

Pediatric Asthma Control & Communication Instrument

Your child's name: _____ Today's Date: _____

When was your child's last asthma visit? _____ If your child has never had an asthma visit, check here

Please check one answer for each of the following questions.
Your answers will help your doctor give you the best asthma care.

Direction

- | | | | |
|--|--|---------------------------------------|--|
| 1. Since your child's last visit to this doctor's office, how has your child's asthma been? | Better
▼
<input checked="" type="checkbox"/> | Same
▼
<input type="checkbox"/> | Worse
▼
<input type="checkbox"/> |
|--|--|---------------------------------------|--|

If your child has not seen a doctor, please answer about the past 2 months.

Bothered

- | | | | |
|--|--|--|--|
| 2. Since your child's last visit to this doctor's office, how much have you been bothered by your child's asthma? | Not bothered
▼
<input checked="" type="checkbox"/> | Somewhat bothered
▼
<input type="checkbox"/> | Very bothered
▼
<input type="checkbox"/> |
|--|--|--|--|

If your child has not seen a doctor, please answer about the past 2 months.

Risk

- | | | |
|---|-------------------------------------|--------------------------|
| 3-5. Since your child's last visit to this doctor's office, has your child: | No
▼ | Yes
▼ |
| 3. Been to the emergency room for asthma? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Been hospitalized for asthma? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Used prednisone (Orapred, steroid pill, steroid liquid or steroid syrup) for asthma? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If your child has not seen a doctor, please answer about the past 2 months.

Forget to take medicine

- | | | | | | |
|---|---|--|--|--|---|
| 6. How often do you forget to give your child's daily asthma medicine when he/she feels fine? | My child is not supposed to take a daily asthma medicine
▼
<input type="checkbox"/> | None of the time
▼
<input checked="" type="checkbox"/> | Some of the time
1-2 days/week
▼
<input type="checkbox"/> | Most of the time
3-4 days/week
▼
<input type="checkbox"/> | All of the time
5-7 days/week
▼
<input type="checkbox"/> |
|---|---|--|--|--|---|

Daily asthma medicines include: Advair, Asmanex, , Budesonide, Dulera, Flovent, QVAR, Pulmicort, Singulair, Symbicort.

FOR CLINICIAN USE

If any of the answers farthest to the right or in red are selected, this may be consistent with poorly controlled and/or undertreated asthma. Further assessment and **follow-up in 2-6 weeks** is recommended.

(OVER)

FIG E1. PACCI.

Asthma Symptoms	
7. Over the past week , how many days has your child had asthma symptoms? For example:	Days
<ul style="list-style-type: none"> ▪ Cough ▪ Chest tightness ▪ Shortness of breath ▪ Sputum (spit, mucous, phlegm when coughing) ▪ Difficulty taking a deep breath ▪ Wheezy or whistling sound in the chest 	0 1-2 3-6 Every day (not all day long) Every day (all day long)
Reliever use	
8. Over the past week , how many days have you had to give your child medicine to quickly relieve asthma symptoms? For example:	Days
<ul style="list-style-type: none"> ▪ Albuterol/Proventil/Proair/Ventolin/Xopenex via Inhaler/Spray/Pump or Machine/Nebulizer 	0 1-2 3-6 Every day (not all day long) Every day (all day long)
Attacks	
9. Over the past week , how many days did your child have an asthma attack? For example:	Days
<ul style="list-style-type: none"> ▪ When it is harder to breathe for your child ▪ When you give your child more quick-relief asthma medicine (e.g., Albuterol) ▪ When the asthma medicine does not work 	0 1 2-3 4-7
Activity Limitation	
10. Over the past week , how much does asthma limit your child's activities?	Not at all Slightly Moderately Very much Completely
Nighttime Symptoms	
11. Over the past TWO weeks , how many nights did your child's asthma keep your child from sleeping or wake him/her up?	Nights
	0 1 2 3-7 8-14

12. Please **write down any concerns or anything else** you would like your doctor to know about your child's asthma.

PLEASE GIVE THIS TO YOUR PROVIDER. Thank you.

FOR CLINICIAN USE ONLY: Control/Severity Assignment	
Controlled/ Intermittent	Partly Controlled/ Mild Persistent
Uncontrolled/ Moderate Persistent	Poorly Controlled/ Severe Persistent

Assign patient's current level of asthma control/severity by looking at the box checked *farthest to the right* on questions 7-11 and match the box color to the level of asthma control/severity in this section.

