

Date:



#	Question	Work Space: What data/information do you need to gather for Financial Benefit, Cost, or Intangible items?
	Quality Note: Annualize all Financial Benefits	
1	<ul> <li>Did you <u>remove waste</u> (waiting, rework from defects, hunting &amp; searching, etc.) and inefficiency in services and processes?</li> <li>List the types of waste addressed</li> <li>Link the waste type to a particular benefit(s), either intangible or tangible</li> <li>If tangible, consider info needed to convert to \$\$ value (for example, identify # of minutes, hours, days, or weeks saved per waste type)</li> <li>If time savings, see #2 below.</li> </ul>	
	<ul> <li>Example Wastes:</li> <li>Defects: decreased errors from 80% to 10% is intangible. BUT due to error reduction, saved 2 hours rework time per week. This is tangible—go to #2, Example 1 below for conversion to \$\$.</li> <li>Waiting: decreased waiting time by 50%, from 60 min. to 30 min. is intangible. BUT reducing waiting allowed us to see 2 additional patients per day is tangible (generate additional revenue)—go to #5, Example 1 below for conversion to \$\$.</li> <li>Hunting: Eliminated search time is intangible. BUT this reduced processing time by 30 min per day—see #2, Example 2 below for conversion to \$\$.</li> </ul>	
2	Lead time: How many total hours of processing time was reduced?	
	<ul> <li>What has this reduction led to? (e.g., reduced no. of calendar days, freed up staff time to work on other tasks, gave ability to service more clients, reduce customer wait time, reduced FTEs per client/per day/per week, etc.)</li> <li>Can you assign cost savings amount to # of hours saved?* What is the value of 1 unit of time including overhead (salary + fringe)?**</li> </ul>	
	<b>Example 1:</b> Decreased errors resulted in 2 hours of time saved weekly x 52 weeks = 104 hours x \$24 (avg salary <sup>**</sup> ) = \$2496 <b>Example 2:</b> Eliminated search time of 10 min per day x 5 days per week x 52 weeks = 2600 min or 43.33 hrs x \$24 (avg salary <sup>**</sup> )= \$1040 <b>Example 3:</b> Used Volunteer Work-study students to handle registration freed up staff time @ no salary cost: 10 hrs. staff time freed up /week x 52 weeks x \$24 (avg. salary)= \$12,480	



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3	<ul> <li>Did you reduce the <u># of process steps</u>? (relates to #2 lead time)</li> <li>By what %? (intangible)</li> <li>Can you assign time/cost savings amount to it? (tangible)</li> <li>Example: Reduced process steps from 25 to 20 steps</li> </ul>	
	(25-20) / 25 = 20% improvement. The 5 steps reduced required 2 hrs total time, done 5 times per day: 2 hrs/occasion x \$24 avg salary x 5 occ/day x 5 days/week x 52 weeks = \$62,400/year	
4	Did you reduce the <b><u># of handoffs</u></b> ?	
	<ul> <li>By what %? (intangible)</li> <li>Can you assign time/cost savings amount to it? (tangible)</li> </ul>	
	- Determine if wait time was eliminated due to handoff reduction; if yes, that's a reduction in lead time (see #2)	
	<ul> <li>Handoff can equal errors. Determine if the error rate has improved for your process? How much rework time would be eliminated? (see #2, Example 1)</li> </ul>	
	<b>Example:</b> Eliminated 2 handoffs @ 1 hour wait each per day. 2 handoffs x 1 hour=2 hours/day saved x 5 days=10 hours per week x 52 = 520 hours x \$24 avg salary = $$12,480$ annually	
5	Did you develop <b><u>new capacity</u></b> due to improved quality?	
	<ul> <li>Examples of New Capacity: service more patients or customers, do more work during the same hours, add new educational courses</li> <li>Describe what you did</li> </ul>	
	<ul> <li>Did the new capacity generate additional revenue?</li> </ul>	
	<ul> <li>What is the value of the new revenue per patient or customer?</li> <li>What is the volume per week of new patients or customers?</li> </ul>	
	<b>Example 1:</b> Increased patients by 4 per wk. with new revenue per patient @ $$30 \text{ each} = 4$ patients x $$30 \times 52 = $6240$ annually	
	<b>Example 2</b> : Re-allocated routine consultant tasks to office staff: 4 hours per week x 3 consultants= $12$ /week x 52 weeks = $624$ hours x $20$ /hr = $12,480$ annually	



