**Supplemental Material**

|  |  |
| --- | --- |
| **Procedure Group** | **n** |
| ASD repair | 2 |
| ASD repair + PDA closure | 1 |
| ASD repair + VSD repair | 9 |
| ASD repair + VSD repair + PDA closure | 12 |
| Glenn procedure | 1 |
| PDA closure | 15 |
| Pulmonary Valve Replacement | 1 |
| VSD repair | 1 |
| VSD repair + PDA closure | 2 |

**Table S1.** Distribution of congenital heart surgeries performed on the T18 population in the State of Texas between 2009 and 2019.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **OR of undergoing CHS** | **95% CI** | **Sig** |
| **Insurance Type** (Reference: Private)  Uninsured  MC/MA  Other/Unknown | 0.403  0.422  1.357 | 0.02-2.25  0.20-0.86  0.29-4.89 | p=0.396  **p=0.020**  p=0.663 |
| **Hispanic Ethnicity** | 0.467 | 0.20-1.01 | p=0.065 |
| **White Race** | 1.797 | 0.91-3.74 | p=0.102 |
| **Surgical Center** | >1000 | <0.001 to >10000 | p=0.984 |

**Table S2**. Regression model performed between the *T18CHD* and *T18CHS* groups to compare the probability of undergoing CHS after controlling for insurance type, ethnicity, race and surgical center.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **CHD Diagnosis** | **MC/MA**  **n=409** | **Other Insurance**  **n=304** | **sig.** | **Private**  **n=261** | **sig.** |
| Septal Defects | Ventricular Septal Defect | 274  (66.99%) | 205  (67.43%) | p=0.901 | 174  (66.67%) | p=0.930 |
| Atrial Septal Defect | 203  (49.63%) | 139  (45.72%) | p=0.301 | 119  (45.59%) | p=0.308 |
| Atrioventricular Septal Defect | 22  (5.38%) | 16  (5.26%) | p=0.946 | 15  (5.75%) | p=0.839 |
| Congenital malformation of cardiac septum, unspecified | 1  (0.24%) | 0  (0%) | p=1 | 0  (0%) | p=1 |
| Patent ductus arteriosus | 204  (49.88%) | 147  (48.36%) | p=0.688 | 131  (50.19%) | p=0.937 |
| Partial anomalous pulmonary venous connection | 4  (0.98%) | 2  (0.66%) | p=1 | 2  (0.77%) | p=1 |
| Decreased Pulmonary Blood Flow (Cyanotic) | Transposition of Great Arteries | 3  (0.73%) | 0  (0%) | p=0.265 | 0  (0%) | p=0.286 |
| Other congenital malformations of other great arteries | 0  (0%) | 1  (0.33%) | p=0.426 | 1  (0.38%) | p=0.390 |
| Total anomalous pulmonary venous connection | 4  (0.98%) | 1  (0.33%) | p=0.400 | 1  (0.38%) | p=0.655 |
| Tetralogy of Fallot | 35  (8.56%) | 17  (5.59%) | p=0.132 | 13  (4.98%) | p=0.080 |
| Common arterial trunk / Truncus | 5  (1.22%) | 2  (0.66%) | p=0.705 | 2  (0.77%) | p=0.711 |
| Hypoplastic left heart syndrome | 22  (5.38%) | 18  (5.92%) | p=0.756 | 16  (6.13%) | p=0.682 |
| Hypoplastic right heart syndrome | 1  (0.24%) | 1  (0.33%) | p=1 | 1  (0.38%) | p=1 |
| Pulmonary valve atresia | 2  (0.49%) | 2  (0.66%) | p=1 | 2  (0.77%) | p=0.645 |
| Congenital pulmonary valve stenosis | 20  (4.89%) | 15  (4.93%) | p=0.978 | 13  (4.98%) | p=0.958 |
| Congenital pulmonary valve insufficiency | 2  (0.49%) | 0  (0%) | p=0.510 | 0  (0%) | p=0.524 |
| Other congenital malformations of pulmonary valve | 6  (1.47%) | 3  (0.99%) | p=0.740 | 2  (0.77%) | p=0.493 |
| Congenital tricuspid stenosis | 1  (0.24%) | 2  (0.66%) | p=0.578 | 2  (0.77%) | p=0.564 |
| Other congenital malformations of tricuspid valve / unspecified | 14  (3.42%) | 14  (4.61%) | p=0.422 | 13  (4.98%) | p=0.317 |
| Pulmonary infundibular stenosis | 1  (0.24%) | 0  (0%) | p=1 | 0  (0%) | p=1 |
| Atresia of pulmonary artery | 4  (0.98%) | 0  (0%) | p=0.140 | 0  (0%) | p=0.161 |
| Stenosis of pulmonary artery | 3  (0.73%) | 6  (1.97%) | p=0.181 | 6  (2.3%) | p=0.098 |
| Obstructive Cardiac Lesions | Congenital stenosis of aortic valve | 4  (0.98%) | 1  (0.33%) | p=0.400 | 1  (0.38%) | p=0.654 |
| Congenital insufficiency of aortic valve | 33  (8.07%) | 33  (10.86%) | p=0.204 | 26  (9.96%) | p=0.399 |
| Congenital mitral stenosis | 6  (1.47%) | 5  (1.64%) | p=1 | 5  (1.92%) | p=0.758 |
| Congenital mitral insufficiency | 4  (0.98%) | 2  (0.66%) | p=1 | 2  (0.77%) | p=1 |
| Other congenital malformations of aortic and mitral valves / unspecified | 8  (1.96%) | 3  (0.99%) | p=0.369 | 3  (1.15%) | p=0.542 |
| Congenital subaortic stenosis | 1  (0.24%) | 0  (0%) | p=1 | 0  (0%) | p=1 |
| Coarctation of aorta | 25  (6.11%) | 16  (5.26%) | p=0.630 | 13  (4.98%) | p=0.537 |
| Interruption of aortic arch | 0  (0%) | 3  (0.99%) | p=0.77 | 3  (1.15%) | p=0.059 |
| Other atresia of aorta | 4  (0.98%) | 1  (0.33%) | p=0.400 | 1  (0.38%) | p=0.653 |
| Congenital malformation of aorta unspecified/other | 7  (1.71%) | 4  (1.32%) | p=0.766 | 3  (1.15%) | p=0.748 |
| Hypoplasia of aorta | 4  (0.98%) | 3  (0.99%) | p=1 | 3  (1.15%) | p=1 |
| Other | Other congenital malformations of cardiac chambers and connections / unspecified | 4  (0.98%) | 4  (1.32%) | p=0.729 | 4  (1.53%) | p=0.718 |
| Malformation of coronary vessels | 1  (0.24%) | 2  (0.66%) | p=0.578 | 1  (0.38%) | p=1 |
| Congenital aneurysm of aorta | 0  (0%) | 1  (0.33%) | p=0.426 | 1  (0.38%) | p=0.390 |
| Right aortic arch | 1  (0.24%) | 0  (0%) | p=1 | 0  (0%) | p=1 |
| Other congenital malformations of pulmonary artery | 9  (2.2%) | 6  (1.97%) | p=0.835 | 6  (2.3%) | p=0.933 |
| Other congenital malformations of great veins | 4  (0.98%) | 2  (0.66%) | p=1 | 2  (0.77%) | p=1 |
| Dextrocardia | 2  (0.49%) | 1  (0.33%) | p=1 | 1  (0.38%) | p=1 |
| Cor triatriatum | 1  (0.24%) | 0  (0%) | p=1 | 0  (0%) | p=1 |
| Other specified congenital malformations of heart / unspecified | 90  (22%) | 73  (24.01%) | p=0.528 | 65  (24.9%) | p=0.386 |
| Double outlet right ventricle | 35  (8.56%) | 13  (4.28%) | **p=0.024** | 12  (4.6%) | p=0.050 |
| Double outlet left ventricle | 2  (0.49%) | 0  (0%) | p=0.510 | 0  (0%) | p=0.524 |
| Double inlet ventricle / common ventricle | 3  (0.73%) | 1  (0.33%) | p=0.640 | 1  (0.38%) | p=1 |

