SPECIALISED COMMISSIONING – RESPONSE TO AMENDMENTS REQUESTED TO EVIDENCE REVIEW DURING ENGAGEMENT OR CONSULTATION

URN	1675
POLICY TITLE	Surgical correction for pectus deformity
CRG:	Specialist Cancer Surgery
NPOC:	Cancer
PUBLIC HEALTH LEAD:	

Description of comments during consultation	NHS England was asked to consider the findings and relevance to the policy of the following studies:
	 Sigalet DL, Montgomery M, et al. Cardiopulmonary effects of closed repair of pectus excavatum. J Pediatr Surg. 2003;38: 380-5.
	 Sigalet DL, Montgomery M, et al. Long term cardiopulmonary effects of closed repair of pectus excavatum. Pediatr Surg Int. 2007;23: 493-7.
	White JA, Fine NM, Shargall Y. Pectus excavatum with compression of the inferior vena cava a rare cause of recurrent syncope. <i>Circulation</i> . 2009;120: 1722-1724.
	 Neviere R, Benhamed L, et al. Pectus excavatum repair improves respiratory pump efficacy and cardiovascular function at exercise. J Thorac Cardiovasc Surg. 2013;145: 605-6.
	O'Keefe J, Byrne R, et al. Longer term effects of closed repair of pectus excavatum on cardiopulmonary status. <i>J Pediatr Surg</i> . 2013;48: 1049-54.
	Chao CJ, Jaroszewski DE, et al. Surgical

repair of pectus excavatum relieves right heart chamber compression and improves cardiac output in adult patients — an intraoperative transesophageal echocardiographic study. *Am J Surg.* 2015;210: 1118-25.

- Borrhomée S, Lenoir M, et al. Syncope caused by right ventricular obstruction by pectus excavatum. *J Thorac Cardiovasc Surg*. 2016;151 :e67-9.
- Udholm S, Maagaard M, et al. Cardiac function in adults following minimally invasive repair of pectus excavatum. *Interact Cardiovasc Thorac Surg.* 2016;22: 525-530.
- Siniorakis E, Arvanitakis S, et al. Pectus excavatum: right ventricular compromise with orthostatic syndrome and Brugada phenocopy. J Saudi Heart Assoc. 2017;29: 223-226.

Action taken by Public Health lead

The papers were reviewed against the relevant PICO criteria for the policy proposal. None of the papers met the criteria:

- Sigalet DL, Montgomery M, et al.
 Cardiopulmonary effects of closed repair of pectus excavatum. J Pediatr Surg. 2003;38: 380-5.
 - Published prior to period used for the search strategy of relevant evidence review.
- Sigalet DL, Montgomery M, et al. Long term cardiopulmonary effects of closed repair of pectus excavatum. *Pediatr Surg Int.* 2007;23: 493-7.
 - Published prior to period used for the search strategy of relevant evidence review.
- White JA, Fine NM, Shargall Y. Pectus excavatum with compression of the inferior vena cava a rare cause of recurrent syncope. *Circulation*. 2009;120: 1722-1724. Case report.
- Neviere R, Benhamed L, et al. Pectus excavatum repair improves respiratory pump efficacy and cardiovascular function at exercise. *J Thorac Cardiovasc Surg*. 2013;145: 605-6.

Less than 30 study participants. O'Keefe J, Byrne R, et al. Longer term effects of closed repair of pectus excavatum on cardiopulmonary status. J Pediatr Surg. 2013;48: 1049-54. Results from a single clinic site. Chao CJ. Jaroszewski DE. et al. Surgical repair of pectus excavatum relieves right heart chamber compression and improves cardiac output in adult patients - an intraoperative transesophageal echocardiographic study. Am J Surg. 2015;210: 1118-25. A single surgeon performed all procedures. Borrhomée S, Lenoir M, et al. Syncope caused by right ventricular obstruction by pectus excavatum. J Thorac Cardiovasc Surg. 2016;151 :e67-9. Case report. Published after relevant evidence review. Udholm S, Maagaard M, et al. Cardiac function in adults following minimally invasive repair of pectus excavatum. Interact Cardiovasc Thorac Surg. 2016;22: 525-530. Less than 30 study participants. Published after relevant evidence review. Siniorakis E, Arvanitakis S, et al. Pectus excavatum: right ventricular compromise with orthostatic syndrome and Brugada phenocopy. J Saudi Heart Assoc. 2017;29:

223-226.

review.

Outcome

Low grade evidence identified by stakeholders that does not materially affect the conclusions of the existing evidence reviews.

Case report. Published after relevant evidence