



Children's Hospital
of The King's Daughters

Learning and Leadership Collaborative VI

Cystic Fibrosis Clinic Playbook

2008-2009

Playbook Table of Contents

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Play #1

Pulmonary Exacerbation Score

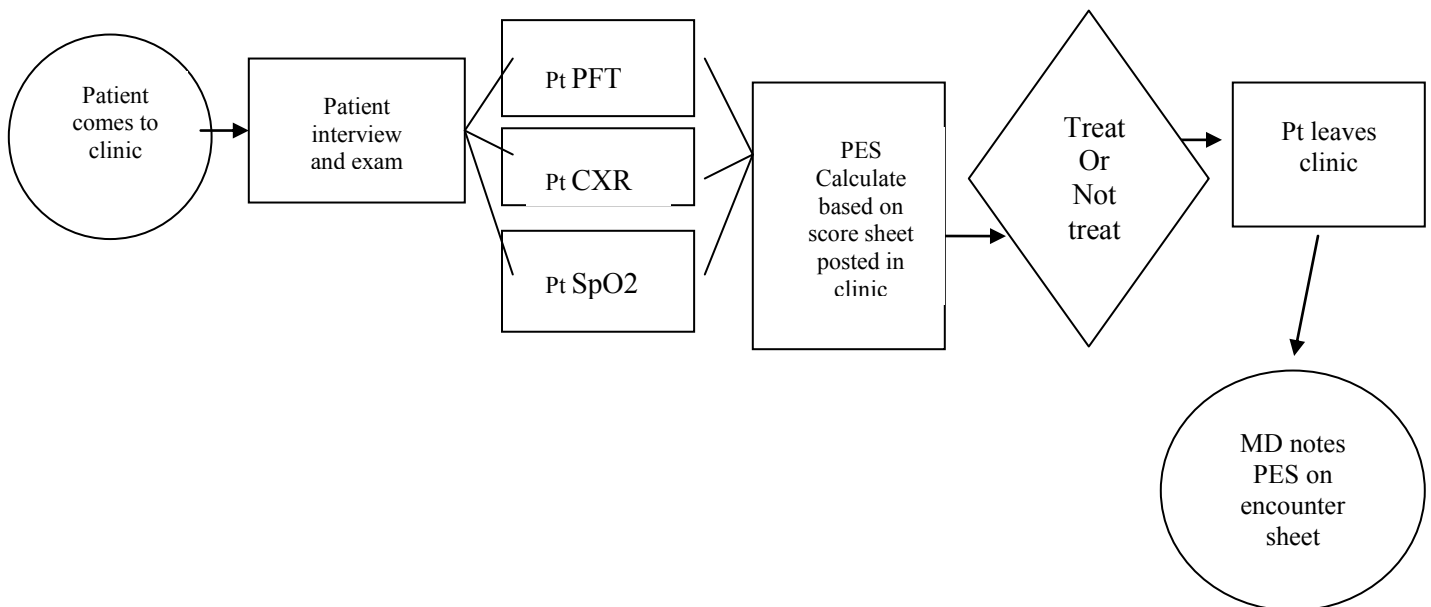
Purpose:

To Identify and treat all patients with pulmonary exacerbations using the same criteria

Process:

The process starts when the patient comes to clinic.

The process ends when the physician makes notes PES on encounter sheet.



Data Collection

Data collection includes the number of PES completed, number of patients with a PES score greater than 5, and whether or not they received treatment. The data will be completed in an Excel spreadsheet and graphs will be reported and reviewed monthly.



Children's Hospital of The King's Daughters, Inc.
601 Children's Lane, Norfolk, VA 23507-1910

