

Global Aim Statement
(Include registry data)

We aim to improve the pulmonary manifestations of CF in the UTHSCSA CF Center.

The process begins with reviewing center data to better understand our current treatment practices and infection rate. The process ends with the development of standardized treatment algorithms for the first time and chronic *Pseudomonas aeruginosa* and MRSA infections, treatment of exacerbations, and optimization of chronic therapy use. By working on this process, we expect to decrease chronic *Pseudomonas* and MRSA colonization rates, exacerbation rates, and sustain/improve pulmonary function. It is important to work on this now because our current infection and exacerbation rates are higher and our use of inhaled antibiotics is lower than the top 10 centers.

Registry Data:
FEV1, Exacerbation Rate, MRSA and Pa colonization rates, rates of use of chronic medications

Specific Aim Statements

We will increase the use of a pulmonary exacerbation (PEX) scoring system from 0 to 100% by 12/31/15 for all patients seen in clinic or who contact the clinic due to illness.

We will decrease the rate of *Pseudomonas aeruginosa* positive cultures in patients from 0-6 years to less than 10% by 12/2016.

We will insure that 100% of our patients are properly cleaning their nebulizers by 12/2016.

We will reduce the rate of MRSA positive cultures by 10% by 12/2016.

Measures
(Operational Definitions)

% time RN/MA use the PEX scoring sheet
% time the PEX sheet completed appropriately

patients < 6 years of age Pa+ monthly
% patients < 6 years of age Pa+ annually

% pts who undergo nebulizer cleaning technique evaluation/re-evaluation weekly by RT
% pts who were correctly cleaning nebulizers

patients with MRSA+ cultures monthly
% patients <18 years of age MRSA+ annually
% patients >18 years of age annually

PDSA Cycles

PDSA Cycle-Develop a consensus definition for PEX
PDSA-Development of a EMR template for sick calls
PDSA-Creation/distribution of PEX/contact magnets

PDSA-Infection Control Site Visit
PDSA-Development of "Lung Bugs" pamphlet
PDSA-Develop culture database
PDSA-Formalize treatment algorithms

PDSA-Neb cleaning assessment and re-education in conjunction with Lung Bugs

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