Severity categories are for patients not on controller therapy. Control categories are for patients currently taking controller therapy.

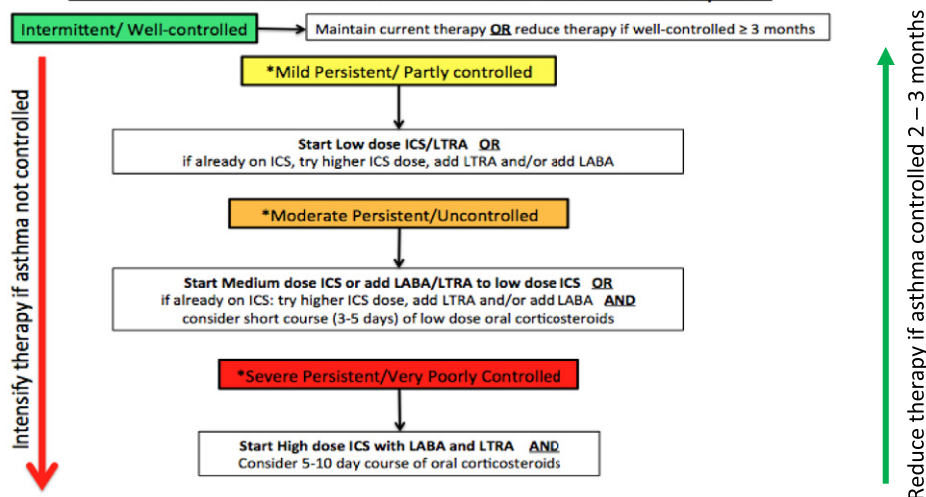
The goal for all patients is to have controlled asthma with the least amount of medication and no side effects.

If asthma is not controlled, possible explanations include: acute respiratory infection, under-treatment with daily controller medications, poor inhaler technique, poor adherence, environmental allergies and/or exposures, comorbid conditions (see treatment algorithm on page 3).

Follow-up in 2 – 6 weeks is recommended.

FIG E1. (Continued)

Treatment Recommendations Based on Asthma Control or Severity Level



*** IF ASTHMA IS NOT CONTROLLED, ALSO CONSIDER EACH OF THE FOLLOWING:**
Acute Respiratory Infection: □ patient may benefit from regular use of Albuterol (e.g., 4 times a day) during the acute illness
Inhaler technique: □ is patient using spacer with MDI? □ have patient demonstrate inhaler technique
Medication adherence: □ review patient response to PACCI adherence question □ review pharmacy record of filled medications
Environmental allergies and exposures: □ has patient been allergy tested? □ is there secondhand smoke exposure?
Comorbid conditions: □ allergic rhinitis □ sinusitis □ obesity □ gastro-esophageal reflux
Asthma specialist referral: □ systemic steroids ≥2 times/year □ intubation/ICU admit □ uncontrolled asthma on high dose ICS

