Pediatric Cardiac Technical Advisory Panel Annual Report Calendar Year 2022

SUBMITTED BY THE AGENCY FOR HEALTH CARE ADMINISTRATION

December 2022

Better Health Care for All Floridians

Introduction

Florida Statute section 395.1055 establishes the Pediatric Cardiac Technical Advisory Panel (PCTAP or "Panel") for Florida, provides direction to the panel, and requires the submission of an annual report to the Governor, the President of the Senate, and the Speaker of the House of Representatives beginning in January of 2020. As required in § 20.052, the Panel Chair and members hereby submit our fourth annual progress report on the activity and accomplishments of the Panel since inception in 2016 and through December 31, 2022.

History of the PCTAP

Various advocates for children and adults with congenital heart disease have long recognized the unique requirements for hospitals that perform complex invasive procedures in the treatment of often critical heart malformations. Such unique requirements embody criteria such as specialized fellowship training for the cardiac surgeon in congenital heart disease repair, cardiac perfusionists who can safely sustain a heart varying in size from a "walnut" to the standard adult heart intraoperatively, specialists in pediatric cardiac anesthesia, pediatric cardiac critical care, and nursing and respiratory staff who are familiar with the pre- and post-operative management of complex cardiac malformations. Standards for such a specialized system of care were developed and functioned successfully in the Division of Children's Medical Services (CMS) of the Department of Health (DOH) for over four decades. These standards were written by experts in pediatric cardiology and pediatric cardiac surgery and revised every four years to keep pace with technological changes in the field.

Enacting Legislation

In 2017, the Florida Legislature enacted a new requirement for the Agency for Health Care Administration (Agency) to establish a pediatric cardiac technical advisory panel (PCTAP) to assist in the development of procedures and standards for measuring outcomes of pediatric cardiac catheterization and surgery programs; and to make recommendations to the Agency regarding regulatory guidelines to govern pediatric cardiac catheterization programs and pediatric open-heart surgery programs in the state.[1] The authorizing statute was amended in 2018[2] and again in 2019[3] with minor changes to membership appointment guidelines and added, that the Agency for Health Care Administration's Secretary may request announced or unannounced site visits..

Currently, Florida Statute section 395.1055 requires the Agency to establish and administer the PCTAP, confirm appointments from the appropriate hospital Chief Executive Officers (CEOs), appoint at-large and alternate at-large members, conduct and document meetings, take recommendations from the panel, coordinate the development of work products from the panel, and develop administrative rule(s) that include minimum quality standards for the pediatric cardiac catheterization programs and pediatric cardiovascular surgery programs in the state. The Agency's Secretary may also appoint additional non-voting members from specific organizations listed in the statute; and may request site visits to be conducted by panel members.

[1] Laws of Florida, 2017-151: http://laws.flrules.org/2017/151
[2] Laws of Florida, 2018-24: http://laws.flrules.org/2018/24
[3] Laws of Florida, 2019-138: http://laws.flrules.org/2019/138

Activities and Progress of the Panel

Rule Development

Proposed Rule 59A-3.248 was published in the Florida Administrative Register on March 10, 2021. The rule was challenged from multiple organizations, resulting in a Notice of Change published on May 25, 2021. The proposed rule was ultimately withdrawn on June 16, 2021.[4] Further action on rule development and finalization are pending at this time.

Public Reporting

Society of Thoracic Surgeons (STS) National Database

The Society of Thoracic Surgeons (STS), a national membership organization of surgeons, researchers, and allied health professionals, has developed a national registry and database where pediatric cardiac surgery programs across the nation submit clinical outcomes for specific procedures and conditions, including surgeries for congenital heart conditions. In return, the individual programs receive detailed statistical reports that include how the program compares to national benchmarks. The STS also hosts and maintains a public reporting website, including data specific to congenital heart surgeries, so that consumers can look up and compare outcomes across various programs. Participation in the STS congenital heart surgery registry is statutorily required of Florida-licensed pediatric cardiac surgery programs. The STS public website lists participating programs and displays mortality ratings based on the severity of procedures.