**CYSTIC FIBROSIS
PRESCRIBED TREATMENT PLAN**

Patient Label or MRN, Acct#, Patient Name, DOB, Date of Service

Today's Date: _____ Patient Name: _____ Dr. _____

<p>AIRWAY CLEARANCE</p> <ul style="list-style-type: none"> • This is the most important thing you can do to keep your lungs healthy • You should do airway clearance at least _____ times a day. If you have more cough than usual, increase this to _____ times a day <p>Primary: CPT Flutter Acapella Vest</p> <p>Duration: 10 min 15 min 20 min 30 min</p> <p>Secondary: CPT Flutter Acapella Vest</p> <p>Duration: 10 min 15 min 20 min 30 min</p> <p><u>Oxygen:</u> _____ liters continuous while asleep</p>	<p>MEDICATIONS</p> <p><u>Airway:</u></p> <p>Albuterol/ Xopenex® nebulizer _____mg _____ times/day</p> <p>MDI _____# of puffs/inhalations _____ times/day</p> <p>With increased cough _____ times/day</p> <p>Inhaled Anti-Inflammatory Agents:</p> <p>Pulmicort 0.25 / 0.5 / 1.0 mg Flovent® 44 / 110 / 220</p> <p>QVAR® 40 / 80 ADVAIR® 100 / 250 / 500 45 / 115 / 230</p> <p>_____# of puffs/inhalations _____ times/day</p> <p>Pulmozyme: _____mg _____ times/day</p> <p>Zithromax: 250mg 500mg 3 times a week</p> <p>Inhaled Meds: TOBI® Colistin® _____mg _____ times/day</p> <p>off / on every other month</p> <p>Hypertonic saline: 5% 7% _____mL _____ times/day</p> <p>Allergy: Singulair® 4 / 5 / 10 mg once a day</p> <p>Claritin® Zyrtec® Allegra® Clarinex® _____mg _____ times/day</p> <p>Flonase® / Rhinocort® / Nasonex® _____sprays _____ times/day</p> <p>Sinus: Mucinex® _____ tablets _____ times/day</p> <p>Hypertonic saline nasal washes _____ times/day</p>
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<p>NUTRITION</p> <p>Meds: Vitamins: Brand: _____ liquid/chewable/softgel/tablet _____ times/day</p> <p>Antacids: Zantac® Protonix® Prevacid® Prilosec® Other _____mg _____ times/day</p> <p>Liver: Actigall® (Ursodiol) _____ mg _____ times/day</p> <p>Appetite stimulant: Periactin® _____ mg _____ times/day</p> <p>Enzymes: Creon® _____ Ultrase® _____ Pancrease® _____ Pancreacarb® _____</p> <p>Other _____</p> <p>Dose: _____ with meal _____ with snack _____ before tube feed _____ after tube feed</p> <p>Nutritional Supplements: Boost® Scandishake® Ensure® Pediasure® CIB</p> <p>Other: _____ times/day</p> <p>Tube Feedings: Nutren 1.5 / 2.0 Pediasure® Peptamen 1.0 / 1.5 Resource Day time bolus _____</p> <p>Feeding Schedule _____ (e.g. overnight drip _____mL/hour) Days per week _____</p> <p>Boosting Calories: Increase intake at meals Add snack(s) Additional meals</p> <p>Adding calories _____ Calorie Boosters: butter scandical dry milk powder oil</p>	<p>WEIGHT GOAL: _____ kg</p>
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OTHER INSTRUCTIONS: _____

