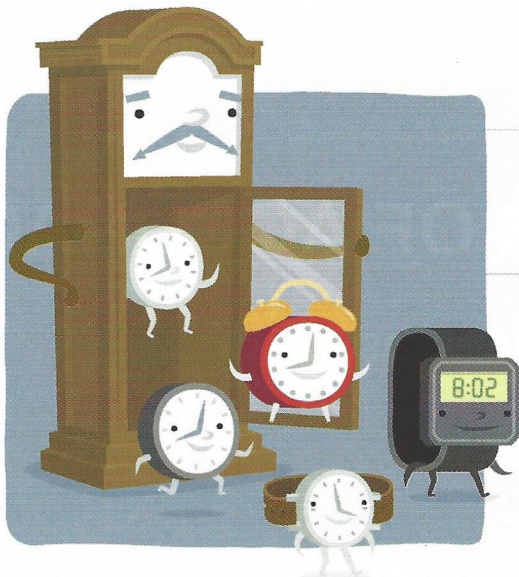


## Finding the right formula for ROI

Time saved = time to reallocate = money? (Part 2 of 2)

In the last issue we discussed the issues with the 'time is money' approach to a return on investment analysis. Now let's turn to a better, but still flawed version: *Time saved = time to reallocate = money*. This is possibly true. As we saw above, reallocating time saved to reducing stress and errors can be a valid – albeit soft – ROI.



If the time is reallocated to income-producing events (i.e. med reviews) then the value is the net income from the new event. If, however, the time is reallocated to cleaning and tidying the dispensary, or filing paperwork, then the value will be difficult to determine and will be a very soft ROI indeed.

A better ROI is to explore the future labour costs (three to five years) with and without the change or addition being considered. This is a more accurate ROI and is the one we use in our consulting business. We calculate your current Rx per labour hour metric as well as your 'growth comfort level'. From these we can calculate forward and show at which future points you will need to hire staff to support your expected growth. Using additional data we can also calculate the level of each new hire (pharmacist, certified technician, technician) and come up with a future cost of labour. The same approach is then taken to analyze the future cost of labour if the change under consideration (e.g. purchase a vial filling robot) is taken.

You will of course still need to hire additional staff in the future. However, by delaying and reducing future hiring, you will see payroll reductions. If those reductions come out higher than the cost of the automation, then it's a good ROI.

The best ROI would be attained using 'simulation modeling'. This refers to computer models created to reproduce real world tasks that can be modified on computer. The modified tasks can then be simulated over extended periods of time (months of Rx filled in seconds of computer time) and the results of the changes quantified. Systems models take into account all time and motion data from your pharmacy as well as use your current labour model (to suggest labour changes).

I have written about this previously so I won't go into detail here. (The article is available at [http://www.caverlypharmacysolutions.com/published/article\\_19.pdf](http://www.caverlypharmacysolutions.com/published/article_19.pdf))

Most ROIs are for technology purchases. Could you also have an ROI for a renovation or redesign?

If your current workflow is causing you to miss delivery deadlines, resulting in wait time complaints, workplace stress and med errors (whether 'processed only' or released – see Grasha AF, O'Neill M, "Cognitive Processes in Medication Errors." U.S. Pharmacist) then a redesign will result in value. As discussed above, most of these values are soft and the ROI is therefore in areas like reducing stress, improving patient and employee satisfaction, retaining staff and patients, and allowing staff, management and shareholders to sleep easier at night. All valuable, but all difficult to quantify.

### ROIs are great, but they can be difficult to trust.

In fact, there is a new terminology for these types of returns: A social return on investment (SROI) is the name of the approach used for determining the return you receive for decisions or actions that provide value socially (e.g. sponsoring the local baseball team); economically (e.g. your investment helps associated firms be more profitable, perhaps an adjacent clinic); and environmentally (e.g. your renovation includes a new "green" lighting system).

The bottom line is: ROIs are great, but they can be difficult to trust. You need to trust the provider and be able to confirm all the inputs for them to provide full value. **PB**

**Wayne Caverly** is president of the Caverly Consulting Group. He is also an internationally recognized speaker and published author with more than 40 articles on pharmacy automation and design who has contributed to two pharmacy textbooks. He has more than 25 years' experience automating, designing, and reengineering community pharmacies.