The most current published reports for Florida's pediatric cardiac surgery programs are included as Appendix A to this report. Additionally, the underlying STS congenital surgery data from Florida's licensed pediatric cardiac surgery programs will be obtained by the Agency, through a Data Sharing License Agreement (DSLA) with the STS as required in statute, for publication on the Agency's consumer-friendly health care transparency website, *FloridaHealthFinder.gov*.

Future Panel Endeavors

American College of Cardiology (IMPACT) Registry

The American College of Cardiology (ACC) hosts a number of patient data registries and produces statistical reports for participating cardiology programs, allowing individual programs to compare their quality and performance outcomes against national benchmarks. The ACC's *IMPACT* registry is specific to congenital heart disease. Communications with the ACC during 2018-2022 indicate that the organization has not yet developed a statewide reporting methodology. The Agency and PCTAP members will continue to explore options for which types of data would be most meaningful to consumers for public reporting of interventional cardiology outcomes.

Real Time Outcomes for Public Reporting

Real time outcomes for public reporting remains an interest of the Panel. A Real Time Outcomes Subcommittee meeting was held on January 23, 2020. As a result, the subcommittee recommended that data managers at each participating hospital collaborate in the use of real time data systems with each other.

[4] Florida Administrative Register: https://www.flrules.org/gateway/ruleNo.asp?id=59A-3.248

Conclusion

The members of the PCTAP were active in the finalization of proposed rule language as well as during public meetings regarding the proposed rule. The Agency also continued negotiations with the Society of Thoracic Surgeons (STS) regarding the establishment of a contract and Data Use Agreement to receive and publish STS quality measures and data for each of Florida's licensed Pediatric Cardiac Surgery programs.

Appendix A

As a national leader in health care transparency and accountability, The Society of Thoracic Surgeons (STS) established the STS Public Reporting initiative, which allows participants in the STS National Database to voluntarily report their surgical outcomes to the public on the STS website. Public reporting is available for the following STS National Database components: The Adult Cardiac Surgery Database, General Thoracic Surgery Database, and Congenital Heart Surgery Database.

Available data reported from the Congenital Heart Surgery Database is shown below for each of Florida's licensed pediatric cardiac surgery programs.

NOTE: Results are based on a participant's unique group of patients (known as case mix) and the number of surgical procedures in each category. Results published are specific to the participant listed and are not intended for direct comparison to other participants.

For this Congenital Heart Surgery Database (CHSD) participant, rating is based on the overall observed-to-expected operative mortality ratio for all patients undergoing pediatric and/or congenital cardiac surgery.

Arnold Palmer Medical Center

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	12 / 433	2.77%	2.52%	1.1 (0.57, 1.9)	2.9 (1.51, 5.02)
STAT Mortality Category 1	0 / 117	0%	0.32%	0 (0, 9.56)	0 (0, 3.24)
STAT Mortality Category 2	0 / 169	0%	1.53%	0 (0, 1.41)	0 (0, 1.94)
STAT Mortality Category 3	2 / 49	4.08%	1.89%	2.16 (0.26, 7.4)	4.13 (0.5, 14.14)
STAT Mortality Category 4	7 / 84	8.33%	5.34%	1.56 (0.64, 3.07)	9.31 (3.82, 18.35)
STAT Mortality Category 5	3 / 14	21.43%	18.09%	1.18 (0.26, 2.81)	13.96 (3.03, 33.09)

Florida Hospital for Children

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	17 / 531	3.2%	2.15%	1.49 (0.87, 2.36)	3.93 (2.3, 6.23)
STAT Mortality Category 1	1 / 164	0.61%	0.34%	1.78 (0.05, 9.77)	0.6 (0.02, 3.31)
STAT Mortality Category 2	3 / 207	1.45%	1.38%	1.05 (0.22, 3.02)	1.44 (0.3, 4.14)
STAT Mortality Category 3	3 / 55	5.45%	2.41%	2.26 (0.47, 6.27)	4.32 (0.9, 11.98)
STAT Mortality Category 4	6 / 90	6.67%	5.53%	1.21 (0.45, 2.52)	7.2 (2.68, 15.06)
STAT Mortality Category 5	4 / 15	26.67%	11.29%	2.36 (0.69, 4.88)	27.85 (8.13, 57.54)