Inhaled Corticosteroids (ICS)	Child 0-4 years old			Child 5-11 years old			>12 years old		
	Low Dose	Medium	High Dose	Low Dose	Medium	High Dose	Low Dose	Medium	High Dose
Beclomethasone/QVar MDI 40mcg 80mcg	N/A	N/A	N/A	2-4 puffs 1-2 puffs	>2-4 puffs	>4 puffs	2-4 puffs 1-3 puffs	>3-6 puffs	>6 puffs
Budesonide/Pulmicort DPI Flexhaler 90mcg 180 mcg	N/A	N/A	N/A	2-4 inhal 1-2 inhal	>2-4 inhal	>4 inhal	2-6 inhal 1-3 inhal	4-6 inhal	>6 inhal
Budesonide/Pulmicort Respule 0.25mg neb 0.5mg neb	2 nebs 1 neb	>2 nebs 2 neb	>2 nebs	2 nebs 1 neb	4 nebs 2 nebs	4 nebs	N/A	N/A	N/A
Fluticasone/Flovent MDI 44 mcg 110 mcg 220 mcg	4 puffs 1 puff	5-8 puffs 1-3 puffs 1 puff	>8 puffs >3 puffs >1 puff	2-4 puffs 1 puff	5-8 puffs 1-3 puffs 1 puff	>8 puffs >3 puffs >1 puffs	2-6 puffs 2 puffs 1 puff	6-10 puffs 2-4 puffs 1-2 puffs	>10 puffs >4 puffs >2 puffs
Fluticasone/Flovent Diskus DPI 50 mcg 100 mcg 250 mcg	N/A	N/A	N/A	2-4 inhal 1-2 inhal	3-4 inhal 1 inhal	>4 inhal >2 inhal	2-6 inhal 1-3 inhal 1 inhal	6-10 inhal 4-5 inhal 2 inhal	>10 inhal >5 inhal >2 inhal
Mometasone/Asmanex Twisthaler DPI 200mcg	N/A	N/A	N/A	N/A	N/A	N/A	1 inhal	2 inhal	>2 inhal
Combination Drugs—ICS + LABA: patient should not take more than: 2 puffs per dose of the combo MDI or 1 puff per dose of the combo DPI									
Fluticasone/Salmeterol (Advair) MDI 45/21 mcg 115/21 mcg 230/21 mcg	N/A	N/A	N/A	1-2 puffs	2-4 puffs 1-2 puffs	2 puffs 1 puff	1-3 puffs 1 puff	3-4 puffs 2-3 puffs 1 puff	3-4 puffs 1-2 puffs
Fluticasone/Salmeterol Diskus (Advair) DPI 100/50 mcg 250/50 mcg 500/50 mcg	N/A	N/A	N/A	1 inhal	1-2 inhal 1 inhal	1 inhal	1 inhal	1-2 inhal 1 inhal	1- inhal 1 inhal
Budesonide/Formoterol (Symbicort) 80/4.5mcg MDI 160/4.5mcg MDI	N/A	N/A	N/A	N/A	N/A	N/A	1-3 puffs 1-2 puffs	4 puffs 2-3puffs	3-4 puffs
Mometasone/Formoterol (Dulera) 100/5mcg MDI 200/5mcg MDI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 puff	2 puffs

Notes: **MEDICATION DOSES** of puffs or nebs in the chart are for **TOTAL DOSES PER DAY** (e.g., 2 puffs = 2 total puffs per day).
 Combination drugs are assumed to be equivalent to doubling of the ICS dose alone (e.g., 1 puff of Fluticasone/Salmeterol 45/21 = 2 puffs of Fluticasone 44)
 N/A and blank areas indicate that there is no on-label recommended dosing available. **INHAL:** inhalation of DPI
ICS: inhaled corticosteroid; **LTRA:** leukotriene receptor antagonist; **LABA:** long acting beta₂-agonist; **MDI:** metered dose inhaler; **DPI:** dry powder inhaler

FIG E1. (Continued)

Instrumento de Comunicación y Control del Asma

Nombre de su niño: _____ Fecha: _____

¿Cuándo fue la última visita por asma de su niño(a) con su doctor regular? _____

Si su niño(a) nunca ha tenido una visita por asma con un doctor, marque aquí

Por favor marque una respuesta para cada una de las siguientes preguntas. Sus respuestas ayudan al doctor a darle a su niño un mejor cuidado de asma.

Dirección											
1. Desde la última visita de su hijo(a) al doctor, ¿como ha estado el asma de su hijo(a)? Si su hijo(a) no ha sido evaluado por un doctor, por favor conteste sobre los últimos dos meses.	<table border="0"> <tr> <td>Ha estado mejorando</td> <td>Está igual</td> <td>Ha estado empeorando</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Ha estado mejorando	Está igual	Ha estado empeorando	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Ha estado mejorando	Está igual	Ha estado empeorando									
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Molestias											
2. Desde la última visita de su hijo(a) al doctor, ¿qué tan molesto para usted ha sido el asma de su hijo(a)? Si su hijo(a) no ha sido evaluado por un doctor, por favor conteste sobre los últimos dos meses.	<table border="0"> <tr> <td>Nada molesto</td> <td>Algo molesto</td> <td>Muy molesto</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Nada molesto	Algo molesto	Muy molesto	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Nada molesto	Algo molesto	Muy molesto									
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Riesgo											
3-5. Desde la última visita de su hijo(a) al doctor, su hijo(a): Si su hijo(a) no ha sido evaluado por un doctor, por favor conteste sobre los últimos dos meses.	<table border="0"> <tr> <td>No</td> <td>Sí</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Sí	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
No	Sí										
<input checked="" type="checkbox"/>	<input type="checkbox"/>										
<input checked="" type="checkbox"/>	<input type="checkbox"/>										
<input checked="" type="checkbox"/>	<input type="checkbox"/>										
Olvida tomar medicina											
6. Cuando su niño se encuentra bien ¿qué tan frecuente olvida darle su medicina <u>diaria</u> para el asma? Las medicinas diarias para el asma incluyen: Aerobid, Advair, Asmanex, Azmacort, Budesonide, Flovent, QVAR, Pulmicort, Singulair,.	<table border="0"> <tr> <td>Mi hijo no debe de tomar medicina diaria para el asma</td> <td>Nunca lo olvido</td> <td>Lo olvido en algunas ocasiones (1 a 2 días por semana)</td> <td>Lo olvido mayor parte del tiempo (3 a 4 días por semana)</td> <td>Lo olvido todo el tiempo (5 a 7 días por semana)</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Mi hijo no debe de tomar medicina diaria para el asma	Nunca lo olvido	Lo olvido en algunas ocasiones (1 a 2 días por semana)	Lo olvido mayor parte del tiempo (3 a 4 días por semana)	Lo olvido todo el tiempo (5 a 7 días por semana)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mi hijo no debe de tomar medicina diaria para el asma	Nunca lo olvido	Lo olvido en algunas ocasiones (1 a 2 días por semana)	Lo olvido mayor parte del tiempo (3 a 4 días por semana)	Lo olvido todo el tiempo (5 a 7 días por semana)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<p>FOR CLINICIAN USE If any of the answers farthest to the right or in red <input checked="" type="checkbox"/> are selected, this may be consistent with poorly controlled and/or undertreated asthma. Further assessment and follow-up in 2-6 weeks is recommended.</p>											