CHKD Form MR NOT APPROVED FOR USE

Signature: _____

Play #2

Nutrition Action Plan

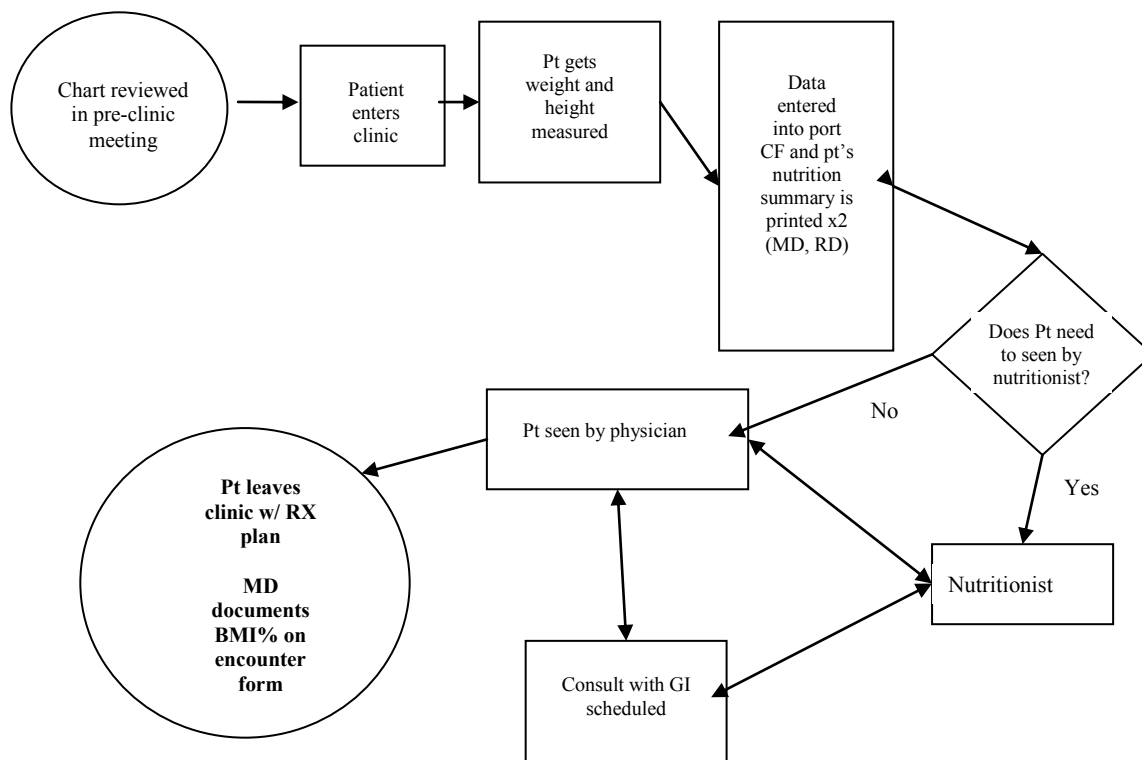
Purpose:

To determine the nutritional status of each patient and identify and treat the patients at nutritional risk

Process:

The process starts when the chart is reviewed in pre clinic meeting.

The process ends when the physician documents BMI % on encounter form.



Data Collection

Data collection includes calculating BMI. We will do chart reviews every 6 weeks and randomly check one half of the charts. The data will be completed in an Excel spreadsheet and graphs will be reported and reviewed every 6 weeks.

**CYSTIC FIBROSIS CENTER
INTERVAL NOTE**

Patient Label or MRN, Acct#, Patient Name, DOB, Date of Service

Date: _____		Allergies: _____		Referring Physician: _____	
Central Line: <input type="checkbox"/> Yes <input type="checkbox"/> No		Date: _____	Date Last Flushed: _____		Date Last Visit: _____
Contact Precaution: _____			Height Last Visit: _____		Wt. Last Visit: _____ kg.
Vital Signs:	T: _____ °C	P: _____	R: _____	BP: _____	Ht: _____ cm ↑ ↓ (_____ %)
INTERVAL SUMMARY:				Wt for Ht: _____ %	BMI _____ %
Date Last Hospitalization: _____				Last IV _____	
Antibiotics: _____					
Activity: <input type="checkbox"/> Increased <input type="checkbox"/> Same <input type="checkbox"/> Reduced /Specify: _____				Missed School/Work: _____ days	
Cough: <input type="checkbox"/> None <input type="checkbox"/> Occasionally <input type="checkbox"/> Daily /Specify: _____					
Sputum: <input type="checkbox"/> None <input type="checkbox"/> Occasionally <input type="checkbox"/> Daily			Hemoptysis: <input type="checkbox"/> None <input type="checkbox"/> Scant <input type="checkbox"/> Minor <input type="checkbox"/> Major		
Specify: _____					
Dyspnea: <input type="checkbox"/> None <input type="checkbox"/> At Rest <input type="checkbox"/> With Exertion			Exercise: _____		
Wheezing: <input type="checkbox"/> None <input type="checkbox"/> Rarely <input type="checkbox"/> Occasionally <input type="checkbox"/> Daily /Specify: _____					
Appetite: <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent /Specify: _____					
Stools: Number per day: _____				<input type="checkbox"/> Abdominal Pain	
Other: <input type="checkbox"/> Vomiting <input type="checkbox"/> Rectal Prolapse <input type="checkbox"/> Heat Prostration <input type="checkbox"/> Abnormal Bleeding					
CURRENT THERAPIES:					
Nutrition: <input type="checkbox"/> Oral Supplements : _____ - Frequency _____					
<input type="checkbox"/> Enteral Feeds _____ Enzymes: _____ before _____ after					
<input type="checkbox"/> Multivitamins: _____					
Pancreatic Enzymes: Brand: _____ # with Meals: _____ # with Snacks: _____					
Aerosol Therapy and Airway Clearance:			CURRENT MEDICATIONS:		
<input type="checkbox"/> β Agonist: _____			<input type="checkbox"/> Antibiotic: _____		
<input type="checkbox"/> Inhaled Steroid: _____			Oral: _____		
<input type="checkbox"/> Airway Clearance Technique			Zithromax _____ M/W/F _____		
<input type="checkbox"/> Vest <input type="checkbox"/> CPT <input type="checkbox"/> Acapella Other _____			IV: _____		
Frequency _____ Time per session _____			_____		
<input type="checkbox"/> Oxygen: _____			<input type="checkbox"/> TOBI®: _____ cycle date: _____		
<input type="checkbox"/> Pulmozyme® <input type="checkbox"/> 2.5mg daily <input type="checkbox"/> BID <input type="checkbox"/> Other _____			Colistin: _____ cycle date: _____		
<input type="checkbox"/> Hypertonic Saline __ 7% __ 5% __ other _____			<input type="checkbox"/> Insulin/Oral Hypoglycemic: _____		
_____			<input type="checkbox"/> Contraceptive (oral): _____		
_____			<input type="checkbox"/> _____		
_____			<input type="checkbox"/> _____		
<input type="checkbox"/> Flu Shot <input type="checkbox"/> Immunizations UTD <input type="checkbox"/> Pneumococcal					
Completed by: _____			Reviewed by: _____		

