Practice Patterns in Compounded Topical Corticosteroids for Eosinophilic Esophagitis

“Hello, my name is Dr. [Name] and I am physician at the University of Michigan conducting an internal research project through the University of Michigan GI department. The goal of our study is to gain understanding about how compounding pharmacies in Michigan acquire materials for, formulate, and distribute compounded budesonide specifically for the treatment of eosinophilic esophagitis, or EoE.

Would you be willing to partake in a brief 15-minute survey relating to this?”

Pharmacy name: \_\_\_\_\_\_\_\_\_

Pharmacy Location: (City, Michigan, Zip) \_\_\_\_\_\_\_\_

1. Does your compounding pharmacy compound topical corticosteroids (budesonide, fluticasone, prednisone, ciclesonide, betamethasone)?

[ ] No 🡪 hang up the phone

[ ] Yes 🡪 which ones?

2. Typically, what type of provider is sending the prescription?

[ ] GI

[ ] Allergy

[ ] Primary care

[ ] Unsure

[ ] Other: \_\_\_\_\_

3. When a prescription for compounded **budesonide suspension** is received by your pharmacy, are you made aware of the indication for the medication? In other words, is it clear if this for EoE?

[ ] Yes

[ ] No

4. How frequently do you compound steroids for EoE – how many active/current patients? \_\_\_\_

“These next few questions are related to the formulation of budesonide suspension/gel and the compounding process.”

**Budesonide**

5. Do you use USP grade budesonide?

[ ] Yes

[ ] No

6. Do you have a certificate of analysis for this active ingredient?

[ ] Yes

[ ] No

**Medium**

7. What do you most commonly use as your medium? \_\_\_\_

8. What other materials are used for compounding? (Check all that apply)

[ ] Water

[ ] Flavoring

[ ] Thickening agents

* If so, which ones: (e.g., carboxymethylcellulose, guar gum, xanthan gum, cornstarch, alginates, agar)

[ ] Other: \_\_\_\_\_\_\_

**Compounding**

9. What is your standard concentration of compounded budesonide suspension?

\_\_\_ mg/\_\_\_ mL

9a. Volume instructed to use

9b. Volume unit

9c. Frequency per day

[ ] Once daily

[ ] BID

[ ] TID

[ ] QID

[ ] More often (if so, how many times?)

9d. Specific Instructions? (e.g., using it with/before/after meals, bedtime, NPO for X time after, how much time, rinsing the mouth after)

9e. Volume dispensed all at once

9f. Storage instructions (e.g., refrigerate, room temperature, dark place)

10. Are you aware of any favored or preferred recipes for budesonide suspension?

[ ] Yes. If yes, do you use them?

[ ] No

11. Are you ever asked to mix other medications in with the steroid?

[ ] Yes. If yes, what other meds? \_\_\_\_\_\_\_\_\_ (e.g. cromolyn mast cell stabilizer, any anti-histamines, PPIs, montelukast, prostaglandin inhibitor, immunosuppressive meds)

[ ] No

12. How long does it take to make one prescription of budesonide suspension?

[ ] Less than 30 minutes

[ ] 30 minutes – 1 hour

[ ] 1 -2 hours

[ ] > 2 hours

13. What materials do you provide to the patient to ensure accurate dosing of the medication?

[ ] Nothing additional is given (e.g. patients instructed to just pour out X-teaspoons)

[ ] Marked Syringe

[ ] Dose cups

[ ] Other: ­\_\_\_

14. What is your recommended expiration duration for the budesonide suspension?

[ ] up to 30 day

[ ] up to 60 day

[ ] up to 90 days

[ ] longer than 90 days

15. What is the cost per prescription to the patient? (price per 30-day supply) $ \_\_\_\_\_

16. Is the prescription ever covered by insurance?

[ ] Yes

[ ] No

[ ] Don’t know

17. Are you ever asked to compound other topical corticosteroids specifically for EoE?

[ ] Yes. If so, what other steroids do you compound for EoE?

[ ] No, never.

“These last few questions are related to patient interactions”

18. Do you routinely provide patients with education, counseling, and detailed instructions about the compounded budesonide suspension?

[ ] Yes (proceed with 18a and 18b)

[ ] No

If so, what do you counsel them on?

18a. Purpose of medication [ ] Yes, [ ] No

18b. When to expect results [ ] Yes, [ ] No

18c. Potential side effects and when to contact a physician/pharmacist [ ] Yes, [ ] No

18d. Measuring and dosing the medication [ ] Yes, [ ] No

18e. Storage and use [ ] Yes, [ ] No

18f. Expiration [ ] Yes, [ ] No

18g. Missed doses, importance of adherence [ ] Yes, [ ] No

18h. If yes, how much time on average is spent during this initial visit on educating and counseling patients?

[ ] Less than 5 minutes

[ ] 5-10 min

[ ] 11-15 minutes

[ ] More than 16 minutes

19. Do you actively track or are able to estimate the proportion of patients who get > 3 refills (or > 3-months of medicine)?

[ ] Yes

[ ] No

20. Do you offer in-state and out-of-state shipping options?

[ ] No, will not ship. Pick up only

[ ] In-state only shipping only

[ ] Both in-state and out-of-state shipping

“These last few questions are about your pharmacy’s practice”

21. How many years has the pharmacy been operating?

[ ] Less than 1 year

[ ] 1-5 years

[ ] 6-10 years

[ ] More than 10 years

22. Is your pharmacy accredited? If so, through what body?

[ ] Not accredited

[ ] Pharmacy Compounding Accreditation Board

[ ] National Association of Boards of Pharmacy

[ ] Verified Pharmacy Program

[ ] Other group: \_\_\_\_\_\_

23. Does your pharmacy routinely test the quality or accuracy of its budesonide suspension?

[ ] Yes, for budesonide suspension. If so, how? (e.g. send-out 3rd party, in-house testing)

[ ] No

[ ] Not for budesonide, but yes for other medications. How?

24. Final question: As you may know, there are currently no FDA-approved medications for EoE which makes compounded budesonide suspension such a great service. If or when there is a FDA-approved an equivalent product on market, would you still offer this service?

[ ] Yes

[ ] No

**"Thank you for participating in our survey. Do you have any additional comments?"**