Preface

The provision of quality care is of paramount importance to health care providers, patients and families who are the recipients of that care. Care Maps, along with Clinical Practice Guidelines and outcome measures are currently considered important tools for maintaining and improving quality care. One must remember however, that quality improvement tools are just that – tools to help coordinate the entire patient process. Clinical judgment is the single most important factor in maintaining quality care. No care map or guideline will replace the experience and training of health care providers in determining the course of action and delivering high quality care to patients. The purpose of the Care Map is to provide a consistent standard of care and a systematic means of gathering patient information.
Author Team Members
Sponsoring Program: Child Health

Re-Author Team:
Dr. Hans Pasterkamp, Section Head Pediatric Respirology
Cathy Gillespie, Clinical Nurse Specialist Pediatric Allergy and Asthma,
Todd Mortimer, Clinical Specialist, Respiratory Therapy, Children's Hospital
Leslie Galloway, Quality Officer, Child Health Program
Dr. Gerarda Cronin, Director, Quality and Decision Support, Child Health Program
Dr. Jim Carson, Community Pediatrician
Kristen Valeri, Manager of Patient Care, CH4
Dr. Jared Bullard, Pediatric Resident
Dr. Marni Hanna, Pediatric Resident
Dr. Mosarrat Qureshi, Pediatric Resident
Alice Studney, Pharmacist, Child Health Program
Sheila Hutton, Nurse Educator

Care Map Ex-Officio Membership List (attending selected meetings for specific purposes and receiving relevant minutes; providing ongoing input)
Sharon P, parent
Dr. Wade Watson, Professor, Dalhousie University, Halifax
Karla Hoare, Administrative Assistant, Child Health Quality Team (process mapping)
Dr. Nestor Cisneros, Pediatric Allergist, Children’s Hospital
Child Health Program Management Team:
   Dr. Cheryl Greenberg
   Ron VanDenakker
   Cheryl Susinski
   Susan Fogg
**Inclusion Criteria**
The following are the inclusion criteria:

- Children and adolescents 2 to 17 years of age being admitted with an acute exacerbation of the asthma;
- Children and adolescents admitted to PICU for treatment of severe asthma should be placed on the Care Map when they are transferred to the ward at the discretion of the physician.
- Caution should be exercised for children with co-morbid conditions such as cardiovascular disease, chronic lung disease, immunodeficiency syndromes. Inclusion for these children should be discussed with the physician.

**Exclusion Criteria**
The exclusion criteria are as follows:

- Children under 2 years of age.
- Children who have croup;
- Children with active chicken pox;
- Children in PICU;

**Implementation Guidelines**

1. The pediatric asthma standard orders will reside in the Emergency Department, CH4, and on CH5.
2. The Care Map System will reside on CH4 and CH5 and will be initiated by ward staff on admission.
3. The admitting physician to complete the Pediatric Inpatient Asthma Care Map Physician’s Order Sheet (form #PHOR171).
4. Transcribe the orders onto the Care Map, kardex, and pre-printed medication administration record (MAR) as appropriate.
**Discharge Outcomes**
The following outcomes are to be met prior to the child being discharged home:

**Clinical Outcomes**
1. Oxygen saturation on room air while awake ≥91%.
2. Respiratory, neurological and cardiovascular status stable with salbutamol inhalation therapy at q3-4h intervals (as per physician’s order).
3. If child ≥5 years: Pulmonary Function Test pre and post bronchodilator therapy done or referral to the Pulmonary Function Lab for follow-up post discharge has been done.

**Teaching Outcomes**
4. Discharge teaching has been completed.
5. Family receives and understands their written Asthma Discharge Plan.
6. Family is able to afford discharge medications and/or provisions made as per social worker.