(OVER)

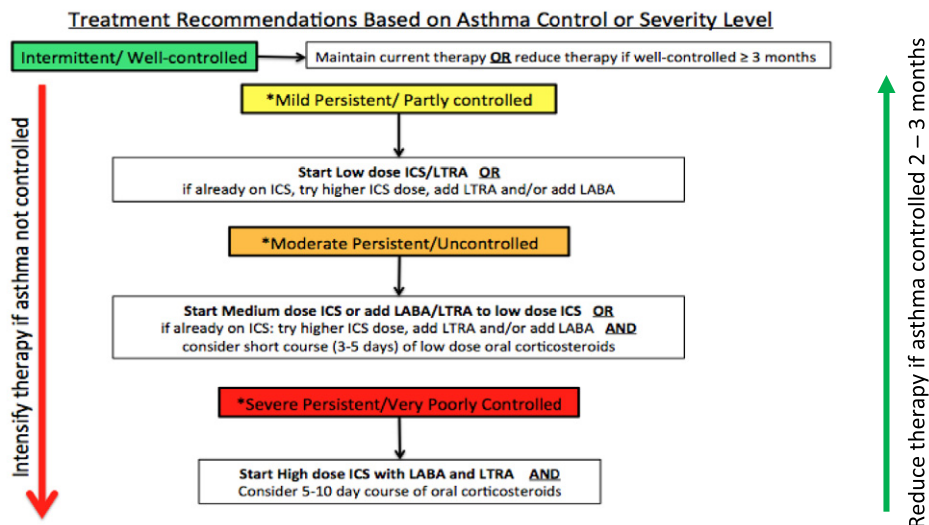
FIG E2. Spanish-language PACCI.

Síntomas de asma					
7. En la última semana , ¿cuantos días su hijo(a) presentado síntomas de asma? *Por ejemplo: tos, presión o dolor de pecho, falta de aire, flema (escupe, moco, flema al toser), dificultad para respirar profundo, tiene silbidos o hace día)	Días				
	0	1-2	3-6	Todo los días (no todo el día)	Todos los días (todo el día)
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medicamentos de rescate					
8. En la última semana , ¿cuantos días le ha dado a su hijo(a) todo el día medicamento para alivio rápido de los síntomas de asma? Por ejemplo: Albuterol, Inhalador, spray, Bomba, Máquina, nebulizador	Días				
	0	1-2	3-6	Todo los días (no todo el día)	Todos los días (todo el día)
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ataques o Crisis Días					
9. En la última semana , ¿cuantos días su hijo(a) ha tenido ataques Por ejemplo: cuando le cuesta trabajo respirar; cuando usted tiene que darle más medicamento; cuando las medicinas no funcionan.	Días				
	0	1	2-3	4-7	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limitación a la actividad física					
10. En la última semana , el asma de su hijo (a) ¿qué tanto ha limitado su actividad física??	Nada	Ligeramente	Moderadamente	Mucho	Completamente
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Síntomas nocturnos					
11. En las últimas dos semanas , ¿cuantas noches el asma de su hijo(a) lo ha despertado o no lo ha dejado dormir?	Noches				
	0	1	2	3-7	8-14
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Por favor escriba cualquier otra información que a usted le interese que su doctor sepa acerca del asma de su hijo(a).

