

Direct costs of TST

Personnel for TST		
Average hourly wage for RN	\$44/hour	Refugee Health 2008-2009 Budget summary
Estimated time (per patient) taken to place (10 minutes) and then read test (5 minutes), including time to document	15 minutes	Phone conversation with nurse manager at Community Health Services clinic
Personnel cost per TST	\$11.00	Calculated
Supplies for TST		
Cost of test antigen per patient	\$1.65/test	Phone conversation with pharmacist manager at Childrens Hospital Los Angeles
Cost of injection material (syringe, gauze, alcohol wipe) per patient	\$0.3/test	Estimated costs based upon Dr. Bob Bolan presentation
Supplies cost per TST	\$1.95	Calculated
Total cost of TST per patient	\$12.95	Calculated
Number who require TB testing each year in LA County	5000	Based upon projection from The Public's Health Newsletter, Volume 9, Number 6, July 2009
Estimated per cent who fail to return and need re-testing	50%	Phone conversation with Dr. Frank Alvarez
Number who need retesting per year	2500*	Calculated
Total TSTs needed per year	7,500	Calculated
Total direct cost of TSTs	\$89,625	Calculated

Indirect costs of TST

% of false positives from TST (as compared to Quantiferon In-tube)	62%	Data from Dr. Masae Kawamura from the SF Immigrant population (37% vs. 14%)
% of unneeded CXRs	23%	Data from Dr. Masae Kawamura from the SF Immigrant population (37% vs. 14%)
% Positive tests requiring CXR	37%	Data from Dr. Masae Kawamura from the SF Immigrant population
Unneeded CXR ordered	1150	Calculated
% of CXR obtained	85%	Data from Dr. Masae Kawamura
Total number of unneeded CXR obtained	978	Calculated
Cost of CXR	\$24	Data from Dr. Masae Kawamura
Total cost of unneeded CXRs	\$23,619	Calculated
% of patients with latent TB treatment initiation	26%	Data from Dr. Masae Kawamura
Total number of patients with unneeded latent TB treatment initiation	254	Calculated
Cost of latent TB treatment initiation appointment	\$185	Data from Dr. Masae Kawamura
Total cost of unneeded latent TB treatment initiation appointments	\$46,990	Calculated
% of patients with latent TB who complete therapy	70%	Data from Dr. Masae Kawamura
Total number of patients with unneeded latent TB therapy for 9 months	178	Calculated
Cost of latent TB treatment therapy	\$26	Data from Dr. Masae Kawamura
Total cost of unneeded latent TB treatment	\$4,628	Calculated
Total indirect costs of TST	\$75,237	Calculated

Direct costs of IGRA testing

Lab personnel time per IGRA assay	\$1.27	Data from Dr. Masae Kawamura
IGRA cost per assay	\$20	Data from Dr. Masae Kawamura
Total cost of IGRA per patient	\$21.27	Calculated
Number who require TB testing each year in LA County	5000	Based upon projection from The Public's Health Newsletter, Volume 9, Number 6, July 2009
Estimated per cent who have an indeterminate value	2%	Data from Dr. Masae Kawamura
Number who need retesting per year	100	Calculated
Total IGRA needed per year	5,100	Calculated
Total direct cost of IGRA	\$108,477	Calculated
Fixed costs		
ELISA machine/maintainance	?	Based on local capacity
Decapper machine	~\$5000	Data from Dr. Masae Kawamura

Compare and contrast

- Costs: ~\$165,000 vs. \$109,000
- Other advantages: Patient costs (single initial visit, lost productivity/school, transportation, administering a medication for 9 months, and side effects)
- Improved reliability in testing benefits both the MD and the patient