**Follow up Outcomes**
7. Discharge prescriptions given if medications not available at home.
8. Referral to Children’s Asthma Education Centre completed.
9. Family is aware to arrange follow-up appointment with primary care physician within 7 days of discharge.
10. Follow-up appointments as requested by the consulting sub-specialists i.e. allergy, respirology have been arranged if applicable.
11. Asthma Discharge Plan (and Discharge Information Sheet only if applicable) has been faxed to the primary care physician.
Standards Of Care
The following define standards of care for the pediatric asthma patient:

Assessment
- The Children’s Hospital Nursing Database (form #85396) will be completed within 24 hours of admission.
- The respiratory parameter is assessed pre and post bronchodilator treatment and if there is any worsening in the child’s clinical status.
- The central nervous system, cardiovascular, and gastrointestinal parameters are assessed every 4 hours as per the following standards:

Central Nervous System (CNS)
- “Alert and appropriate for age and/or developmental level” indicates the patient has spontaneous eye opening, is interactive, and is responding in a manner that is developmentally appropriate for their age.

Cardiovascular (CVS)
- Normal cardiovascular assessment includes blood pressure and heart rate within normal range for the patient’s age (as per the table on page 7), no pallor or cyanosis of nail beds or mucous membranes, warm and dry skin and moist mucous membranes.
- **Consult the physician** when there is significant tachycardia, defined as >180/min. In the judgement of the physician, if the child is in asymptomatic sinus tachycardia this is not an indication to remove the child from the care map.
- A more detailed assessment of cardiovascular status is obtained if there are any abnormalities found during the physical exam or there is history of cardiovascular disease. This information is brought to the attention of the physician who also assesses the patient and may decide to remove the child from the Care Map.
- A detailed assessment includes aspects of:
  - Peripheral perfusion status:
    - Capillary refill time
    - Peripheral pulse rate/quality
    - Skin temperature
    - Edema
  - Heart sounds/murmurs
  - Evaluation of central pulses
  - Hydration status

Gastrointestinal (GI)
- A brief assessment is done of recent history of diarrhea, nausea or vomiting and tolerance of oral fluids.
- Document oral intake on the intake and output record
- Patients with non-GI related complaints do not require detailed documentation of their GI status.
Respiratory
- The asthma clinical score is done by the nurse (RN)/registered respiratory therapist (RRT) pre and post each inhalation treatment and with worsening in clinical status.
- The score is recorded on the asthma clinical scoring sheet.
- The physician (MD) assesses the patient on admission and before weaning inhalation treatments up until q2h.
- Normal respiratory status includes adequate air entry to all quadrants, no adventitious sounds, no retractions or accessory muscle use, respiratory rate within normal range for age and oxygen saturation ≥91% on room air.
- Full assessment includes wheezing, respiratory rate, retractions, breath sound intensity, and oxygen saturation. Finding any of these signs requires a narrative description for any aspects not already described on the Asthma Clinical Scoring Sheet.

Psychosocial
- Documentation of the interaction noted between the pediatric patient and caregiver is required when a nursing assessment is completed.
- No further assessment is required if there is evidence of good interaction between caregiver and child and the caregiver shows an appropriate amount of concern for the child and an understanding of the child’s illness and treatment.
- Assessed language barriers should be managed individually with consults for interpreters as required.
- If it is identified that the family is unable due to financial constraints to fill/refill a prescription a referral should be made to Social Work.
- If other concerns are identified, a consult to Social Work must be done.

Tests/Consults
- The physician following his/her clinical assessment of the patient will determine the diagnostic tests.
- Pulmonary function tests for children ≥5 years of age, pre and post salbutamol inhalation therapy should be done prior to discharge.
- PFT's pre and post bronchodilator treatment for a child ≥5 years should be ordered if difficult to wean (>4 masks at any one level), especially if this occurs when the inhalation frequency is ≥q2h. The results of the PFT's at this point might indicate that there is a fixed obstruction that is not amenable to bronchodilator treatment or that another diagnosis needs to be considered.
- A written referral to the Children’s Asthma Education Centre (CAEC) should be completed and CAEC is notified of referral by phone.

