**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)UninsuredMC/MAOther/Unknown | 0.4030.4221.357 | 0.02-2.250.20-0.860.29-4.89 | 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.