Results of Implementation of a Thoracic Surgery Program in a Large, Non-University, Metropolitan Health System



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Objective: Multidisciplinary, collaborative, specialized care has been shown superior, especially concerning complex surgical care. In 2004, we formed a unified thoracic surgery program (TSP) within a large non-university health system involving competing private practice surgical groups in 2 tertiary care hospitals in a major metropolitan area. We examine the results of this unusual collaboration.

Methods:

- •Surgeons invited into TSP:
 - •performing thoracic surgery (cardiothoracic or general)
 - •participating in weekly Multi-disciplinary Thoracic Oncology conferences (MTOC) on either campus
- •Meet periodically to standardize care patterns
 - •perioperative orders & protocols
- •Orders & protocols published on TSP internet site
 - •ready access for clinical use
 - annually updated
- •Dedicated TSP data manager
 - •prospectively enter all TS cases into clinical database
- •Monthly professional journal club
 - •review current evidence-based cardiothoracic literature
- •Quarterly morbidity & mortality meetings
 - •analyze running 12 months of data
 - •program trends reviewed relative to the literature & TSP results
- •Alterations of care patterns updated in orders & protocols
- •Quality improvement projects undertaken (ie: patterns of chest tube usage and duration)

Results:

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
# Cases MTOC	775	681	829	836
TSP Surgeons/Others	9/11	8/15	8/20	7/12
Case Vol TSP surg/Others	419/33	448/50	512/76	506/75
% 2 highest Vol TSP Surg	48%	52%	64%	75%
TSP Volume (# Cases)	452	498	588	581
TSP Mortality @ D/C	4%	2.6%	3.9%	2.4%
No Complications	79.4%	86.7%	80.4%	81.2%
Lobectomy (# Cases)	96	96	117	135
Lobectomy Mortality @ D/C	4.2%	0%	2.6%	0.7%
Lobectomy Postop LOS (median days)	6	5.5	6	5

2005-2008	LND w Lobectomy	LND w VATS Pneumonectomy		VATS Lobectomy
# Cases (%)	418/444 (94%)	36/43(84%)	860/2119(41%)	126/444(28%)

<u>Conclusions</u>: TSP surgeons performed the vast majority of cases with 2 high volume surgeons contributing an increasing proportion. Case volume has increased for the TSP; including all surgeons (TSP & Others). Volume of signature cases increased annually with outstanding quality indicators (e.g. thoracic lymphadenectomy-LND) and outcomes. Complex, technically advanced cases were frequent. TSP collaboration in large non-university health system in a major metropolitan area is successful.