FOR CLINICIAN USE ONLY: Control/Severity Assignment				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controlled/ Intermittent	Partly Controlled/ Mild Persistent	Uncontrolled/ Moderate Persistent	Poorly Controlled/ Severe Persistent	
Assign patient's current level of asthma control/severity by looking at the box checked <i>farthest to the right</i> on questions 7-11 and match the box color to the level of asthma control/severity in this section.				
<u>Severity</u> categories are for patients <u>not on controller therapy</u> . <u>Control</u> categories are for patients <u>currently taking controller therapy</u> .				
The <u>goal</u> for <u>all patients</u> is to have <u>controlled</u> asthma with the least amount of medication and no side effects.				
If asthma is <u>not controlled</u> , possible explanations include: acute respiratory infection, under-treatment with daily controller medications, poor inhaler technique, poor adherence, environmental allergies and/or exposures, comorbid conditions (see treatment algorithm on page 3).				
Follow-up in 2 – 6 weeks is recommended.				

FIG E2. (Continued)



Inhaled Corticosteroids (ICS)	Child 0-4 years old			Child 5-11 years old			>12 years old		
	Low Dose	Medium	High Dose	Low Dose	Medium	High Dose	Low Dose	Medium	High Dose
Beclomethasone/QVar MDI 40mcg 80mcg	N/A	N/A	N/A	2-4 puffs 1-2 puffs	>2-4 puffs	>4 puffs	2-4 puffs 1-3 puffs	>3-6 puffs	>6 puffs
Budesonide/Pulmicort 90mcg DPI Flexhaler	N/A	N/A	N/A	2-4 inhal 1-2 inhal	>2-4 inhal	>4 inhal	2-6 inhal 1-3 inhal	4-6 inhal	>6 inhal
Budesonide/Pulmicort 0.25mg neb Respule 0.5mg neb	2 nebs 1 neb	>2 nebs 2 neb	>2 nebs	2 nebs 1 neb	4 nebs 2 nebs	4 nebs	N/A	N/A	N/A
Fluticasone/Flovent MDI 44 mcg 110 mcg 220 mcg	4 puffs 1 puff	5-8 puffs 1-3 puffs 1 puff	>8 puffs >3 puffs >1 puff	2-4 puffs 1 puff	5-8 puffs 1-3 puffs 1 puff	>8 puffs >3 puffs >1 puffs	2-6 puffs 2 puffs 1 puff	6-10 puffs 2-4 puffs 1-2 puffs	>10 puffs >4 puffs >2 puffs
Fluticasone/Flovent Diskus 50 mcg 100 mcg 250 mcg	N/A	N/A	N/A	2-4 inhal 1-2 inhal	3-4 inhal 1 inhal	>4 inhal >2 inhal	2-6 inhal 1-3 inhal 1 inhal	6-10 inhal 4-5 inhal 2 inhal	>10 inhal >5 inhal >2 inhal
Mometasone/Asmanex 200mcg Twisthaler DPI	N/A	N/A	N/A	N/A	N/A	N/A	1 inhal	2 inhal	>2 inhal
Combination Drugs—ICS + LABA: patient should not take more than: 2 puffs per dose of the combo MDI or 1 puff per dose of the combo DPI									
Fluticasone/Salmeterol (Advair) MDI 45/21 mcg 115/21 mcg 230/21 mcg	N/A	N/A	N/A	1-2 puffs	2-4 puffs 1-2 puffs	2 puffs 1 puff	1-3 puffs 1 puff	3-4 puffs 2-3 puffs 1 puff	3-4 puffs 1-2 puffs
Fluticasone/Salmeterol Diskus (Advair) DPI 100/50 mcg 250/50 mcg 500/50 mcg	N/A	N/A	N/A	1 inhal	1-2 inhal 1 inhal	1 inhal	1 inhal	1-2 inhal 1 inhal	1- inhal 1 inhal
Budesonide/Formoterol 80/4.5mcg MDI (Symbicort) 160/4.5mcg MDI	N/A	N/A	N/A	N/A	N/A	N/A	1-3 puffs 1-2 puffs	4 puffs 2-3puffs	3-4 puffs
Mometasone/Formoterol 100/5mcg MDI (Dulera) 200/5mcg MDI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 puff	2 puffs