Treatment
- A full set of vital signs is done on admission to the ward prior to administration of the inhalation treatments. These include temperature, blood pressure, heart rate, respiratory rate, and oxygen saturation. All vital signs are recorded on the Asthma Clinical Scoring Sheet.
- The nurse assesses the patient pre and post each inhalation treatment.
- The temperature is taken q 4 hours.
• The heart rate, respiratory rate and oxygen saturation are assessed pre and post bronchodilator treatment.
• The blood pressure is taken every 4 hours while the child is on q 1 hourly masks and then twice a day during the remainder of the hospitalisation.
• If the child is crying and the nurse is not able to do additional vital signs such as blood pressure or respiratory rate, document “unable” and the reason (i.e. “crying”).
• Please see vital sign frequency table on page 6 of the care map.

**Vital Sign Ranges** (from PALS modified version 2005)

<table>
<thead>
<tr>
<th>Age</th>
<th>Heart Rate (beats/min)</th>
<th>Respiratory Rate (breaths/min)</th>
<th>Blood Systolic Pressure (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>80-140</td>
<td>22-34</td>
<td>&gt;75</td>
</tr>
<tr>
<td>School Age</td>
<td>70-120</td>
<td>18-30</td>
<td>&gt;80</td>
</tr>
<tr>
<td>Adolescent</td>
<td>60-100</td>
<td>12-16</td>
<td>&gt;90</td>
</tr>
</tbody>
</table>

**Oxygen Therapy**

• Supplemental oxygen via nasal prongs should be started immediately when the oxygen saturation is <91% on room air, oxygen should be started at a flow rate of 1L and be increased by increments of 0.5-1.0L to achieve oxygen saturation of between 91 and 94%.
• When the saturation is >94%, the flow rate will be decreased to maintain saturations 91 to 94%.
• All changes in oxygen flow rate will be made and documented pre bronchodilator treatment.

**Use of Oximetry**

• Oxygen saturation monitoring is done for all children requiring oxygen therapy.
• Oxygen saturation will be documented on the Asthma Clinical Scoring sheet:
  o each time a respiratory assessment is done and
  o within 5 minutes of an adjustment in oxygen therapy
• Following discontinuation of oxygen, oxygen saturation will be checked:
  o within 5 minutes after discontinuing oxygen
  o Prior to the next bronchodilator treatment.
  o During the first sleeping period following discontinuing of oxygen.
• If the oxygen saturation remains ≥91% during the above three assessments following discontinuing oxygen, the use of oximetry will be discontinued.

**Consult the Physician:**

• The patient develops new or increasing oxygen requirements after admission.
• The patient has continued oxygen requirements despite apparent improvement in bronchospasm and weaning of salbutamol treatment (ex. salbutamol treatments q3h and supplemental oxygen).

**Medications:**

**Beta₂-Agonists**
• Administer short acting inhaled beta₂-agonists for rapid reversal of airflow obstruction.

• A standard dose of 5 mg of salbutamol (5mg/2.5ml unit dose nebul) is given for all face masks. There is evidence to support using a standard dose for all patients. This will also minimize the potential for error and maximize consistency. The delivered dose will be self-regulated by the patient’s own inhalation pattern.

• Transition is made to the MDI and AeroChamber® when the frequency is at q2h. The dose is 8 puffs. **When children are transitioned to the MDI/AeroChamber® at q2h, this is an excellent teaching opportunity. It is important to explain to families that the standard dose for salbutamol treatment at home is 2 puffs q4h if required. If 2 puffs of salbutamol are required more often than q3h at home, this is a reason to bring their child to hospital. The child is able to receive a higher dose in hospital because he/she is still recovering and we are also monitoring their child’s vital signs and oxygen saturation carefully. It is important to stress to families that use of the higher dose at home is NOT a safe practice.**

• When the frequency decreases to q3h the dose is also decreased to 4 puffs.

• When the frequency decreases to q4h the dose is decreased to 2 puffs.

• If the patient is being discharged at q3h frequency, the dose should be decreased to 2 puffs for at least one treatment and the child reassessed prior to discharge.

• Effective medication delivery of 4 puffs salbutamol is approximately equivalent to 2.5 mg aerosol salbutamol and 8 puffs salbutamol is approximately equivalent to 5.0 mg aerosol salbutamol.

