

01 / YOUR CAPACITY

Start with studies you can actually add.

Use facility-specific inputs. This worksheet and the website calculator are planning tools, not a forecast or a reimbursement schedule.

Input	Illustrative example	Your facility
A. Scheduled studies per shift	2	_____
B. Shifts per operating week	3	_____
C. Operating weeks per year	48	_____
D. Completed share of scheduled studies	85%	_____
E. Collections per completed study	\$700	_____
F. Other cost per completed study	\$150	_____
G. Paid hours per week	36	_____
H. Paid weeks per year	52	_____
I. Productive hourly wage	\$32	_____
J. Payroll burden multiplier	1.25	_____
K. Other incremental annual cost	\$0	_____

Count incremental output and the full cost to deliver it

Use genuinely additional studies with demand to fill them. Other study cost excludes the technologist payroll shown separately. Include paid weeks without study output. Add any new fixed costs. Staffing assignments remain clinical decisions.

If one completed overnight study uses one bed-night, annual completed studies and occupied bed-nights have the same count in this model. This equivalence does not apply to every service or scheduling pattern.

02 / CONTRIBUTION AND RECOVERY

Use contribution to estimate recovery.

The default illustration shows why gross collections alone are not an appropriate payback measure.

Calculation	Default illustration
Completed studies = $A \times B \times C \times D$	244.8 per year
Collections = completed studies $\times E$	\$171,360 per year
Productive payroll = $G \times H \times I \times J$	\$74,880 per year
Other study costs = completed studies $\times F$	\$36,720 per year
Operating contribution = collections - payroll - other study costs - K	\$59,760 per year

Build your full employer investment

Include the privately quoted program fee, training-period payroll and burden, protected preceptor time, travel, materials, external fees, and other startup spending. Keep noncash opportunity cost separate unless you deliberately choose an economic-cost recovery model.

Total cash investment: \$ Months before productivity:

Cash recovery after productivity begins = cash investment / positive annual contribution $\times 12$ months.

Recovery from plan start = months before productivity + recovery months after productivity begins. The website uses this simplified calculation.

Completed studies to recover investment = investment / (annual contribution / annual completed studies), rounded up. Operating weeks = investment / (annual contribution / operating weeks per year).

Model timing and uncertainty explicitly

The simple model assumes steady productivity after training. It excludes collection delays, financing, tax, attrition, and replacement hires. If contribution is zero or negative, there is no operating payback under those assumptions.

03 / THE ALTERNATIVE

What would it cost to build this internally?

An internal program has both startup work and recurring training obligations. Compare the same candidate, clinical exposure, outcome measures, and time horizon in each approach.

Cost or resource	Internal build	DSC-supported
Curriculum and program development	Hours / \$: _____	Residual hours / \$: _____
Applicable program review, registration or recognition work and fees	Hours / \$: _____	Local work / \$: _____
Materials, licenses, assessments and records	Hours / \$: _____	Exclusions / \$: _____
Candidate training wages and burden	\$ _____	\$ _____
Local supervision and preceptor time	Hours / \$: _____	Hours / \$: _____
External program fee / travel / exams	\$ _____	\$ _____
Displaced clinical work or studies (separate from cash costs)	\$ _____	\$ _____
Rework, remediation or repeat attempt scenario	\$ _____	\$ _____

Clarify the 160-hour development assumption

Use **160 combined staff-hours** as the starting planning estimate for initial development, based on DSC's experience. It is not 160 hours for each role. Allocate the total between the medical director, lead technologist, and any other contributors. Replace it with a local work estimate before budgeting.

For example: 80 medical-director hours + 80 lead-technologist hours = 160 total hours. Registration-related work, if applicable, must be scoped and priced specifically; using DSC does not automatically eliminate local requirements.

04 / OPPORTUNITY COST AND RISK

Protected teaching time has an economic value.

Keep cash spending, displaced contribution, and uncertain rework visible as separate parts of the comparison.

Medical director: identify work actually displaced

Using the founder's planning assumption of **\$600 per hour of potential clinical activity**, 80 allocated physician hours represent **\$48,000 of gross clinical activity**. This is not automatically \$48,000 in lost profit or an added cash expense. Verify the rate and determine which clinic visits or study interpretations would actually be displaced.

Physician opportunity cost = displaced clinical hours x local contribution per clinical hour. Contribution per hour subtracts costs that would be avoided when that activity does not occur.

Lead technologist: separate wages from displaced studies

Count additional paid training or backfill hours as cash expense. If studies are truly lost because a technologist is teaching, estimate lost studies x contribution per displaced study. Do not count the same payroll or lost contribution twice. If coverage preserves output, use the actual coverage cost.

First-attempt development and rework

An initial program may need revisions, additional teaching, or a repeat candidate attempt. No measured comparison of internal versus DSC-supported failure rates is asserted here. Build your own base, delayed-progress, and repeat-attempt scenarios instead of assuming an unsupported failure rate.

Scenario input	Your estimate
Additional development or remediation hours	_____
Additional training payroll / repeat fees	_____
Delay in productive start	_____ months
Lost contribution from the delay	_____

Expected rework cost can be modeled as probability x incremental cost, but only when both inputs have a defensible basis. Keep it separate from first-attempt cash cost and explain the source of each assumption.