Notes: **MEDICATION DOSES** of puffs or nebs in the chart are for **TOTAL DOSES PER DAY** (e.g., 2 puffs = 2 total puffs per day).
 Combination drugs are assumed to be equivalent to doubling of the ICS dose alone (e.g., 1 puff of Fluticasone/Salmeterol 45/21 = 2 puffs of Fluticasone 44)
 N/A and blank areas indicate that there is no on-label recommended dosing available. **INHAL:** inhalation of DPI
ICS: inhaled corticosteroid; **LTRA:** leukotriene receptor antagonist; **LABA:** long acting beta₂-agonist; **MDI:** metered dose inhaler; **DPI:** dry powder inhaler

FIG E2. (Continued)

TABLE E1. PACCI discriminant properties: trend in mean values (95% CIs) of C-ACT, quality of life (PACQLQ), and lung function across PACCI problem index values (0-5) by using ANOVA

PACCI problem index value: score*	0 (n = 124)	1 (n = 47)	2 (n = 44)	3 (n = 38)	4 (n = 28)	5 (n = 30)	P value
ACT/C-ACT score							
English† (n = 259)	22.8 (22.2-23.5)	18.4 (16.8-19.9)	17.5 (16.3-18.6)	16 (14.8-17.2)	14.8 (13.4-16.2)	12.9 (11.6-14.2)	<.0001
<5 y (n = 73)	22.7 (21.5-24)	18.8 (17-20.6)	16.5 (14.4-18.6)	16.1 (13.9-18.4)	16 (12.8-19.2)	15.2 (11.7-18.6)	.0001
5-11 y (n = 117)	23.2 (22.4-24)	20.2 (18-22.4)	18.5 (17.3-19.7)	16.5 (15-17.9)	14.9 (13.2-16.6)	12.7 (11.6-13.8)	<.0001
≥12 y (n = 69)	22.6 (21.5-23.7)	15.9 (12.1-19.6)	18 (16.1-19.9)	15.8 (13.9-17.6)	12.6 (11.1-14.2)	13.5 (10.5-16.5)	<.0001
African American (n = 131)	22.1 (21.1-23.1)	16.4 (13.9-19)	17.3 (15.9-18.7)	15.6 (14-17.1)	15.9 (13.8-18)	13.3 (11.6-15)	<.0001
White (n = 97)	23.5 (22.4-24.5)	20.4 (18.4-22.5)	17.9 (15.8-20)	17.8 (16.2-19.5)	13.7 (11.9-15.5)	13.2 (11.3-15.1)	<.0001
Spanish (n = 52)	23.3 (22.4-24.3)	20.9 (18.7-23.1)	19.4 (17.9-21)	17.4 (15.2-19.6)	13.5 (8.6-18.4)	16.8 (13.9-19.6)	<.0001
Quality of life (PACQLQ) score							
English† (n = 259)	6.4 (6.2-6.5)	5.4 (5.1-5.7)	5.2 (4.8-5.6)	5.1 (4.7-5.5)	4.4 (4-4.9)	4.1 (3.6-4.7)	<.0001
<5 y (n = 73)	6.2 (5.9-6.5)	5.3 (4.9-5.7)	5.3 (4.7-5.9)	4.5 (3.6-5.3)	3.6 (2.6-4.6)	4.6 (4-5.2)	.0001
5-11 y (n = 117)	6.2 (6-6.4)	5.8 (5.3-6.3)	5.5 (4.9-6.1)	4.9 (4.4-5.4)	4.5 (4-5)	3.6 (3-4.2)	<.0001
≥12 y (n = 69)	6.6 (6.4-6.9)	5.5 (4.8-6.2)	5.1 (4.4-5.8)	5.7 (5.1-6.3)	4.7 (4.2-5.1)	4.8 (3.7-5.8)	<.0001
African American (n = 131)	6.2 (5.9-6.5)	5.3 (4.9-5.7)	5.1 (4.5-5.6)	4.9 (4.4-5.4)	4.3 (3.8-4.8)	4.1 (3.4-4.7)	<.0001
White (n = 97)	6.6 (6.4-6.7)	5.6 (5.1-6.1)	5.6 (5.1-6)	5.1 (4.2-6)	4.9 (4.4-5.4)	4.4 (4.1-4.8)	<.0001
Spanish (n = 52)	5.9 (5.5-6.4)	5.8 (4.9-6.8)	6.2 (5.5-6.9)	4.1 (2.7-5.5)	2.6 (1.5-3.7)	3.9 (2.5-5.3)	.0003
FEV₁ (% predicted)							
All patients‡ (n = 118)	0.9 (0.85-0.94)	0.98 (0.82-1.14)	0.89 (0.8-0.99)	0.84 (0.76-0.91)	0.8 (0.68-0.92)	0.83 (0.69-0.97)	.3
English† (n = 79)	0.88 (0.82-0.94)	0.95 (0.75-1.16)	0.86 (0.76-0.97)	0.8 (0.71-0.89)	0.8 (0.68-0.93)	0.78 (0.67-0.89)	.42
5-11 y (n = 50)	0.84 (0.78-0.9)	0.98 (0.82-1.13)	0.88 (0.6-1.16)	0.76 (0.69-0.84)	0.76 (0.64-0.89)	0.79 (0.66-0.93)	.40
≥12 y (n = 29)	0.97 (0.86-1.09)	0.93 (0.55-1.31)	0.86 (0.77-0.95)	1.08§	0.88 (0.64-1.13)	0.73 (0.6-0.85)	.68
African American (n = 38)	0.83 (0.77-0.89)	0.62 (0.54-0.71)	0.83 (0.70-0.97)	0.77 (0.70-0.85)	0.73 (0.62-0.83)	0.76 (0.62-0.89)	.28
White (n = 33)	0.94 (0.84-1.05)	1.19 (0.94-1.44)	0.96 (0.86-1.07)	0.97 (0.83-1.12)	0.88 (0.69-1.07)	0.83 (0.66-0.99)	.34
Spanish (n = 39)	0.92 (0.85-0.99)	1.02 (0.84-1.2)	0.98 (0.83-1.13)	0.9 (0.8-0.99)	0.79 (0.34-1.23)	1.04§	.06
FEV₁/FVC ratio							
All Patients‡ (n = 79)	0.9 (0.87-0.93)	0.9 (0.83-0.97)	0.87 (0.82-0.92)	0.87 (0.8-0.95)	0.81 (0.75-0.87)	0.86 (0.79-0.93)	.3
English† (n = 79)	0.85 (0.82-0.88)	0.86 (0.78-0.94)	0.84 (0.8-0.88)	0.83 (0.74-0.91)	0.83 (0.77-0.88)	0.84 (0.78-0.9)	.97
5-11 y (n = 50)	0.85 (0.81-0.89)	0.91 (0.87-0.95)	0.87 (0.82-0.92)	0.8 (0.72-0.88)	0.79 (0.73-0.85)	0.86 (0.79-0.93)	.41
≥12 y (n = 29)	0.84 (0.79-0.89)	0.81 (0.67-0.96)	0.83 (0.77-0.88)	1§	0.89 (0.86-0.92)	0.77 (0.74-0.8)	.51
African American (n = 38)	0.86 (0.81-0.9)	0.77 (0.61-0.92)	0.84 (0.76-0.91)	0.79 (0.69-0.89)	0.84 (0.75-0.94)	0.83 (0.76-0.9)	.79
White (n = 33)	0.85 (0.81-0.89)	0.91 (0.86-0.96)	0.85 (0.81-0.89)	0.88 (0.71-1.05)	0.81 (0.76-0.86)	0.86 (0.74-0.97)	.80
Spanish (n = 39)	1.0 (0.96-1.04)	0.97 (0.88-1.05)	0.98 (0.8-1.2)	0.94 (0.83-1.06)	0.77 (0.25-1.3)	0.95§	.1