• **Consult the physician** if the patient has adverse reactions to beta₂-agonist treatment such as excessive coughing, increased irritability, tremor, increased wheezing, and significant tachycardia.

• Significant tachycardia is defined as >180/min. In the judgement of the physician, if the child is in asymptomatic sinus tachycardia this is not an indication to remove the child from the care map.

• Wean as per [Asthma: Salbutamol Treatment and Oxygen Guideline](#)

### Weaning Treatment Frequency

- The admitting physician will determine the initial frequency of salbutamol treatment based on the course of treatment in the Emergency Department or Pediatric Intensive Care Unit.

- Standard treatment frequency of q1h, q90 min, q2h, q3h and q4h will most commonly be used. Additional medications may be required and ordered by the physician. The MD, RN and RRT will check the patient when possible between scheduled assessments for signs of worsening respiratory distress.

- Treatment decisions are made based on the Asthma Clinical Score (ACS) and respiratory assessment.

- The RN or RRT and MD decide when to wean the salbutamol frequency until it decreases to q2 hours. The RN and or RRT may guide subsequent treatment weaning and oxygen therapy titration until discharge outcomes are met.

- When a child comes to the ward at q1 hourly inhalation treatments, the resident/house staff will reassess the child following the third q hourly inhalation treatment. The child...
will be reassessed sooner if the nurse feels that the child’s clinical status has deteriorated or if there has been an improvement in the child’s clinical status that would indicate that the child could be weaned to q90 minute inhalation treatments or if at any time the nurse is concerned/uncomfortable with his/her clinical assessment.

- The MD is required to assess the patient pre-treatment when:
  - The patient assessment indicates a decrease in treatment frequency up until q2h
  - the treatment frequency is < 2 hours
  - an increase in treatment frequency is indicated

- The ACS is completed pre and post treatment and documented on the Asthma Clinical Scoring Sheet.

- Pre-Treatment Scores:
  - If the pre-treatment ACS is ≥ 2, the treatment will be given and the treatment frequency will remain unchanged.
  - If the pre-treatment ACS is >4, give an immediate salbutamol treatment and consult the MD.
  - If the pre-treatment ACS is <2 the treatment will not be given, the treatment frequency will be reduced and the patient will be assessed at the next time interval.

- When the frequency is reduced to q2h the method of delivery will change from aerosol to MDI, 8 puffs, with patient appropriate spacer device at 30 second to 1 minute intervals. The RN or RRT will instruct and reinforce proper MDI inhaler technique with each puff.

- If following the initial transition to MDI the post treatment score is >4 give aerosol treatment and notify the physician. Administer subsequent treatments via aerosol at the previously tolerated frequency until the ACS decreases to 0 or 1 and treatment frequency is reassessed. If a decrease in treatment frequency is required, retry MDI.

**Increasing Treatment Frequency**

- If the ACS post treatment increases to >4 or an acute deterioration is observed at any time, the RN or RRT will give an aerosol treatment and notify the MD.

**Consult the Physician:**

- When the patient is assessed to have a ACS >4 that may include clinical signs such as:
  - decreased air entry without wheezing (silent chest)
  - prolonged and forced expiratory phase

- When the treatment frequency increases during the weaning process (ex. q2h →q1h).
- When the treatment frequency decreases and the treatment frequency is ≤ q2h.
- If following the initial transition to MDI the post treatment score is >4, give aerosol treatment and notify the physician.
- When the treatment frequency is unchanged after 3 consecutive treatments at the same time interval.
- If the patient has an adverse reaction to aerosol treatment such as excessive coughing.
- Consult PICU according to Nursing Policy Ventolin Administration 100.30.118.

**Corticosteroids**
The choice of oral corticosteroid (i.e. prednisone vs prednisolone, dexamethasone) is based on the patient’s ability to tolerate medication. Prednisone and prednisolone may be interchanged based on the patient’s acceptance of tablet or liquid dosage form.

Patients intolerant of prednisone/prednisolone or who are unlikely to complete a 4 day course of corticosteroid may receive dexamethasone.

Intravenous methylprednisolone should be chosen for patients who are unable to tolerate oral medications.

