On-line Appendix 1: Timeline of different activities related to improvement work at Arkansas Children’s Hospital CF Care Center from February 2006 to the end of the year in 2012.

<table>
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<tr>
<th>Year/month</th>
<th>Action</th>
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| **February** | • Established LLCIV team  
• Drafted ground rules  
• Reviewed PORT CF data  
• Mailed FAB applications  
• Discussed QI aims |
| **March** | • Began microsystems evaluation  
• Worked on 5 P’s (purpose, patients, professionals, processes, patterns)  
• Drafted staff satisfaction survey  
• Initial FAB meeting  
• Sent patient/physician ratio list to Appointment Center to ensure clinic schedule allowed each patient 3 CF clinic slots per 6 months |
| **April** | • Presented FAB plan, do, study, act process in Bethesda  
• Worked on clinic profile and demographics |
| **May** | • Created fishbone for barriers to clinic attendance  
• Created clinic flow chart  
• Discussed themes and specific aims  
• Drafted patient satisfaction survey  
• Reviewed CF patients in 2005 seen less than 4 times looking for patterns of non-adherence (i.e. age, gender, season, insurance, geographic area, or physician) |
| **June** | • Finalized purpose statement  
• Met with pulmonary section regarding LLCIV goals  
• Collated staff and clinic satisfaction surveys  
• Drafted rescheduling algorithm for missed appointments  
• Started clinic time cycle studies |
| **July** | • Distributed patient satisfaction survey to assess perception of care  
• Met with centralized scheduling team  
• Revised clinic template to include CF- specific slots |
| **August** | • Internal display posted  
• Met with nurses on rescheduling algorithm participation  
• Began run chart for patient specific missed appointment rates  
• Met with ACH information technology group to create daily missed appointment reports  
• Ended clinic time studies  
• First FAB newsletter distributed highlighting importance of clinic |
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<tr>
<th>Month</th>
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| September  | • Met with physicians and nurses on staff satisfaction results  
              • Collated time study data, and patient satisfaction results                                             |
| October -  | • Status report to LLCIV and poster presentation at the North American CF Conference  
              • Nutrition algorithm and monitoring started                                                                 |
| December   | • 2 issues of FAB newsletters distributed during 2006                                                        |
| 2007       | • Quarterly posting of clinic attendance, and BMI/W-L % on internal display and emailed to CF Team  
              • Three issues of FAB newsletter distributed during 2007                                                      |
| January    | • Reviewed run charts  
              • Outlined Center playbook  
              • Reviewed rescheduling algorithm, met with appointment center  
              • Auto emails sent to office assistant  
              • Reviewed nurses role in rescheduling                                                                         |
| Feb - Mar  | • Met with Appointment Center to standardize rescheduling algorithm                                             |
| May        | • Appointment Center opened on 5/4  
              • Assistant tracked patients who missed appointments to be rescheduled  
              • Reviewed scheduling issues with Section Chief since physician calendars not released hence appointment slots not available for next fiscal year (July 1 2007) |
| June       | • Final LLCIV meeting  
              • Standardized practice and continued monitoring through the outpatient committee as part of the CF Leadership team  
              • Monitoring of attendance: monthly through CFF Registry and quarterly through internal database              |
| 2008       | • Quarterly posting of clinic attendance, and BMI/W-L % on internal display and emailed to CF Team  
              • Three issues of FAB newsletter distributed during 2008  
              • Continued monitoring through the outpatient committee as part of the CF Leadership team  
              • Monitoring of attendance: monthly through CFF Registry and quarterly through internal database |
| Feb        | • Decision to establish an award to be given to 3 randomly selected patients who met 4 or more visits at the end of each calendar year |
| May        | • Outreach clinic in the northwestern part of the state opened with reassignment of patient/MD appointment slot ratios |
| June       | • Meeting was held with the Appointment Center team to discuss issues with staff not following the rescheduling decision tree |
| July       | • Changes were made to the appointment letter template and automated phone calls to patients }
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| **2009** | Quarterly posting of clinic attendance, and BMI/W-L % on internal display and emailed to CF Team  
|      | Two issues of FAB newsletter distributed during 2009  
|      | Continued monitoring through the outpatient committee as part of the CF Leadership team  
|      | Monitoring of attendance: monthly through CFF Registry and quarterly through internal database  |
|      | **2010** | Quarterly posting of clinic attendance, and BMI/W-L % on internal display and emailed to CF Team  
|      | One issue of FAB newsletter distributed during 2010  
|      | Continued monitoring through the outpatient committee as part of the CF Leadership team  
|      | Monitoring of attendance: monthly through CFF Registry and quarterly through internal database  |
|      | October | Annual CFF Quality Care Award: Recognizing Outstanding QI Projects and Accomplishments  |
|      | **2011** | Quarterly posting of clinic attendance, and BMI/W-L % on internal display and emailed to CF Team  
|      | Two issues of FAB newsletter distributed during 2011  
|      | Continued monitoring through the outpatient committee as part of the CF Leadership team  
|      | Monitoring of attendance: monthly through CFF Registry and quarterly through internal database  |
|      | Feb | Nurses were included in the notification of patients to be rescheduled sent by the office assistant  |
|      | **2012** | Quarterly posting of clinic attendance, and BMI/W-L % on internal display and emailed to CF Team  
|      | Three issues of FAB newsletter distributed during 2012  
|      | Continued monitoring through the outpatient committee as part of the CF Leadership team  
|      | Monitoring of attendance: monthly through CFF Registry and quarterly through internal database  |

CF = Cystic Fibrosis, BMI = Body mass index, W-L = Weight-for Length, and FAB = Family Advisory Board, QI = Quality Improvement, LLCIV = Learning and Leadership Collaborative IV, CFF = Cystic Fibrosis Foundation, PORT CF = CFF Patient Database.