Supplementary file

For questions 1 and 2, please select the answer choices that best describe behaviors in your practice.

1. Within each age group, select which device you most commonly prescribe for your patients with asthma.

	Metered dose inhaler	Dry powder inhaler	Nebulizer	Other
0-3 years				
3-6 years				
6-12 years				
> 12 years				

2. Within each age group, select whether or not you prescribe spacer devices for use with inhalers.

	I always prescribe spacer devices in this age group.	I sometimes prescribe spacer devices in this age group.	I do not prescribe spacer devices in this age group.
0-3 years			
3-6 years			
6-12 years			
> 12 years			

Questions 3-7: For your patients with asthma:

- 3. How frequently do you deliver asthma education in your office?
 - Never
 - Occasionally
 - Sometimes
 - Usually
 - Always
- 4. How frequently do you deliver education in inhaler use?
 - Never
 - Occasionally
 - Sometimes
 - Usually
 - Always
- 5. Who in your office, besides you, most commonly delivers education in inhaler use?
 - Physician
 - Physician assistant
 - Medical assistant
 - Registered nurse
 - Nurse practitioner
 - Asthma educator
 - Licensed Vocational Nurse

	• Never
	• Occasionally
	• Sometimes
	• Usually
	• Always
	• Unsure
7.	When you <i>first prescribe</i> an inhaler device to a patient: (check all that apply)
	 No specific instruction is given or instructional resources are provided.
	• The patient is instructed verbally in the use of the inhaler.
	• A health provider demonstrates the proper use of the inhaler.
	• The patient practices use of the inhaler and receives feedback from a health provider.
	• The patient is provided with a training video on proper inhaler technique.
	• The patient is provided with printed material on proper inhaler technique.
	• The patient is provided with a computer-based tutorial on proper inhaler technique.
	• Other instruction or resources not listed above are provided. Please describe briefly below:
For	questions 8-10: On subsequent visits after a patient has been prescribed an inhaler:
8.	How often do you or another health provider in your practice assess the patient's inhaler technique when the patient's asthma is well controlled? Never Rarely Sometimes Usually
	• Always
9.	How often do you or another health provider in your practice assess the patient's inhaler technique when the patient's asthma is NOT well controlled? Never Rarely Sometimes Usually Always
10.	How do you or another health provider in your practice assess the patient's inhaler technique? Check
	all that apply.
	• Health providers in my practice do not regularly assess inhaler technique. • Health providers sale the retirnt about his/her says the inhaler.
	• Health providers ask the patient about his/her <i>confidence</i> in his/her ability to use the inhaler properly.
	 Health providers ask the patient for verbal description of how he/she uses the inhaler.
	 Health providers ask the patient for written description of how he/she uses the inhaler.
	 Health providers ask the patient for written description of now he/she uses the inhaler. Health providers ask the patient to demonstrate the use of the inhaler, either with his/her own inhaler or placebo inhaler. Other. Please describe briefly below:
	· ————————————————————————————————————

6. How often do the other providers in the previous question deliver education in inhaler use?

• Unsure

• Other (Please specify)

For questions 11-15, please select the answer choices that most consistently represent your views.

- 11. Proper inhaler technique plays a significant role in asthma control.
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- 12. Patients should receive specific instruction on proper inhaler technique when first prescribed a new inhaler
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- 13. Patients require periodic reassessment of their technique to ensure skill maintenance over time.
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- 14. The typical patient education in my clinic setting is adequate to ensure patients' proper inhaler use.
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- 15. Given my current time and resources, I am able to regularly assess patients' inhaler technique in standard office visits.
 - Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree
- 16. In your practice, what are the most significant barriers to regular assessment of patients' inhaler technique? Check all that apply.
 - I do not encounter significant barriers to regular assessment of inhaler technique.
 - Time available in a typical patient encounter
 - Access to inhaler device to use in assessment of patient technique
 - Health providers' knowledge of proper inhaler technique
 - Language differences between health providers and patients
 - Lack of interest of patients in proper inhaler technique
 - Other. Please describe briefly below:

17.	How did you personally learn proper steps in inhaler use? Check all that apply. I have not learned proper steps in inhaler use. From personal experience with asthma From my own research From specific training during medical/nursing school From specific training during residency From a resource (pamphlet, video, etc.) provided by my practice From another healthcare provider in my practice From an organized training in my practice Other. Please describe briefly below:
18.	 How did you learn to teach patients and families in inhaler technique? Check all that apply. I have not learned how to teach patients and families in inhaler technique. From my own experience in teaching patients From my own research From specific training during medical/nursing school From specific training during residency From a resource (pamphlet, video, etc.) provided by my practice From another healthcare provider in my practice From an organized training in my practice Other. Please describe briefly below:
19.	How confident are you in your ability to teach proper inhaler technique? Not at all confident Somewhat confident Moderately confident Mostly confident Completely confident
20.	If you teach patients inhaler technique, how effective is your instruction? Not at all effective Somewhat effective Moderately effective Mostly effective Completely effective
21.	Assuming no barriers, what methods or resources do you think would be most effective to teach patients proper inhaler technique? (Free text box)
22.	Please select your gender. • Male • Female
23.	 In what type of setting(s) do you most often practice? Check all that apply. Private practice: independent Private practice: large single or multi-specialty group Kaiser University-associated

• Federally-Qualified Health Center

	Military-associatedOther. Please specify:
24.	Please fill in the street name of your practice:
25.	 What is your medical training? Doctor of Medicine (MD) Doctor of Osteopathic Medicine (DO) Nurse Practitioner (NP) Registered Nurse (RN) Physician's Assistant (PA) Medical Assistant (MA) Licensed Vocational Nurse (LVN) Other. Please specify:
26.	How many years have you been practicing since completing your medical training? • 0-4 years • 5-9 years • 10-14 years • 15 years or more
27.	What percentage of your patients receives insurance through Medi-Cal? • 0-20% • 21-40% • 41-60% • 61-80% • 81-100%
28.	What percentage of your patient population speaks primarily Spanish? • 0-20% • 21-40% • 41-60% • 61-80% • 81-100%
29.	How often do you use a translator when interacting with your Spanish-speaking population? Never, I am bilingual/fluent Rarely Sometimes Often Always
30.	 What percentage of your patient population has asthma? Less than 5% 5-14% 15-24% 25% or more

31.	Do	you have active asthma, defined by use of asthma medications within the last year?
	•	Yes
	•	No
32.	If y	you have active asthma, do you use an inhaler with a spacer? [Answer this question onl

- 32. If you have active asthma, do you use an inhaler with a spacer? [Answer this question only if answer to Q#31 is Yes]
 - Yes
 - No
- 33. Do you have a child with active asthma, defined by use of asthma medications within the last year?
 - Yes
 - No
- 34. If you have a child with active asthma, does your child use an inhaler with a spacer? [Answer this question only if answer to Q#33 is Yes]
 - Yes
 - No