If a child receives a dose of prednisone prior to 0300 in the Emergency Department, the next dose will be given in the morning. If the first dose of prednisone is received after 0300 the next dose will be given the following day.

The standard course of prednisone for an asthma exacerbation is five days.

Dexamethasone has a longer half life (36-72 hours) than prednisone (18-36 hours). The standard course of therapy is 2 days. The second dose should be given on the next calendar day.

Inhaled corticosteroids using the MDI/Aerochamber® will be introduced when the bronchodilator inhalation treatments are weaned to q2h.

**Nutrition**

- Pediatric Standard diet as tolerated.
- Known food allergies are considered and signage is posted as required.
- Oral intake is determined by nursing/ respiratory therapy/ physician judgement.
- The physician may place the child NPO if there is a history or evidence of intolerance of fluids.

**Safety/Activity**

- Orient the child and family to the unit.
- Activity as tolerated.
- Family/Child receives a copy of the Inpatient Pediatric Asthma Family Care Guide.

**Teaching**

- The parent/caregiver is provided with an opportunity to watch the asthma video if the child is ≥3 years of age.
- The parent/caregiver is given a copy of the Asthma Education Teaching Package. The package contains:
  - How to Care for Your Child or Adolescent with Asthma
  - Children’s Asthma Education Centre pamphlet
  - Caring for Your Child’s Asthma After a Hospital Stay
  - Patient Education Record
  - Asthma Action Plan
- Any member of the multidisciplinary team may carry out inhaler technique and discharge asthma teaching, ie: nurse, physician, registered respiratory therapist, or pharmacist.
- The appropriate “How To Use” inhaler teaching sheets are provided and reviewed with all families.
• The family/child will demonstrate proper use of drug delivery techniques for any devices prescribed:
  o How to Use the Puffer (Metered Dose Inhaler or MDI) (form #W-00075)
  o How to Use the Puffer (Metered Dose Inhaler or MDI) & Pediatric Spacer (form #W-00077)
  o How to Use the Puffer (Metered Dose Inhaler or MDI) & Adult Spacer (form #W-00078)
  o How to Use the Turbuhaler (form #W-00076)
  o How to Use the Diskus (form #W-00083)

Discharge Planning

Clinical Outcomes
1. Oxygen saturation on room air while awake ≥91%.
2. Respiratory, neurological and cardiovascular status stable with salbutamol inhalation therapy at q3-4h intervals (as per physician’s order).
3. If child ≥5 years: Pulmonary Function Test pre and post bronchodilator therapy done or referral to the Pulmonary Function Lab for follow-up post discharge has been done.

Teaching Outcomes
4. Discharge teaching has been completed. Includes:
   • A review of the reasons to return to the hospital
   • The role, dosing, and scheduling of oral corticosteroids, relievers, and controllers
5. Family receives and understands their written Asthma Discharge Plan. A discharge plan includes:
   • Use of asthma medications until follow-up with physician.
   • When to seek medical attention due to increased symptoms.
   • Instructions to follow-up with their family physician or Children’s Clinic within 7 days of their child’s discharge.
6. Family is able to afford discharge medications and/or provisions made as per Social Worker.

Follow up Outcomes
7. Discharge prescriptions given if medications not available at home.
8. Referral to Children’s Asthma Education Centre completed.
9. Family is aware to arrange follow-up appointment with primary care physician within 7 days of discharge.
10. Follow-up appointments as requested by the consulting sub-specialists i.e. allergy, respirology have been arranged if applicable.
11. Asthma Discharge Plan (and Discharge Information Sheet only if applicable) has been faxed to primary care physician.
Documentation Guidelines

Generic Care Map Charting Guidelines
The purpose of the Care Map is to provide a systematic means of gathering patient information which identifies baseline data and ongoing assessment and care standards.

1. **Key Definitions:**
   
   **Interventions:** are patient care activities needed to be undertaken in order to assist patients to achieve discharge outcomes in a timely manner. These are listed on the Care Map in the appropriate category of care. The categories of care are defined as: Assessments/Psychosocial, Tests/Consults, Treatments, Nutrition, Safety/Activity, Teaching, and Discharge Planning.

