Supplementary Data

SUPPLEMENTARY TABLE S1. HYPOTHETICAL COST COMPARISON OF IRRIGATION Equipment/Personnel for Percutaneous Nephrolithotomy Assuming A CENSUS OF 312 PERCUTANEOUS NEPHROLITHOTOMY/YEAR (I.E., 6/WEEK)

HP irrigation			$AIP\ (Thermedx^{\circledR})$			
Equipment/personnel	Total cost	Cost per case ^a	Equipment/personnel	Total cost	Cost per case ^a	
Irrigation tower ^{b,c} Irrigation fluid warmer ^{a,e}	\$3460 \$1850	\$11.09 \$5.96	Thermedx ^b	\$11,000 ^d	\$35.26	
Disposable units Additional circulating nurse hourly salary	\$51.81 \$57.00	\$00.17 131.10 ^f	Thermedx disposable unit	\$123	\$123	
Total	\$5427.81	\$148.31				

SUPPLEMENTARY TABLE S2. IDENTITY AND FREQUENCY OF SURGEONS AND CIRCULATING NURSES WHO ANSWERED THE SATISFACTION SURVEY

Surgeon and nurse identifier	L	reteroscopy	Percutaneous nephrolithotomy			
	$\overline{HP (n=26)}$	AIP (n=25)	p	$\overline{HP (n=15)}$	AIP (n=14)	p
Surgeon 1	9 (34.6%)	3 (12.0%)	0.1	7 (46.7%)	2 (14.3%)	0.2
Surgeon 2	4 (15.4%)	6 (24.0%)		3 (20.0%)	6 (42.9%)	
Surgeon 3	6 (23.1%)	5 (20.0%)		5 (33.3%)	4 (28.6%)	
Surgeon 4	0 (0.0%)	1 (4.0%)		0(0.0%)	1 (7.1%)	
Surgeon 5	1 (3.8%)	6 (24.0%)		0 (0.0%)	0 (0.0%)	
Surgeon 6	6 (23.1%)	4 (16.0%)		0(0.0%)	1 (7.1%)	
Nurse 1	0 (0%)	3 (12.0%)	0.9	0 (0%)	1 (7.1%)	0.8
Nurse 2	1 (3.8%)	1 (4.0%)		1 (6.7%)	0 (0%)	
Nurse 3	0 (0%)	0 (0%)		1 (6.7%)	0 (0%)	
Nurse 4	1 (3.8%)	0 (0%)		0 (0%)	0 (0%)	
Nurse 5	0 (0%)	0 (0%)		0 (0%)	1 (7.1%)	
Nurse 6	5 (19.2%)	4 (16.0%)		2 (13.3%)	0 (0%)	
Nurse 7	0 (0%)	0 (0%)		1 (6.7%)	0 (0%)	
Nurse 8	1 (3.8%)	0 (0%)		1 (6.7%)	0 (0%)	
Nurse 9	0 (0%)	1 (4.0%)		0 (0%)	0 (0%)	
Nurse 10	1 (3.8%)	0 (0%)		0 (0%)	0 (0%)	
Nurse 11	1 (3.8%)	0 (0%)		1 (6.7%)	0 (0%)	
Nurse 12	2 (7.6%)	2 (8.0%)		2 (13.3%)	1 (7.1%)	
Nurse 13	0 (0%)	0 (0%)		2 (13.3%)	3 (21.4%)	
Nurse 14	1 (3.8%)	1 (4.0%)		0 (0%)	0 (0%)	
Nurse 15	0(0%)	1 (4.0%)		1 (6.7%)	1 (7.1%)	
Nurse 16	0(0%)	1 (4.0%)		0(0%)	0(0%)	
Nurse 17	0 (0%)	0 (0%)		1 (6.7%)	0 (0%)	
Nurse 18	0 (0%)	0 (0%)		1 (6.7%)	1 (7.1%)	
Nurse 19	1 (3.8%)	0 (0%)		0(0%)	0 (0%)	
Nurse 20	0(0%)	1 (4.0%)		0 (0%)	0 (0%)	
Nurse 21	3 (11.5%)	2 (8.0%)		1 (6.7%)	2 (14.2%)	
Nurse 22	0(0%)	1 (4.0%)		0 (0%)	0 (0%)	
Nurse 23	1 (3.8%)	0 (0%)		0 (0%)	0 (0%)	
Nurse 24	1 (3.8%)	0(0%)		0 (0%)	0 (0%)	
Nurse 25	0 (0%)	0 (0%)		0 (0%)	1 (7.1%)	
Nurse 26	0 (0%)	1 (4.0%)		0 (0%)	0 (0%)	
Nurse 27	3 (11.5%)	2 (8.0%)		0 (0%)	1 (7.1%)	
Nurse 28	4 (15.4%)	4 (16.0%)		0 (0%)	2 (14.2%)	

^aAssuming 312 PCNL/year.

^bReusable equipment.

^cAllen[®] Easy Irrigation Tower (Allen Medical, Acton, MA).

^dCost varies by contract.

^e3M[™] Ranger Irrigation Warming System (3M Bair Hugger; Normothermia System, St. Paul, MN).

^fBased on the average PCNL operative time for HP cases in this report (i.e., 2.3 hours).

AIP=automated irrigation pump; HP=hand pump; PCNL=percutaneous nephrolithotomy.