*Higher scores indicate more asthma control problems (frequency of daytime symptoms, rescue use of short-acting β_2 -agonists, asthma attacks and nocturnal symptoms, and degree of activity limitation caused by asthma).

†Refers to all patients who completed the English version of the PACCI.

‡Refers to all patients who completed the PACCI.

§No CI is presented because there was only 1 patient in this category.

TABLE E2. Performance of the PACCI sum score and problem index in identifying “not controlled” asthma as determined by clinicians by age and language using the AUC (95% CI)

	Accuracy of PACCI measures of uncontrolled asthma	
	Sum score	Problem index
English* (n = 265)	0.84 (0.79-0.88)	0.82 (0.77-0.87)
<5 y (n = 75)	0.78 (0.67-0.88)	0.76 (0.66-0.87)
5-11 y (n = 119)	0.84 (0.77-0.92)	0.83 (0.76-0.91)
≥12 y (n = 71)	0.88 (0.80-0.97)	0.86 (0.78-0.95)
African American (n = 134)	0.88 (0.82-0.94)	0.86 (0.80-0.92)
White (n = 99)	0.81 (0.72-0.90)	0.80 (0.70-0.89)
Spanish (n = 52)	0.82 (0.71-0.94)	0.77 (0.63-0.90)

*Refers to all patients who completed the English version of the PACCI.