2. **Six Basic Documentation Rules**

   **Basic Rule: Initial in all sections of the Care Map. Do not leave any blank spaces. If you have not initialed the intervention/outcome it can be interpreted as not completed or not met.**

   1. Intervention done or Outcomes met
      - Each intervention or outcome in a category of care may be initialed individually OR bracketed, as a group, to indicate completion.
      - The bracket indicates that ALL interventions or outcomes have been addressed. If one intervention or outcome is NOT met a bracket will not be used.
      - Ongoing assessment and treatments may be initialed at the end of the shift.
   2. Item not appropriate for your shift
      - Indicate N/A if “not applicable” on your shift. This will indicate that the item has been addressed, e.g. walking in the hallway on the night shift.
   3. Item not appropriate to patient
      - Draw a line through it, initial and star the item as it indicates that a variance note is required to explain the reason.
   4. Item ordered then discontinued
      - Draw a line through the item, write d/c, time, date and initial the item.
   5. Intervention ordered in addition to the pre-printed Standard Physician Orders.
      - Write the intervention on the Care Map in the appropriate care category and time frame.
   6. Intervention not done or Outcome not met
      - Place an * in the appropriate column across from the intervention or outcome not achieved or met.
      - Write the variance on the Variance Record and describe corrective action plan.
      - If appropriate write the action plan on the Care Map, in the time frame in which it is to be next assessed.

3. **Not Progressing with the Plan of Care**

   When the nurse and/or physician determines that **most** of the "critical" (to the length of stay) expected outcomes are not met for discharge on the applicable day, and the length of stay will be increased, then the Care Map will be continued on the Extension Map.
The Inpatient Asthma Care Map will be discontinued:

- if there is a clinical deterioration in the child’s clinical status and the frequency of the bronchodilator treatments >q1h.
- the child is transferred to PICU.
- a variance form is completed if the care map is discontinued.

4. **SOAP Documentation and the Care Map System**

   Documentation using the Integrated Progress Notes by Nursing Staff is only done if further explanation is required to clarify an issue/problem. Do not double document on the Integrated Progress Notes if the information is clearly documented as a variance. If further explanation is required, document “see IPN” in the appropriate column on the Care Map. Medical and Allied Health staff will continue to document in the IPN as their common practice dictates.

5. **Preprinted Standard Physician Orders on the Care Map**

   1. Standard orders are identified with a solid black box (■). These are initiated on all patients placed on the Care Map and are pre-printed on the Care Map.
   2. Individualized orders are identified with a blank box (□). These require a physician's order to activate them. To activate the order place a "√" inside the box.
   3. Other individualized orders can be added to the standard order sheet. Once these orders are processed, further orders are to be written on the HSC physician order sheets with the following exception: As the patient progresses through the salbutamol weaning algorithm, this can be documented on the IPN, but a formal physician order is not required.
   4. The Physician Order Sheet for Home Medications Only (NS000850) should be completed for each child.

**Asthma Care Map Charting Guidelines**

On admission to the unit the nurse/clerk shall ensure the HSC Medical Care Map Variance Record and the HSC Signature Record are addressographed and placed with the patient's bedside chart. All Disciplines documenting on Care Map will enter their full signature/printed names/initials on the HSC Signature Record.

The admitting nurse will document the admission date and time at the top of the Care Map. Nursing staff will indicate their ‘type’ of shift (D8, D12, E1, E2, N8, or N12) in the appropriate columns and initial their care under the appropriate columns.

**Assessment Section**

- Children’s Hospital Nursing Data Base (form #85396)
  - Complete Children’s Nursing Data Base form within 24 hours of admission according to the charting guidelines.
- Nursing assessments are required q4h. Assessments reflect a charting by exception concept in which only abnormal assessments are identified by placing a star (*) in the initial column. This * refers one to the HSC Medical Variance Record where the
assessment findings are detailed and an action plan is developed. Note: Page 7 and Page 6 of the care map details the normal assessment parameters.