**Table S3.** Distribution of congenital heart diagnoses between patients with MC/MA compared to other insurance type; and to private insurance.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Total**  **n=360** | ***T18NoCHD***  **n=120** | ***T18CHD***  **n=196** | ***T18CHS***  **n=44** | **Overall sig.** |
| **a. DEMOGRAPHICS n(%)** | | | | | |
| **Female** n(%) | 230 (63.89) | 76 (63.33) | 121 (61.73) | 33 (75.00) | p=0.251 |
| **Race** n(%)  **- Am. indian/Eskimo/Aleut**  **- Asian or Pacific Islander**  **- Black**  **- White**  **- Other** | 1 (0.28)  5 (1.39)  57 (15.83)  228 (63.33)  69 (19.17) | 0 (0)  1 (0.83)  9 (7.5)  81 (67.5)  29 (24.17) | 0 (0)  4 (2.04)  41 (20.92)  116 (59.18)  35 (17.86) | 1 (2.27)  0 (0)  7 (15.91)  31 (70.45)  5 (11.36) | **p=0.011** |
| **Hispanic** n(%) | 147 (40.83) | 60 (50) | 78 (39.8) | 9 (20.45) | **p=0.003** |
| **Insurance** n(%)  **- Private**  **- Uninsured**  **- Medicaid/Medicare**  **- Other/unknown** | 124 (34.44)  4 (1.11)  218 (60.56)  14 (3.89) | 33 (27.5)  1 (0.83)  83 (69.17)  3 (2.5) | 65 (33.16)  2 (1.02)  121 (61.73)  8 (4.08) | 26 (59.09)  1 (2.27)  14 (31.82)  3 (6.82) | **p=0.001** |
| **b. CLINICAL CHARACTERISTICS AND OUTCOMES** | | | | | |
| **Median Admissions Records** (n [IQR])  Excluding <2 admissions | 1[1-3]  3[2-6] | 1[1-2]  3[2-4.25] | 2[1-3]  3[2-6] | 2[1-4]  4[2.75-6.25] | **p<0.001**  p=0.089 |
| **Median LOS** (days [IQR])  **- Total**  **- Mean**  **- Longest stay** | 17 [5-46]  7.8 [3.3-18.1]  12 [4-32] | 5 [2.8-19.3]  4 [2-9.1]  5 [2-13] | 23 [8-50]  9.6 [4-19.9]  15 [6-37.5] | 47.5 [12.3-113.3]  14.375 [6.9-41.6]  30.5 [9.8-68.3] | **p<0.001**  **p<0.001**  **p<0.001** |
| **Gastrostomy status** n(%) | 247 (68.61) | 72 (60) | 147 (75) | 28 (63.64) | **p=0.015** |
| **Tracheostomy status** n(%) | 55 (15.28) | 15 (12.5) | 31 (15.82) | 9 (20.45) | p=0.434 |

**Table S4.** Main outcomes among the three patients who underwent any non- cardiac surgical procedure among the *T18NoCHD*, *T18CHD* and *T18CHS* groups.