ADULT AND PEDIATRIC CONGENITAL HEART DISEASE HOSPITALIZATIONS IN THE UNITED STATES

Poster Contributions
Poster Sessions, Expo North
Monday, March 11, 2013, 9:45 a.m.-10:30 a.m.

Session Title: Congenital Cardiology Solutions: Outcomes and Resource Utilization in the Adults
Abstract Category: 12. Congenital Cardiology Solutions: Adult
Presentation Number: 1290-120

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Background: Congenital heart disease (CHD) incidence has remained stable but longevity has improved, resulting in a growing adult CHD population. Previous reports suggested a rise in US CHD hospitalizations from 1998-2005. It is unclear if those trends have continued and whether pediatric CHD admissions have changed in a similar way.

Methods: We identified CHD admissions to US hospitals, 1998-2009 using the Nationwide Inpatient Sample. Diagnostic codes for CHD identified cases, which were classified as simple, complex or unclassified. Sampling weights were used to produce national estimates of annual CHD admissions.

Results: Annual adult CHD hospitalizations increased from 72,656±5,258 in 2005 to 117,483±8994 in 2009 (61.7%;15.4%/year), maintaining the prior trend. There was a 215% increase in adults admitted with CHD from 1998 to 2009 (19.5%/year) while pediatric admissions increased 46.9% (4.3%/year). Admissions for simple, unclassified and complex defects grew at an annual rate of 26.3, 12.2, and 11.2% respectively among adults; for children equivalent figures were 7.0, -1.2 and 4.0%. The Figure shows admissions by year for adults and children stratified by complexity. Adults accounted for 42.2% of CHD admissions in 2009, up from 25.4% in 1998.

Conclusion: Growth in adult CHD hospitalizations has continued unabated and the number of adult admissions for CHD is approaching that of pediatric. Further research is warranted to effectively care for this emergent population of adults living with CHD.