Jackson Memorial Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	8 / 229	3.49%	2.21%	1.58 (0.69, 3.06)	4.16 (1.81, 8.07)
STAT Mortality Category 1	0 / 74	0%	0.37%	0 (0, 13.19)	0 (0, 4.47)
STAT Mortality Category 2	2 / 79	2.53%	1.1%	2.3 (0.28, 8.04)	3.16 (0.38, 11.03)
STAT Mortality Category 3	2 / 28	7.14%	1.2%	5.93 (0.73, 19.51)	11.33 (1.39, 37.28)
STAT Mortality Category 4	2 / 35	5.71%	4.88%	1.17 (0.14, 3.92)	6.99 (0.86, 23.42)
STAT Mortality Category 5	2 / 13	15.38%	14.48%	1.06 (0.13, 3.14)	12.52 (1.56, 36.98)

Joe DiMaggio Children's Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	18 / 537	3.35%	2.42%	1.39 (0.83, 2.17)	3.66 (2.18, 5.72)
STAT Mortality Category 1	1 / 165	0.61%	0.27%	2.21 (0.06, 12.13)	0.75 (0.02, 4.11)
STAT Mortality Category 2	5 / 167	2.99%	1.11%	2.71 (0.89, 6.19)	3.72 (1.22, 8.5)
STAT Mortality Category 3	3 / 67	4.48%	2.61%	1.72 (0.36, 4.8)	3.28 (0.68, 9.18)
STAT Mortality Category 4	7 / 117	5.98%	5.77%	1.04 (0.42, 2.07)	6.19 (2.52, 12.34)
STAT Mortality Category 5	2 / 21	9.52%	10.43%	0.91 (0.11, 2.91)	10.76 (1.33, 34.32)

Johns Hopkins All Children’s Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	2 / 116	1.72%	1.95%	0.88 (0.11, 3.12)	2.33 (0.28, 8.23)
STAT Mortality Category 1	0 / 43	0%	0.47%	0 (0, 17.43)	0 (0, 5.91)
STAT Mortality Category 2	1 / 43	2.33%	1.53%	1.52 (0.04, 8.03)	2.09 (0.05, 11.02)
STAT Mortality Category 3	0 / 8	0%	1.27%	0 (0, 29.03)	0 (0, 55.47)
STAT Mortality Category 4	1 / 19	5.26%	5.58%	0.94 (0.02, 4.67)	5.63 (0.14, 27.86)
STAT Mortality Category 5	0 / 3	0%	8.11%	0 (0, 8.72)	0 (0, 100)

Nemours Children's Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	6 / 302	1.99%	1.85%	1.07 (0.4, 2.31)	2.84 (1.05, 6.1)
STAT Mortality Category 1	0 / 125	0%	0.21%	0 (0, 13.55)	0 (0, 4.6)
STAT Mortality Category 2	1 / 79	1.27%	1.33%	0.95 (0.02, 5.14)	1.3 (0.03, 7.06)
STAT Mortality Category 3	1 / 23	4.35%	1.22%	3.58 (0.09, 18.05)	6.83 (0.17, 34.49)
STAT Mortality Category 4	2 / 68	2.94%	4.82%	0.61 (0.07, 2.12)	3.64 (0.44, 12.67)
STAT Mortality Category 5	2 / 7	28.57%	10.08%	2.83 (0.36, 7.04)	33.4 (4.29, 82.95)

