

Figure E1. Sample progress note auto-generated by the TEAMS CDSS tool

Progress note

TECHNOLOGY ENABLED ASTHMA MANAGEMENT SYSTEM (TEAMS)

Asthma telemedicine visit summary xx/xx/xxxx:

- Assessment: Very Poorly Controlled, likely Severe persistent asthma based on prescribed medications and symptom pattern.
- Prescribed: SYMBICORT 160-4.5 mcg (Budesonide-Formoterol MDI) at a MEDIUM dose (640 mcg daily) and is currently taking 2 puffs in the morning and 2 puffs at night (640 mcg daily - MEDIUM dose)
- Other asthma control medications: NONE (taking cetirizine for allergy)
- Recommended stepwise therapy is Step 5.
- The patient is currently taking Step 4 - Insufficient control medication
- Plan: Schedule office visit with PCP, Follow up virtual visit in 2 weeks

DETAILED NOTE BELOW

SUBJECTIVE

XXX was seen via Zoom (telemedicine) for nursing follow up of Asthma.

The patient reports the following:

Daytime symptoms Well controlled <= 2 x week	Every day, throughout the day (maybe 2-3x day, mostly morning or evening). Notes recurrent chest discomfort which resolves with albuterol
Night time wake up from asthma Well controlled <= 2 x month	Wakes three nights a week
Use of rescue inhaler for symptoms Well controlled <= 2 x week	Using inhaler many times a day
Activity limitations Well controlled = none	Some limitation

Patient perceived asthma control: **Very poorly controlled**

Current respiratory illness: Feels fine

Any smoking in the past 6 months: **Yes**

Any symptoms of life-threatening asthma: No

NOTES: noticing chest discomfort all day, a pain with deep breathing, pain resolved with taking albuterol and stays away for 3 to 4 hours then returns.

MEDICATION USE:

Prescribed: SYMBICORT 160-4.5 mcg (Budesonide-Formoterol MDI) and is currently taking 2 puffs in the morning and 2 puffs at night (MEDIUM dose)—fully adherent.

Low dose is equal or less than 540mcg; High dose is greater than 1080mcg

Taking any additional long acting beta agonist or leukotriene inhibitor: NONE (taking cetirizine for allergy)

Rescue medication: Albuterol inhaler - used about 4-5 times a day - takes prior to AM/PM Symbicort as recommended, and then a couple of times during the day

Most recent patient self-reported data (MyChart smartphone monitoring) shows:

	4/16/2019	4/15/2019	4/14/2019	4/5/2019	4/3/2019	4/1/2019
Time	6:00 AM	7:01 AM	9:22 AM	7:52 AM	5:44 AM	2:23 PM
Did you have ANY SYMPTOMS of asthma in the past 24 hours?	I had SOME asthma symptoms	I had SOME asthma symptoms	I had SOME asthma symptoms	I had SOME asthma symptoms	I had SOME asthma symptoms	I had SOME asthma symptoms
What was your PEAK FLOW	358	357	352	401	318	533

today?

OBJECTIVE

Appears well - Normal effort with respiration

Peak flow today via digital PEF meter is 481 L/min, which is 100% of personal best (481)

FEV1 (today): 3.35 FEV1 Predicted: 4.15 • FEV1 % of predicted: 81

- FEV1 or PFM Zone: Green

ASSESSMENT

No current safety concerns: Symptoms have decreased over all, but noticing regular chest discomfort - needs to follow up in office ASAP and may need stepwise increase to bring symptoms under control faster. Should follow up ASAP for chest pain.

EPR-3 calculated asthma assessment:

Asthma control: Very poorly controlled

Asthma severity (EPR3): Severe persistent asthma

Guideline based assessment of controller therapy: Insufficient control medication

- Guideline recommended stepwise therapy: Step 5
- Provider prescribed stepwise therapy level: 4
- Patient using stepwise therapy level: 4
- Recommended ICS adjustments: Taking maximum dose prescribed by provider
- Recommended follow up: Follow up with PCP ASAP

Based on DHHS. National Heart Lung & Blood Institute. [Asthma Care Quick Reference: Diagnosing and Managing Asthma](#)

PLAN

Asthma Education covered this visit:	
What is asthma + what causes symptoms	
What happens when asthma is uncontrolled	Demonstrates understanding
How do you know if your asthma is controlled?	Demonstrates understanding
Control vs. rescue medications	Demonstrates understanding
Recognizing symptoms of asthma	Demonstrates understanding
What to do during an asthma attack	Demonstrates understanding
Life threatening asthma symptoms	Demonstrates understanding
How to take inhalers correctly	Demonstrates understanding
How and why you should use a spacer	Demonstrates understanding
How to use a peak flow meter	Demonstrates understanding
Asthma triggers and how to handle them	Demonstrates understanding
Managing exercise induced asthma	Demonstrates understanding
Keeping track of symptoms	
Using an asthma action plan	

Personal goals for asthma management: Wants to get rid of chest discomfort; Total minutes asthma education: 35

Follow up plan: Schedule office visit with PCP ASAP, Follow up virtual visit in 2 weeks. Reinforced need to follow up in office ASAP; given # to call clinic since he did not have it.