits of providing TeleHealth to the pediatric and adult patient population with the incorporation of Registered Respiratory Therapists and Registered Nurses.
- Audience member will identify daily digital education and communication tools that are available to assist with asthma management.
- The attendees will be taught the benefit of incorporating in-person appointments, TeleHealth visits, and daily digital touch points to close care gaps when caring for a patient with asthma.



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**Statistics**

**Nationally**

Greater than 25 million Americans have asthma

- 4,226,659 children (< 17 years of age) with asthma
  - 790,478 Emergency Department Visits
  - 64,525 Hospitalizations
- 21,030,479 adults (≥ 18 years of age) with asthma
  - 1,045,423 Emergency Department Visits
  - 104,805 Hospitalizations

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**Statistics**

**Nationally**

- 4,145 deaths for individuals with the diagnosis of asthma
  - 204-children
  - 3,941-adults

**Worldwide**

- 262 million people with a diagnosis of asthma
- 455,000 deaths

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**Healthcare App**



Predicted that 500 million people worldwide will use a health care app.

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## Digital Health

Digital Health  
*"The use of information and communications technologies in medicine and other health professions to manage illnesses and health risks and to promote wellness. Digital health has a broad scope and includes the use of wearable devices, mobile health, telehealth, health information technology, and telemedicine."*

- Improve access to healthcare
- Reduce any inefficiencies in the healthcare system
- Improve the quality of care
- Lower the cost of healthcare
- Provide more personalized health care for patients .



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## Goals

### *Function and Goals of Digital Health*

The objectives of digital health products and services include:

- To improve the quality of outcomes of care and service
- To improve population health
- To improve the patient experience
- To improve the physician and other non-physician provider experience.
- To address health disparities .



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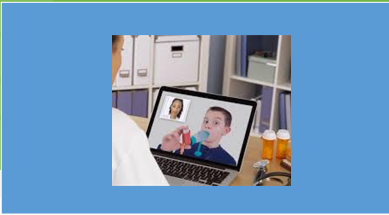

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## *Meet the patient where they are!*

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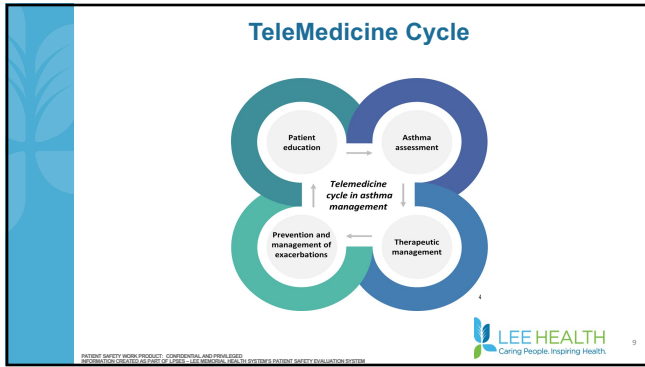
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**NHLBI**

*Guidelines of National Asthma Education & Prevention Program*

**Focusing on Four Components of Asthma Management**

1. Measurement of Lung Function  
Assessment and Monitoring
2. Reduction or Elimination of Triggers  
Contribute to Symptoms and Severity
3. Comprehensive Pharmacologic Management  
Short and Long Term
4. Education that Promotes a Patient, Family/Care-giver, Physician/Provider, & Certified Asthma Educator Partnership s

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**Research**

**“Successful asthma treatment can be attributed 10% to medication and 90% to education” .**

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**Asthma Management Program Model**

3 Month Program

- 6-Month follow-up
- 12-month follow-Up

One-on-One 1-hour appointment with a **Certified Asthma Educator**

- Education to enhance and encourage self management skills
- Diagnostic Testing
  - Pre and Post Bronchodilator Spirometry
  - In-Check Dial



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**Initial appointment**

- Within 7 days of referral and/or post-hospital discharge
- After PCP and/or Pulmonology appointment
- 24-72 hours post Emergency Department visit

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**Follow-up Appointments**

- In-person very two weeks
- TeleHealth appointments
  - Between in-person visit
  - Reinforcement of previous in-person visit

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**Take Home Asthma Pack**

- Asthma Carrying Pack
- Spacers for home, school and work
- Asthma Management Education Book
- Asthma Action Plan
- Nebulizer Kits
- Peak Flow Meter with Diary
- Nasal and Sinus Products
- Bulb Syringes
- Educational and Instructional DVDs & Handouts



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**Asthma Management**

- ❖ Education must be provided in an engaging manner.
- ❖ All education from previous appointment is reinforced at each visit.
- ❖ Use same educational pictures for reinforcement.
  - ❖ In-person and TeleHealth
- ❖ Use the Assessment Questionnaire Tool
- ❖ Asthma Control Test
- ❖ Mini Asthma Quality of Life Questionnaires
- ❖ Identify Barriers
  - ❖ Financial
  - ❖ Transportation
  - ❖ Literacy

**LISTEN to your patient!!!**

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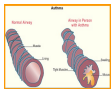

**Asthma Management**

**Week 1**  
**Initial Appointment In-Person**

**Week 2**  
**Initial Appointment TeleHealth**

**Main Focus**

- Lung Anatomy and Physiology-Symptoms
- Pre and Post Bronchodilator Pulmonary Function Testing
- Review of Inhaler Technique
- MyChart setup for future **TeleHealth and Care Companion**