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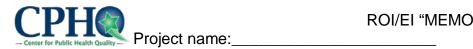
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	<b>Example 3:</b> Because of improved chart documentation, clinic improved Medicaid reimbursement ability. Anticipate increase average of 20 cases per month @ \$11.93 per case = 238 x 52 wk. = \$12407 annualized. Note \$11.93 is low end Medicaid reimbursement rate.*	
	<b>Example 4</b> : Added 2 new educational courses because of improved registration and tracking process. Each course generates \$4000 in additional revenue: $2 \times 4000 = 8000$	
6	<ul> <li>Did you reduce <u>unused capacity</u> or <u>appointment "no show" rates</u>?</li> <li>Describe what you did</li> <li>Appointment "no shows" can cause idle staff time (wasted salary)</li> <li>Can you assign a dollar value savings and annualize?</li> </ul>	
	<ul> <li>Example:</li> <li>No show rates improved by 25% (intangible):</li> <li>Improved processing time (see #2) - tangible</li> <li>Generated new capacity (see #5) - tangible</li> <li>Generate more revenue (see #5) - tangible</li> </ul>	
7	<ul> <li>Did you upgrade or <u>enhance equipment/software</u> resulting in improved productivity?</li> <li>Describe what you did</li> <li>What is the additional productivity gained from improvement?</li> <li>Can you assign a dollar value savings and annualize? (tangible)</li> </ul>	
	<b>Example:</b> Upgraded 1 old computer resulted in increased productivity for 1 worker. Need avg weekly hours saved and avg salary: <i>Computer upgrade improved worker's productivity by 1 hr per day x 5 days x 52 wks = 260 hrs/year x \$24 average salary = \$6240 annualized</i>	
	Customer Processing Note: Annualize all Financial Benefits	
8	<ul> <li>Did you <u>reduce complaints</u> from customers?</li> <li>How many complaints have been reduced per year? (intangible)</li> <li>What is the average hourly salary plus overhead for personnel handling complaints?* (tangible)</li> <li>What is the average # of hours it takes to resolve 1 complaint?</li> </ul>	



ROI/EI "MEMORY JOGGER" WORKSHEET
Project name:\_\_\_\_\_\_ Department:\_\_\_\_\_ Department:\_\_\_\_\_



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	<b>Example:</b> Can show as an intangible improvement (% of reduced complaints) and tangible as follows: Reduced staff time by 3 hours per week to follow up on complaints: 3 hrs. x 52 weeks x \$24 salary = \$3744 annually	
	Administrative Note: Annualize all Financial Benefits	
9	<ul> <li>Did you reduce costs of <u>office supplies</u> (postage, envelopes, paper, copying, etc.) based on past expenses? - tangible</li> <li>Define the type of supply and its unit cost.*</li> <li>Define the volume used.*</li> <li>How much is your annual savings?</li> <li>Example: Electronic storage for forms, files, and archiving reduced paper/copies for lists, and eliminated binders and paper-based storage costs.</li> <li>-Archiving paper costs=\$200 (2000 sheets+printing/copying @ \$0.10)</li> <li>-Other printing/paper=\$160 (1600 sheets @\$0.10)</li> <li>Total savings: \$360</li> <li>Calculate an estimate of volume of paper used, # copies, and archiving container costs</li> </ul>	
	Personnel Note: Annualize all Financial Benefits	
10	<ul> <li>Did you reduce the need for <u>temporary labor</u>? (tangible)</li> <li>What is the average annual salary of temporary employees?*</li> <li>How many temporary jobs were eliminated?</li> </ul>	
11	<ul> <li>Did you reduce <u>overtime</u>? (tangible)</li> <li>Is overtime pay applicable?</li> <li>What is the average hourly salary for overtime?*</li> <li>How many overtime hours were eliminated?</li> </ul>	