TABLE E3. Sensitivity, specificity, and likelihood ratios for PACCI sum score identifying “not controlled” asthma, as determined by clinicians by age and language

Group	Cut point	C-statistic*	Sensitivity	Specificity	Correctly classified	Positive likelihood ratio	Negative likelihood ratio
English† (n = 265)	≥0		100%	0%	52%	1.0	
	≥1	0.72	92%	52%	73%	1.9	0.2
	≥2	0.71	86%	56%	72%	2.0	0.2
	≥3	0.75	81%	69%	75%	2.6	0.3
	≥4	0.79	76%	81%	78%	4.0	0.3
	≥5	0.78	68%	88%	78%	5.7	0.4
<5 y (n = 75)	≥0		100%	0%	52%	1.0	
	≥1	0.66	90%	42%	67%	1.5	0.2
	≥2	0.69	85%	53%	69%	1.8	0.3
	≥3	0.70	77%	64%	71%	2.1	0.4
	≥4	0.74	67%	81%	73%	3.4	0.4
	≥5	0.69	51%	86%	68%	3.7	0.6
5-11 y (n = 119)	≥0		100%	0%	50%	1.0	
	≥1	0.75	92%	58%	75%	2.2	0.1
	≥2	0.72	86%	58%	72%	2.1	0.2
	≥3	0.76	83%	70%	76%	2.8	0.2
	≥4	0.79	78%	80%	79%	3.9	0.3
	≥5	0.81	75%	87%	81%	5.6	0.3
≥12 y (n = 71)	≥0		100%	0%	58%	1.0	
	≥1	0.74	95%	53%	77%	2.0	0.1
	≥2	0.72	88%	57%	75%	2.0	0.2
	≥3	0.78	83%	73%	79%	3.1	0.2
	≥4	0.83	83%	83%	83%	5.0	0.2
	≥5	0.84	76%	93%	83%	11.3	0.3
Spanish (n = 52)	≥0		100%	0%	42%	1.0	
	≥1	0.65	100%	30%	60%	1.4	0.0
	≥2	0.67	91%	43%	63%	1.6	0.2
	≥3	0.75	86%	63%	73%	2.3	0.2
	≥4	0.71	73%	70%	71%	2.4	0.4
	≥5	0.72	68%	77%	73%	2.9	0.4

*The C-statistic assesses the accuracy of each PACCI sum score value in identifying uncontrolled asthma.

†Refers to all patients who completed the English version of the PACCI.

TABLE E4. Sensitivity, specificity, and likelihood ratios for PACCI problem index identifying “not controlled” asthma, as determined by clinicians by age and language

Group	Cut point	C-statistic*	Sensitivity	Specificity	Correctly classified	Positive likelihood ratio	Negative likelihood ratio
English† (n = 265)	≥0		100%	0%	52%	1.0	
	≥1	0.75	85%	65%	76%	2.5	0.2
	≥2	0.77	72%	83%	77%	4.2	0.3
	≥3	0.72	53%	92%	71%	6.5	0.5
<5 y (n = 75)	≥0		100%	0%	52%	1.0	
	≥1	0.69	84%	54%	70%	1.8	0.3
	≥2	0.70	55%	86%	70%	3.9	0.5
	≥3	0.64	37%	91%	63%	4.3	0.7
5-11 y (n = 119)	≥0		100%	0%	49%	1.0	
	≥1	0.76	84%	68%	76%	2.7	0.2
	≥2	0.81	79%	82%	80%	4.3	0.3
	≥3	0.77	63%	90%	77%	6.3	0.4
≥12 y (n = 71)	≥0		100%	0%	58%	1.0	
	≥1	0.79	88%	72%	81%	3.2	0.2
	≥2	0.79	78%	83%	80%	4.5	0.3
	≥3	0.73	53%	97%	71%	15.2	0.5
Spanish (n = 52)	≥0		100%	0%	42%	1.0	
	≥1	0.69	77%	60%	67%	1.9	0.4
	≥2	0.72	68%	77%	73%	2.9	0.4
	≥3	0.72	54%	90%	75%	5.4	0.5

*The C-statistic assesses the accuracy of each PACCI index score in identifying uncontrolled asthma.

†Refers to all patients who completed the English version of the PACCI.