Nicklaus Children’s Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	21 / 896	2.34%	2.9%	0.81 (0.5, 1.23)	2.14 (1.33, 3.24)
STAT Mortality Category 1	0 / 268	0%	0.37%	0 (0, 3.65)	0 (0, 1.24)
STAT Mortality Category 2	4 / 348	1.15%	1.53%	0.75 (0.21, 1.91)	1.03 (0.28, 2.62)
STAT Mortality Category 3	2 / 84	2.38%	1.88%	1.27 (0.15, 4.44)	2.42 (0.29, 8.49)
STAT Mortality Category 4	7 / 160	4.38%	7.71%	0.57 (0.23, 1.14)	3.39 (1.38, 6.82)
STAT Mortality Category 5	8 / 36	22.22%	15.89%	1.4 (0.64, 2.46)	16.48 (7.5, 29.04)

St. Joseph's Children's Hospital BayCare Health System

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	15 / 690	2.17%	2.64%	0.82 (0.46, 1.35)	2.18 (1.22, 3.56)
STAT Mortality Category 1	0 / 199	0%	0.28%	0 (0, 6.64)	0 (0, 2.25)
STAT Mortality Category 2	1 / 239	0.42%	1.28%	0.33 (0.01, 1.8)	0.45 (0.01, 2.48)
STAT Mortality Category 3	0 / 76	0%	2.03%	0 (0, 2.33)	0 (0, 4.45)
STAT Mortality Category 4	6 / 148	4.05%	5.84%	0.69 (0.26, 1.48)	4.15 (1.54, 8.81)
STAT Mortality Category 5	8 / 28	28.57%	15.72%	1.82 (0.84, 3.1)	21.42 (9.92, 36.49)

UF Health Shands Children's Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	17 / 881	1.93%	2.64%	0.73 (0.43, 1.16)	1.93 (1.13, 3.07)
STAT Mortality Category 1	0 / 269	0%	0.32%	0 (0, 4.22)	0 (0, 1.43)
STAT Mortality Category 2	3 / 275	1.09%	1.27%	0.86 (0.18, 2.49)	1.18 (0.24, 3.42)
STAT Mortality Category 3	1 / 68	1.47%	1.55%	0.95 (0.02, 5.12)	1.82 (0.05, 9.79)
STAT Mortality Category 4	11 / 209	5.26%	5.32%	0.99 (0.5, 1.73)	5.9 (2.98, 10.35)
STAT Mortality Category 5	2 / 60	3.33%	11.19%	0.3 (0.04, 1.03)	3.51 (0.43, 12.14)

Wolfson Children's Hospital

Operative and Adjusted Operative Mortality (July 2017 - June 2021)

Population: Neonates, Infants, Children & Adults	# / Eligible	Observed	Expected	O/E Ratio (95% CI)	Adj. Rate (95% CI)
Overall	14 / 514	2.72%	1.9%	1.43 (0.79, 2.38)	3.79 (2.08, 6.3)
STAT Mortality Category 1	0 / 155	0%	0.3%	0 (0, 7.78)	0 (0, 2.64)
STAT Mortality Category 2	6 / 205	2.93%	1.29%	2.27 (0.84, 4.86)	3.12 (1.15, 6.67)
STAT Mortality Category 3	1 / 60	1.67%	1.68%	0.99 (0.03, 5.31)	1.89 (0.05, 10.14)
STAT Mortality Category 4	6 / 87	6.9%	5.62%	1.23 (0.46, 2.56)	7.32 (2.73, 15.3)
STAT Mortality Category 5	1 / 7	14.29%	10.64%	1.34 (0.03, 5.44)	15.82 (0.4, 64.08)

*This information can be found at: Congenital Heart Surgery Public Reporting | STS Public Reporting

Arnold Palmer Medical Center	Orlando, Florida
Florida Hospital for Children	Orlando, Florida
Jackson Memorial Hospital	Miami, Florida
Joe DiMaggio Children's Hospital	Hollywood, Florida
Johns Hopkins All Children's Hospital	St. Petersburg, Florida
Nemours Children's Hospital	Orlando, Florida
Nicklaus Children's Hospital	Miami, Florida
St. Joseph's Children's Hospital BayCare Health System	Tampa, Florida
UF Health Shands Children's Hospital	Gainesville, Florida
Wolfson Children's Hospital	Jacksonville, Florida