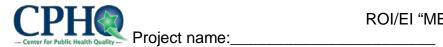


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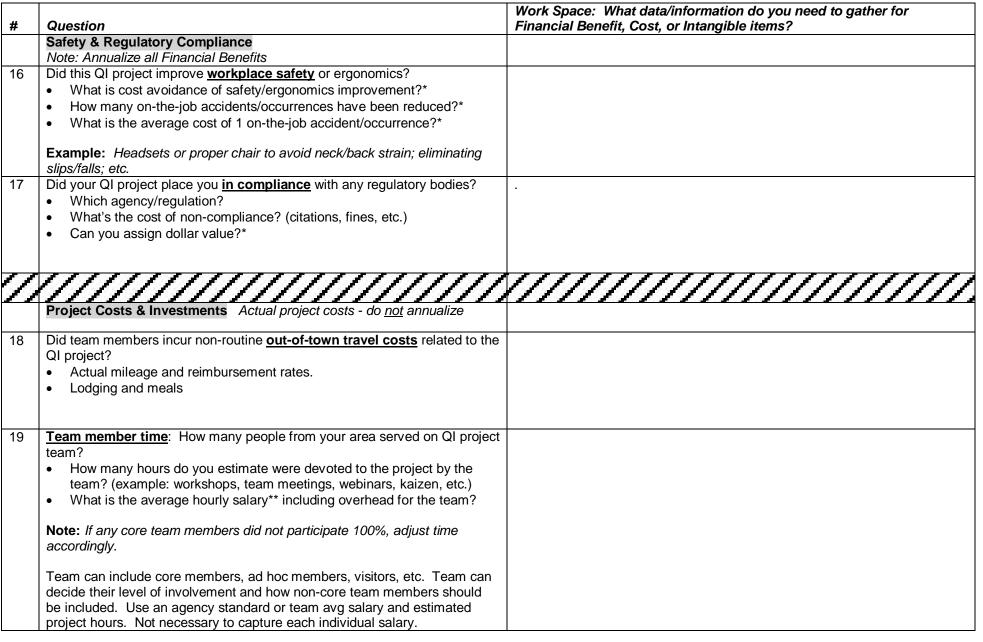
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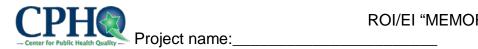
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	Facilities & Utilities         Note: Annualize all Financial Benefits	
12	<ul> <li>Did you increase <u>facility capacity</u>?</li> <li>How did you do that?</li> <li>What is the financial benefit?</li> <li>Example: 5s'g freed up 1 office and 1 cubicle @ 136 sq ft x \$37.25/sq ft =</li> </ul>	
	\$5066 annual savings	
13	<ul> <li>Do you have <u>any in-house or offsite areas</u> that are no longer required?</li> <li>Are you paying supplement rent on said space?</li> <li>What is your monthly cost? Annualize that.</li> </ul>	
	<b>Example:</b> Storing forms/files electronically eliminated storage area and the associated rent: 1720 sq ft @ \$120/mo x 12=\$1440 + \$50 boxing materials= \$1490 annually	
14	Did you avoid spending additional funds by <u>eliminating the need to</u> purchase additional space, cabinets, or equipment?	
	How much did you save? (tangible)	
	<b>Example</b> : 5S reduced the amount of space needed for growth. 2 offices will not be needed: $$5000/year$ per office x 2 offices = $$10,000$ cost avoidance	
15	<ul> <li>Did you have a reduction in <u>utility costs</u>? (tangible)</li> <li>How much did you save monthly in oil/wood or other energy sources?</li> <li>How much did you save monthly on natural gas?</li> <li>How much did you save monthly in water usage?</li> <li>How much did you save monthly in electricity?</li> </ul>	



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20	<ul> <li>Did you <u>purchase any equipment or supplies</u> to make improvements?</li> <li>How much did you spend?*</li> </ul>	
	<b>Examples:</b> (1) Storage boxes for archiving course folders. Need # and unit cost. (2) special labels for envelopes with information re envelope content. (3) bell chime and door flags to signal providers that patient chart is ready. (4) mini-refrigerator to store meds. (5) copier. (6) headsets	
21	<ul> <li>Have you <u>purchased additional technology</u> (computers/monitors, scanners, software, printers, etc.)?</li> <li>How much did you spend?*</li> </ul>	
	<b>Examples:</b> (1) Upgraded 1 computer at no cost. See #7. (2) purchased scanners to reduce staff time at copier and eliminate process steps. (3) purchased printer with improved capabilities to eliminate manual processes	
22	What were the costs (including labor) to <b>modify/remodel</b> equipment, fixtures, building, etc. as a result of the QI project?*	
	<b>Examples:</b> (1) installed sliding pocket door to create confidential office space for patient interviews; (2) installed light system to signal patient readiness for transport	