	Normal	Abnormal	Comments
General	<input type="checkbox"/>	<input type="checkbox"/>	
Eyes	<input type="checkbox"/>	<input type="checkbox"/>	
Nose	<input type="checkbox"/>	<input type="checkbox"/>	
Ears	<input type="checkbox"/>	<input type="checkbox"/>	
Oro-pharynx	<input type="checkbox"/>	<input type="checkbox"/>	
Neck	<input type="checkbox"/>	<input type="checkbox"/>	
Chest	<input type="checkbox"/>	<input type="checkbox"/>	
Lungs	<input type="checkbox"/>	<input type="checkbox"/>	
Heart	<input type="checkbox"/>	<input type="checkbox"/>	
Abdomen	<input type="checkbox"/>	<input type="checkbox"/>	
Liver	<input type="checkbox"/>	<input type="checkbox"/>	
Spleen	<input type="checkbox"/>	<input type="checkbox"/>	
Neuro	<input type="checkbox"/>	<input type="checkbox"/>	
Extremities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> clubbing: _____+

STUDIES PERFORMED: PFTs: stable improved decreased CF Respiratory Culture: sputum throat
IgE CBC Vitamin Levels (A,D,E) CMP/GGT Oximetry AFB Culture and Smear
Other: _____

CHEST XRAYS:

Please Check **ALL CURRENT DIAGNOSES:**

- Cystic Fibrosis:** stable interval improvement interval decline exacerbation
 Allergic Bronchopulmonary aspergillosis **Asthma/RAD** **Pneumothorax**
 Hemoptysis: scant minor (<1 cup/24hr) major (>1 cup/24hr)
 Laryngitis **Pharyngitis** **Voice Alteration** **Nasal Polyposis** **Sinusitis** (symptomatic)
 Liver Disease cirrhosis portal hypertension elevated LFTs **Diabetes** **Glucose Intolerance**
 Rectal Prolapse **Pregnancy** **GERD** **Failure to Thrive/Malnutrition**
 _____ _____ _____

Nutritional Status: Stable Improved Decreased

Respiratory Status: Stable Improved Decreased

DISPOSITION:

- Continue current therapy
 Change: _____
 Add: _____
Comments: _____

Treated for exacerbation yes no Antibiotic Treatment Initiated: oral IV TOTAL PES
Treated for Alternative Diagnosis If already on treatment Continue D/C Change Oral to IV