**Psychosocial Section**
- Transcribe any known areas of concern in relation to the patient. If complex needs/concerns are identified, put a ‘*’ in the appropriate area, and a write a variance or a note in the IPN.

**Test/Consult Section**
- A referral should be faxed to the Pulmonary Function Lab (fax number 71944) at the time of admission. The Pulmonary Function Lab will follow up the referral on their next working day if the PFT’s have not been done prior to discharge.

**Treatment Section**
- Vital signs, blood pressure, temperature and oxygen saturations are done as per frequency table on page 6 of the Care Map and recorded on the Pediatric Asthma Clinical Scoring Sheet
- Medications are administered as per the standard orders and documented on the MAR as current practice dictates.

**Plan Reviewed Section**
The unit nurse will review the entire plan of care for his/her shift to ensure that all interventions and outcomes have been addressed. Upon completion of the review, the “plan reviewed” section will be initialed. Staff working part of a shift will initial only those interventions and/or outcomes that were attended by them. The nurse assigned to the patient is responsible for signing the “plan reviewed” section to ensure its completion.

**Attending/House Staff/Resident Note Sections**
- The notes will be written on integrated progress notes. Orders to progress on the frequency of inhalation treatments do not need to be written on the Physician Order Sheet. Progression of inhalation treatments will be documented on the progress notes.
- The history and physical done on admission will not be documented on the progress notes.

**Allied Health Notes on the Daily Progress Notes**
- Other disciplines involved in the child’s care will document on the integrated progress notes.
Pediatric In-Patient Asthma Salbutamol Weaning Algorithm

1. **Pre Score**
   - 2 - 4
   - >4

2. **q1h tx**
   - Face mask
   - 5 mg

3. **Pre Score**
   - 2 - 4
   - >4

4. **Give neb Tx & Consult MD**

5. **q90 min tx**
   - Face mask
   - 5 mg

6. **Pre Score**
   - 2 - 4
   - >4

7. **Give neb Tx & Consult MD**

8. **q2h tx**
   - Aerochamber
   - 8 puffs

9. **Pre Score**
   - 2 - 4
   - >4

10. **Give neb Tx & Consult MD**

11. **q3h tx**
    - Aerochamber
    - 4 puffs

12. **Pre Score**
    - 2 - 4
    - >4

13. **Give neb Tx & Consult MD**

14. **q4h tx**
    - Aerochamber
    - 2 puffs

* 3 Tx at the same Frequency
Consult MD

If discharge at q3h freq
Dose = 2 puffs
Discharge if all other criteria met
References

## Copy of the Pediatric Asthma Care Map System

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS00696</td>
<td>Pediatric Asthma Inpatient Care Map</td>
</tr>
<tr>
<td>PHOR #171</td>
<td>Pediatric Asthma Inpatient Care Map Physician’s Order Sheet</td>
</tr>
<tr>
<td>NS00695</td>
<td>Pediatric Asthma Clinical Scoring Sheet</td>
</tr>
<tr>
<td>W00114</td>
<td>Caring for Your Child’s Asthma After a Hospital Stay</td>
</tr>
<tr>
<td>W00115</td>
<td>Pediatric Asthma Inpatient Family Care Guide</td>
</tr>
<tr>
<td>W00075</td>
<td>How to Use the Puffer (Metered Dose Inhaler or MDI)</td>
</tr>
<tr>
<td>W00077</td>
<td>How to Use the Puffer (Metered Dose Inhaler or MDI) and Pediatric Spacer</td>
</tr>
<tr>
<td></td>
<td>How to Use the Puffer (Metered Dose Inhaler or MDI) and Adult Spacer</td>
</tr>
<tr>
<td>W00076</td>
<td>How to Use the Diskus</td>
</tr>
<tr>
<td></td>
<td>How to Use the Turbuhaler</td>
</tr>
<tr>
<td>W00081</td>
<td>Pediatric Asthma Discharge Plan</td>
</tr>
<tr>
<td>NS00477</td>
<td>Medicine Care Map Variance Record</td>
</tr>
</tbody>
</table>