# Appendix A: Synthesis Table: Interventions

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Interventions | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | Synthesis |
| Home Visit | X | X |  |  |  |  |  |  |  |  |  | 2 of 11 |
| Post Discharge Phone Calls | X | X |  |  | X |  |  |  |  |  |  | 3 of 11 |
| Discharge instructions / disease education |  | X | X |  |  |  |  |  |  | X | X | 4 of 11 |
| Inpatient Care Planning |  |  |  |  |  |  |  |  | X |  |  | 1 of 11 |
| Schedule Follow-up visits before discharge |  | X | X | X |  |  |  | X | X | X | X | 7 of 11 |
| Youth Adult Transition Clinic |  |  | X |  |  |  |  |  |  |  |  | 1 of 11 |
| Self-management strategies |  |  | X |  |  |  |  |  |  |  |  | 1 of 11 |
| Sickle Cell Outpatient Infusion Center / Clinic |  |  |  |  |  | X | X |  |  |  |  | 2 of 11 |
| Prescribe Hydroxyurea |  |  |  |  |  |  |  |  |  | X | X | 2 of 11 |
| 1 = Bronstein, L.R., et al. (2015); 2 = Gao, W., et al. (2018); 3 = Dangi-Garimella, S. (2015); 4 = Limenis (2017); 5 = Harrison et al. (2014); 6 = Lanzkron, S. et al. (2015); 7 = Koch, K. L., et al. (2013); 8 = Leschke, J., et al. (2012); 9 = Manwani, D., et al. (2014); 10 = Pashankar, F.D., et al. (2018); 11 = Onimoe, G.I., et al. (2016). |

# Appendix B: Synthesis Table: Outcomes

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | Synthesis |
| **Interventions** | HVPDCC | HVDCEFUA | DCEFUAYATCSMS | FUA | PDCC | SCIC | SCIC | FUA | ICPFUA | DCEFUAHYDR | DCEFUAHYDR |  |
| **Outcomes** |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Management |  |  |  |  |  |  |  |  |  |  |  | 1 of 11 |
| 30-day Readmission Rate |  |  |  | **-** |  |  |  |  |  |  |  | 10 of 11 |
| 14-day Readmission Rate |  |  |  |  |  |  |  |  |  |  |  | 1 of 11 |
| Patient satisfaction / engagement |  |  |  |  |  |  |  |  |  |  |  | 2 of 11 |
| Health Literacy |  |  |  |  |  |  |  |  |  |  |  | 1 of 11 |
| Number of Infusion Visits |  |  |  |  |  |  |  |  |  |  |  | 1 of 11 |
| ED visits |  |  |  |  |  |  |  |  |  |  |  | 1 of 11 |
| Admissions / Acute Care Utilization |  |  |  |  |  |  |  |  |  |  |  | 3 of 11 |
| Length of Stay (LOS) |  |  |  |  |  |  |  |  |  |  |  | 2 of 11 |
| High Utilizers |  |  |  |  |  |  |  |  |  |  |  | 1 of 11 |
| 1 = Bronstein, L.R., et al. (2015); 2 = Gao, W., et al. (2018); 3 = Dangi-Garimella, S. (2015); 4 = Limenis (2017); 5 = Harrison et al. (2014); 6 = Lanzkron, S. et al. (2015); 7 = Koch, K. L., et al. (2013); 8 = Leschke, J., et al. (2012); 9 = Manwani, D., et al. (2014); 10 = Pashankar, F.D., et al. (2018); 11 = Onimoe, G.I., et al. (2016). |
| HV=Home Visits; PDCC=Post-discharge calls; DCE=Discharge Education; FUA=Follow-Up Appointments; YATC = Youth Adult Transition Center; SMS =self-management system; SCIC = Sickle Cell Infusion Center; ICP = Inpatient Care Plan; HYDR = Hydroxyurea  = decrease  = increase - = no change |

# Appendix C: SCD Toolkit

What to Know Before You Go to the ER



**Appendix C: SCD Toolkit continued**

Medical Appointment Sheet



**Appendix C: SCD Toolkit continued**

Medical Emergency Information Sheet



**Appendix C: SCD Toolkit continued**

SMART Goals



**Appendix C: SCD Toolkit continued**

Healthy Behavior Contract



**Appendix C: SCD Toolkit continued**

Daily Pain Tracking Sheet



**Appendix C: SCD Toolkit continued**

Describe the Pain Sheet



**Appendix C: SCD Toolkit continued**

Patient Education Materials: Stress Diary Sheet



**Appendix C: SCD Toolkit continued**

Water Intake Tracking Sheet



**Appendix C: SCD Toolkit continued**

 Questions to Ask My Health Provider



**Appendix C: SCD Toolkit continued**

Fact Sheet: Sickle Cell Status



**Appendix C: SCD Toolkit continued**

Fact Sheet: Sickle Cell Status



**Appendix C: SCD Toolkit continued**

Sickle Cell Disease and Hemoglobin S



**Appendix C: SCD Toolkit continued**

Sickle Cell Disease and Hemoglobin S



# Appendix D: Process Measures Results

|  |  |  |
| --- | --- | --- |
| **SCD-specific education**Threshold >/= 90%Target >/= 95%Baseline data: ~51% |  | **Post-discharge follow-up appointments**Threshold >/= 90%Target >/= 95%Baseline data: ~15% |
| Number of encounters with completed SCD-specific education | 178 |  | Number of encounters with post-discharge follow-up appointment scheduled prior to discharge | 132 |
| Total number of encounters | 178 |  | Total number of encounters | 178 |
| **Compliance Rate** | **100%** |  | **Compliance Rate** | **74%** |

|  |
| --- |
| Reasons appointments not scheduled |
| Patient Refusal or request for self-schedule | 17 |
| Incomplete appointments | 14 |
| Unplanned discharges | 6 |
| Staff omissions (forgot to schedule) | 5 |
| Late appointments | 4 |
| Total | 46 |

# Appendix E: Outcome Measures Results

|  |
| --- |
| **Total Inpatient & Emergency Department Visits Principal Diagnosis Sickle Cell** |
| Admit Type | **Pre-Implementation** | **Post-Implementation** | **Grand Total** | % Reduction Overall Visits |
| Emergency | 134 | 109 | 243 | 18.7% |
| Inpatient | 208 | 178 | 386 | 14.4% |
| Observation | 68 | 52 | 120 | 23.5% |
| **Grand Total** | **410** | **339** | 749 | 17.3% |
|  |  |
|  |
| Admit Type | **Pre-Implementation** | **Post-Implementation** | **Variance** |  |  |
| Inpatients | 208 | 178 | 30 |  |  |
| 30-day readmissions | 95 | 64 | 31 |  |  |
| **Readmission Rate** | **46%** | **36%** | **-22%** |  |  |
|  |  |  |
|  |
| Hospital Stay ALOS Principal Diagnosis Sickle Cell | **Pre-Implementation** | **Post-Implementation** | % Reduction  |  |
| Admit Type | **Count of Encounter** | **Average length of stay (ALOS)** | **Count of Encounter** | **Average length of stay (ALOS)** |  |
| Inpatient | 208 | 7.7 | 178 | 6.8 | 11.7% |  |
| Observation | 68 | 1.0 | 52 | 1.0 | 0.0% |  |