The Hospital for Sick Children Technology Assessment at Sick Kids (TASK)

TECHNICAL APPENDIX

THE COST-EFFECTIVENESS OF CLINIC-BASED CHLORAL HYDRATE SEDATION VERSUS GENERAL ANAESTHESIA FOR PAEDIATRIC OPHTHALMOLOGICAL PROCEDURES

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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Table 1: Description of calculations used for cost inputs

Description of model input	Calculation	Sample calculation
Opthalmologist fee*	[Frequency of procedure per arm x OHIP fee for procedure(s)]/ Number of patients per arm	[(25 x \$260.00) + (10 x \$434.75) + (5 x \$308.85)]/ 40 = \$309.79
Anaesthesilogist fee*	(Frequency of patients per arm x OHIP baseline fee) + (Number of points per arm x OHIP fee per point)/ Number of patients per arm	(40 x \$120.08) + (171 x \$15.01)/40 = \$185.00
Chloral hydrate	(Mean volume administered per arm (mL) + mean waste volume (mL)) x Price per mL	294 x \$0.05 = \$14.70
OR bundle*	[(Frequency of patients per arm with visits after May 1, 2009 x patient level OR price) + (Frequency of patients per arm with visits before May 1, 2009 x Mean OR price)]/ Number of patients per arm	[(15 x \$375) + (10 x \$418) + (5 x \$624)) + (10 x \$472)]/ 40 = \$441
Nursing wage (sedation unit)	Mean LOS sedation unit per arm x Hourly wage for 1 nurse	2.23 x \$35.21 = \$78.52
Nursing wage (PACU)	Mean LOS PACU per arm x Hourly wage for 0.5 nurse	0.99 x \$17.61 = \$17.59
Nursing wage (SDAU)	Mean LOS SDAU per arm x Hourly wage for 1 nurse	2.34 x \$35.21 = \$82.40
Parent time loss	Mean LOS per arm x Hourly wage for 1 parent	4.04 x \$23.70 = \$95.75

Table 2: Ophthalmologist fees assigned to planned procedures

Description of procedure(s)	Fee	OHIP fee code
Exam only (general)	\$260.00	Z850, E982
Exam + Retcam	\$260.00	Z850, E982
Exam + Plugs	\$260.00	Z850, E982
Exam + retcam + suture removal	\$260.00	Z850, E982
Exam + debris removal	\$260.00	Z850, E982
Exam + retcam + B scan	\$306.55	Z850, E982
Exam + A scan	\$308.85	Z850, E982, J108C, J108B*
Exam + retcam + A scan	\$308.85	Z850, E982, J108C, J108B*
Exam + ERG	\$318.00	Z850, E982, G439, G852*
Exam + retcam + ERG	\$318.00	Z850, E982, G439, G852*
Exam + contact lens fitting	\$434.75	Z850 + E982
Exam + retcam + contact lens fitting	\$434.75	Z850 + E982
Failed sedation	\$22.45	A234

^{*} technical component (technician required) Abbreviations: OHIP=Ontario Health Insurance Plan

Table 3: Anaesthesiologist fees assigned in addition to base fee (\$120.08)

LOS; patient age	Fee	Number of points assigned
15 minutes; > 1 year	\$135.09	1
30 minutes; > 1 year	\$150.10	2
45 minutes; > 1 year	\$165.11	3
1 hour age; > 1 year	\$180.12	4
1 hour 15 minutes; > 1 year	\$210.14	6
1 hour 30 minutes; > 1 year	\$240.16	8
1 hour 45 minutes; > 1 year	\$285.19	11
2 hours; > 1 year	\$330.22	14
2 hours 15 minutes; > 1 year	\$375.25	17
15 minutes; < 1 year	\$165.11	3
30 minutes; < 1 year	\$180.12	4
45 minutes; < 1 year	\$195.13	5
1 hour; < 1 year	\$210.14	6
1 hour 15 minutes; age < 1 year	\$240.16	8
2 hours age < 1 year	\$360.24	16

Abbreviations: LOS=length of stay