Return: _____ **Studies next visit:** _____

Cystic Fibrosis Prescribed Treatment Plan

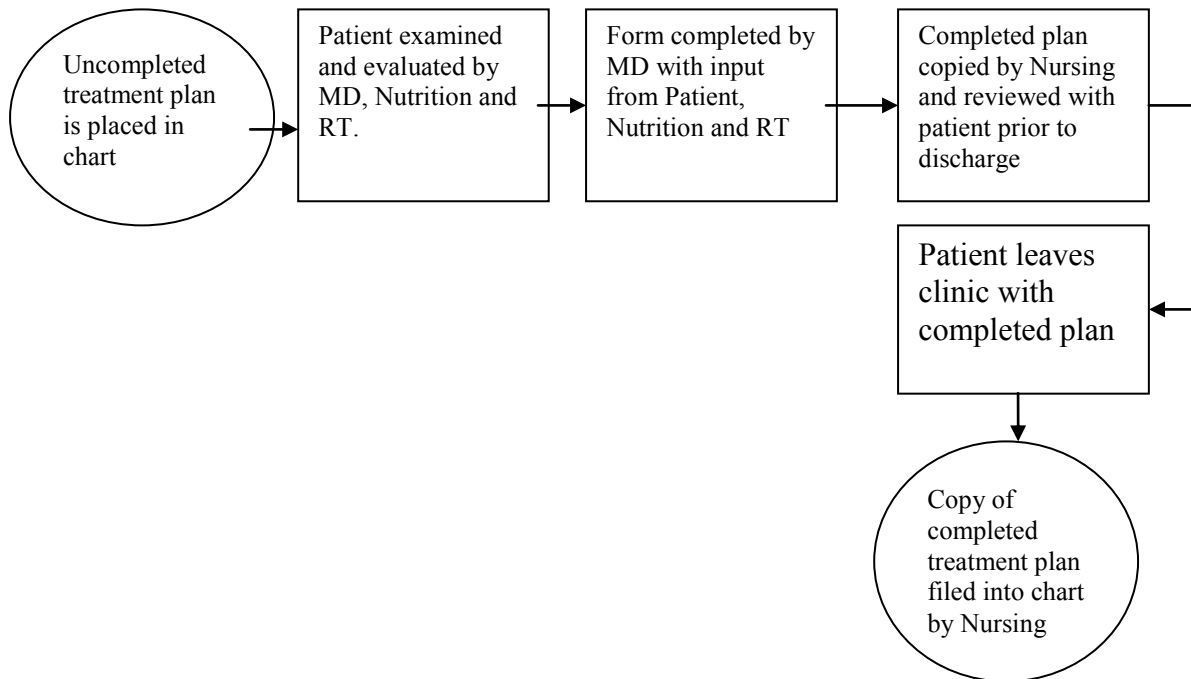
Purpose:

To encourage self management skills and educate patients in their prescribed treatment plan at each clinic visit.

Process:

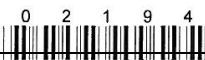
The process starts when the uncompleted treatment plan is placed into the chart prior to clinic.

The process ends when a copy of the completed treatment plan is filed into the chart.



Data Collection

Data collection includes the number of the treatment plans completed. To monitor compliance use, nursing will do random checks once a month. The data will be compiled into our Action Plan Utilization Run Chart and reviewed by Center Director.



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601 Children's Lane, Norfolk, VA 23507-1910

**CYSTIC FIBROSIS
PRESCRIBED TREATMENT PLAN**

Patient Label or MRN, Acct#, Patient Name, DOB, Date of Service

Today's Date: _____ Patient Name: _____ Dr. _____

AIRWAY CLEARANCE

- This is the most important thing you can do to keep your lungs healthy
- You should do airway clearance at least _____ times a day. If you have more cough than usual, increase this to _____ times a day

Primary: CPT Flutter Acapella Vest

Duration: 10 min 15 min 20 min 30 min

Secondary: CPT Flutter Acapella Vest

Duration: 10 min 15 min 20 min 30 min

Oxygen: _____ liters continuous while asleep

MEDICATIONS

Airway:

Albuterol/ Xopenex® nebulizer _____mg _____ times/day

MDI _____# of puffs/inhalations _____ times/day

With increased cough _____ times/day

Inhaled Anti-Inflammatory Agents:

Pulmicort 0.25 / 0.5 / 1.0 mg Flovent® 44 / 110 / 220

QVAR® 40 / 80 ADVAIR® 100 / 250 / 500 45 / 115 / 230

_____# of puffs/inhalations _____ times/day

Pulmozyme: _____mg _____ times/day

Zithromax: 250mg 500mg 3 times a week

Inhaled Meds: TOBI® Colistin® _____mg _____ times/day

off / on every other month

Hypertonic saline: 5% 7% _____mL _____ times/day

Allergy: Singulair® 4 / 5 / 10 mg once a day

Claritin® Zyrtec® Allegra® Clarinex® _____mg _____ times/day

Flonase® / Rhinocort® / Nasonex® _____sprays _____ times/day

Sinus: Mucinex® _____ tablets _____ times/day

Hypertonic saline nasal washes _____ times/day

NUTRITION

WEIGHT GOAL: _____ kg

Meds: Vitamins: Brand: _____ liquid/chewable/softgel/tablet _____ times/day

Antacids: Zantac® Protonix® Prevacid® Prilosec® Other _____mg _____ times/day

Liver: Actigall® (Ursodiol) _____ mg _____ times/day

Appetite stimulant: Periactin® _____ mg _____ times/day

Enzymes: Creon® _____ Ultrase® _____ Pancrease® _____ Pancreacarb® _____

Other _____

Dose: _____ with meal _____ with snack _____ before tube feed _____ after tube feed

Nutritional Supplements: Boost® Scandishake® Ensure® Pediasure® CIB

Other: _____ times/day

Tube Feedings: Nutren 1.5 / 2.0 Pediasure® Peptamen 1.0 / 1.5 Resource Day time bolus _____

Feeding Schedule _____ (e.g. overnight drip _____mL/hour) Days per week _____

Boosting Calories: Increase intake at meals Add snack(s) Additional meals

Adding calories _____ Calorie Boosters: butter scandical dry milk powder oil

OTHER INSTRUCTIONS:

CHKD Form MR NOT APPROVED FOR USE

Signature: _____

Play #4

Airway Clearance and Respiratory Equipment Check off

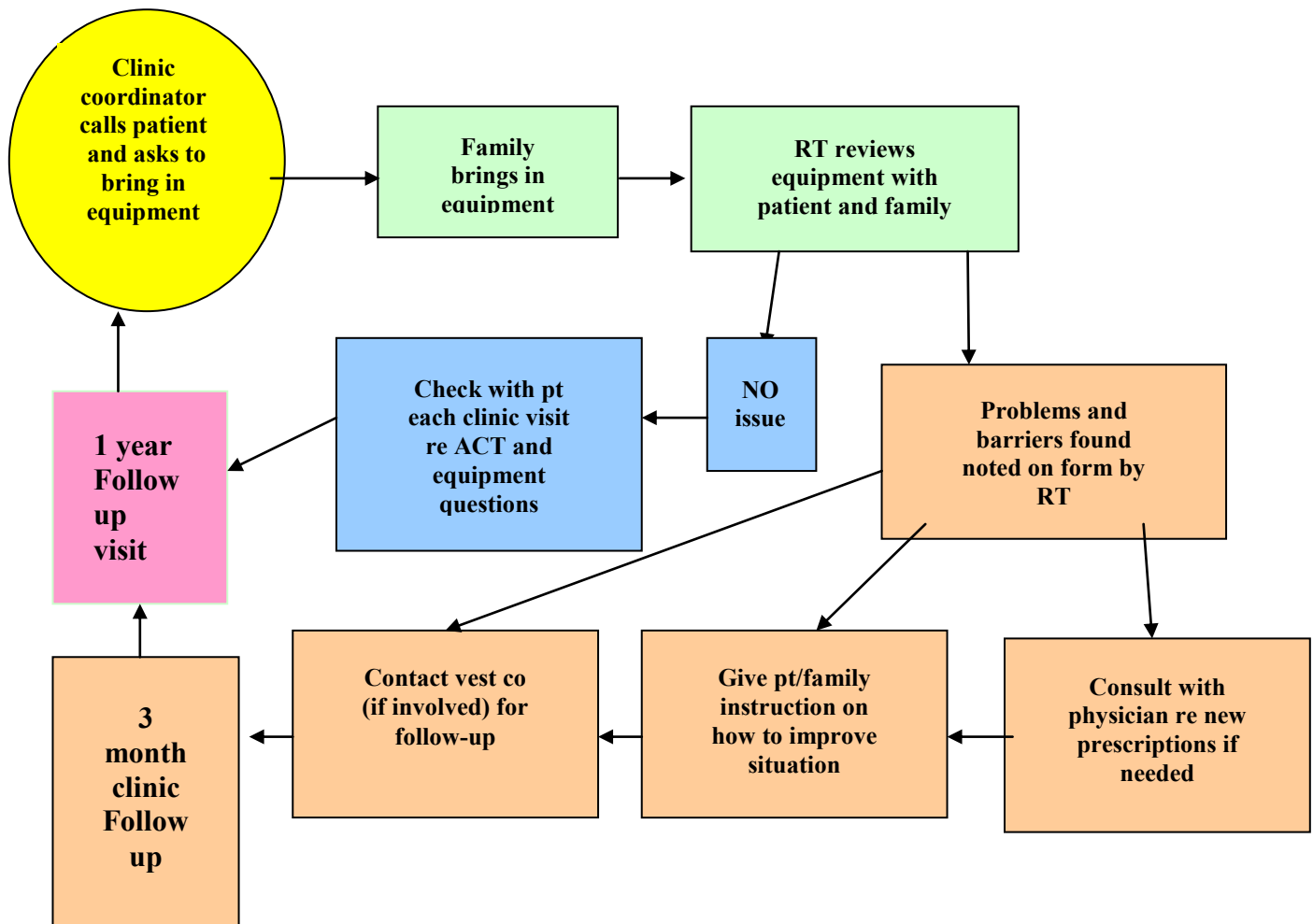
Purpose:

To Identify and correct potential problems with nebulizer and airway clearance procedures in order to provide more effective therapy and fewer barriers to treatment.

Process:

Process starts when families are notified via phone by the clinic coordinator to bring in all their respiratory equipment to their regular clinic visit. Equipment should include vest, Acapella, compressor, nebulizers, inhalers and any other device used for nebulized medications or airway clearance.

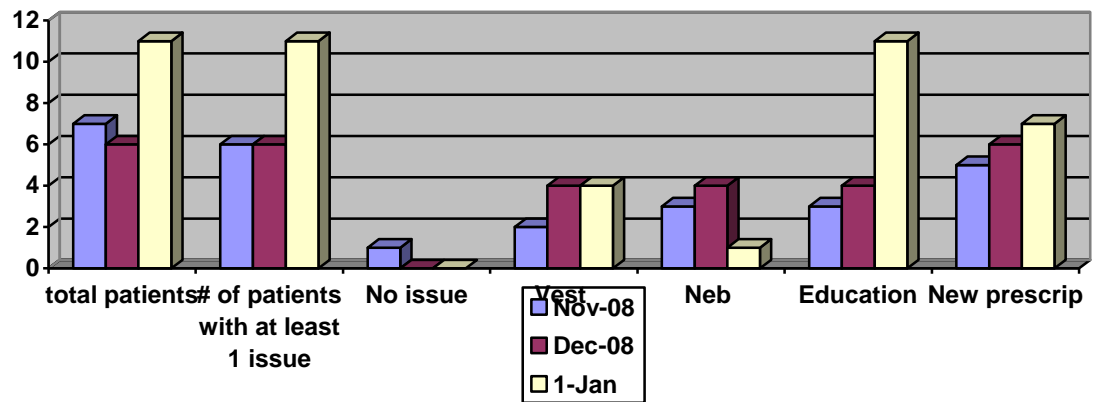
The process ends when patient and/or their family demonstrates and/or describes the proper procedures for each therapy.



Data Collection

A check-off sheet will be maintained for each patient and kept in a binder by the CF RCPs. Data will be tabulated on a monthly basis and charted in regards to how many patients participated in the check off process, how many problems were found and corrected and in what areas did the problems occur.

Airway Clearance and Respiratory Equipment Check-Off Metrics



Family brings
in equipment

Children's Hospital
King's Daughters

CF Clinic Airway Clearance and Respiratory Equipment Check-off

Patient name _____

MR # _____

Date _____

Method	PRESCRIPTION	DEMO	NEEDS	COMMENTS
VEST	Press freq			
Size	Min xday			
Chest measurement				
ACAPELLA	Min xday			
MANUAL CPT				
HUFF COUGH				
OTHER				
MEDICATION	DEVICE	DEMO	NEEDS	COMMENTS
PULMOZYME/DORNASE	Side stream/Pari			
TOBI	Pari LC Plus/Sprint			
ALBUTEROL				
HYPERTONIC SALINE				
OTHER				
MASK OR MOUTHPIECE				
COMPRESSOR				
DME COMPANY				
CLEANING				

ADDITIONAL COMMENTS