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## Asthma Management

**Week 3**  
*Follow-up Appointment In-Person*

**Week 4**  
*Follow-up Appointment TeleHealth*

**Main Focus**  
Asthma Action Plan  
Review of Inhaler Technique

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## Asthma Management

**Week 5**  
*Follow-up Appointment In-Person*

**Week 6**  
*Follow-up Appointment TeleHealth*

**Main Focus**  
Identifying, eliminating, and Reducing Triggers  
Review of Inhaler Technique

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## Asthma Management

**Week 7**  
*Follow-up Appointment In-Person*

**Week 8**  
*Follow-up Appointment TeleHealth*

**Main Focus**  
Nasal and Sinus, Anatomy and Physiology  
Review of Inhaler Technique

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**Asthma Management**

**Week 9**  
*Follow-up Appointment In-Person*

**Week 10**  
*Follow-up Appointment TeleHealth*

**Main Focus**  
Peak Flow Meter and Diary Documentation  
Review of Inhaler Technique

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**Asthma Management**

**Week 11**  
*Initial Appointment In-Person*

**Week 12**  
*Initial Appointment TeleHealth*

**Main Focus**  
Self Management Skills  
\*Symptom management  
\*Peak Flow management  
Review of Inhaler Technique

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**“People don’t care how much you know,  
until they know how much you care.”**

President Theodore Roosevelt.



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**Care Companion**

A mechanism to provide digital daily communication  
between the patient and health care provider.



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**Care Companion**

- Provides daily asthma education
  - Videos
  - Short and easy to read material
- Provides feedback for asthma symptoms and peak flow meter management
  - Escalation of treatment plan
  - Reinforces use of Asthma Action Plan



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**Care Companion**

- Reduce gaps in patient care
- Be a readily available daily patient tool
- Improved patient and Educator communication
- Improved patient self-management skills
- Improved Patient Experience
- Decrease in hospital admissions
- Decrease in repeat ED visits
- Reduction in overall hospital costs
- Increase in Lee Health provider referrals/appointments

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### Care Companion

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### Care Companion

#### Symptom and Peak Flow Daily Check-in

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### Care Companion

**Week 1**  
**Initial Appointment In-Person**  
 Care Companion  
 \*Lung Anatomy and Physiology Video  
 \*Daily symptom check-in

**Week 2**  
**Initial Appointment TeleHealth**  
 Care Companion  
 \*Daily symptom check-in

**Main Focus**  
 Lung Anatomy and Physiology-Symptoms

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**Care Companion**

**Week 3**  
**Follow-up Appointment In-Person**  
**Care Companion**  
*\*Asthma Action Plan Video*  
*\*Daily symptom check-in*



**Week 4**  
**Follow-up Appointment TeleHealth**  
**Care Companion**  
*\*Daily symptom check-in*

**Main Focus**  
 Asthma Action Plan



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**Care Companion**

**Week 5**  
**Follow-up Appointment In-Person**  
**Care Companion**  
*\*Allergen Triggers Video*  
*\*Non-allergen triggers video*  
*\*Daily symptom check-in*



**Week 6**  
**Follow-up Appointment TeleHealth**  
**Care Companion**  
*\*Daily symptom check-in*

**Main Focus**  
 Identifying, eliminating, and Reducing Triggers



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**Care Companion**

**Week 7**  
**Follow-up Appointment In-Person**  
**Care Companion**  
*\*Nasal and Sinus, Anatomy and Physiology reading material*  
*\*Daily symptom check-in*

**Week 8**  
**Follow-up Appointment TeleHealth**  
**Care Companion**  
*\*Daily symptom check-in*



**Main Focus**  
 Nasal and Sinus, Anatomy and Physiology



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**Care Companion**

**Week 9**  
**Follow-up Appointment In-Person**  
**Care Companion**  
 \*Peak Flow Meter and Diary Video  
 \*Daily symptom check-in  
 \*Daily peak flow check-in

**Week 10**  
**Follow-up Appointment TeleHealth**  
**Care Companion**  
 \*Daily symptom check-in  
 \*Daily peak flow check-in

**Main Focus**  
 Peak Flow Meter and Diary Documentation

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**Care Companion**

**Week 11**  
**Follow-up Appointment In-Person**  
**Care Companion**  
 \*Asthma Self-Management Video, reading material  
 \*Daily symptom check-in  
 \*Daily peak flow check-in

**Week 12**  
**Follow-up Appointment TeleHealth**  
**Care Companion**  
 \*Daily symptom check-in  
 \*Daily peak flow check-in

**Main Focus**  
 Self-Management Skills

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**Care Companion**

**\*\*Patient checks in with daily symptoms, peak flows, and use of rescue medication\*\***

**Escalation**  
 In-basket alert sent to Registered Respiratory Therapist and/or Registered Nurse, Certified Asthma Educator (AE-C).

- Patient automatically receives digital message to follow Asthma Action Plan.
- AE-C contacts patient via phone and via message through MyChart.
- AE-C educates, assesses, and determines need for urgent or emergent care over phone.
  - May change to an In-person or TeleHealth appointment
  - Advises patient on treatment plan
- AE-C contacts provider.
- Patient continues to check in with daily symptoms and peak flow values.
- Communication is a streamline process that meets the patient where they are.

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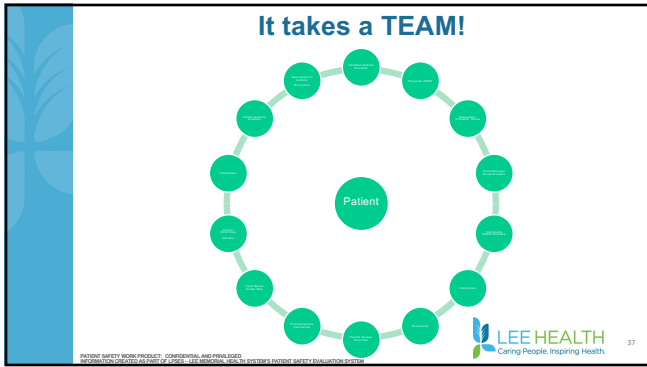
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**TOGETHER**



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