**Tracking KPIs in Your Auto Body Shop**

**Measure It**  
The collision repair industry has done a good job of reducing cycle times. As a whole, we’ve knocked a day or so off of our average cycle time over the past couple of years. Whether that’s because the inventory of repairs is lower or because we’re fixing cars faster isn’t certain, but the number is coming down. The fact is that insurers, customers and repairers are all focused on reducing the time required to repair collision-damaged vehicles.

To manage anything, you need to find a way to measure it. Production key performance indicators (KPIs) include cycle time, touch time, labor efficiency and others. For our back-to-basics approach, we’ll look at ways to improve these three specific KPIs.

**Cycle Time**  
In the collision repair industry, there is no generally accepted definition of cycle time. A good definition might be the time required to complete a process.

There are many cycle time processes in collision repair. Most of us understand the time from drop-off to delivery (keys to keys) as repair cycle time. Other cycle times include assignment of claim to upload of estimate, parts order to delivery, supplement submission to approval, booth time per repair order (RO) and completion to delivery. As you can see, there are many “sub cycles” involved in cycle time.

Cycle time can be measured several ways. If you participate in a DRP, you know that insurers measure cycle time and factor it into their shop performance metrics. You can measure cycle time manually, but the best method is to use a computerized shop management system. Good systems are capable of measuring overall repair cycle time as well as the “sub cycle” times.

Currently, average overall cycle time is 12 days, although many are achieving better results. A good practice is to measure overall cycle time for driveable and non-driveable vehicles separately. Target under five days for driveables and under 10 days for non-driveables. Since many repairers are doing much better, expect those targets to go lower over the next few years.

If you’re not currently measuring cycle time, start today. You need to know where you are so you can decide where you want to go and measure the effect of changes you make in your systems.

**Touch Time**  
Touch time is simply the average number of billed hours produced per day per RO. Let’s say you have a job with 20 labor hours and complete the repair in four days. The touch time is five hours per day (20 hours/4 days.) Insurers use touch time to project rental car needs and generally go by four hours per day, although some have upped that to five.

You need to measure your touch time and use that number to determine how you’re doing in improving your processes. Touch time can be measured manually, but it’s best done with a computerized shop management system.

Don’t forget the sales impact on touch time. Looking at the above example, what’s the impact of going back through the P-pages, writing a better damage evaluation and negotiating 24 hours for the same RO instead of the 20 hours used above? If we still complete the repair in four days, our touch time is six hours per day!

**Efficiency**  
Efficiency percentages have long been used to measure shop production capabilities and can be measured by technicians, teams or the shop as a whole by the job, day, week, month or year. They might even apply to equipment, such as a spraybooth.

The basic math for measuring efficiency remains the same:

Efficiency % = Sold Hours / Worked Hours x 100

Example: A tech takes eight hours to complete a 10-hour repair. His efficiency is 125 percent (10 sold hours / 8 worked hours x 100). If we improve our systems and the technician is able to complete the same job in seven hours, his efficiency improves to 143 percent (10 hours sold / 7 hours worked x 100).

Sales and damage analysis skills have a dramatic effect on efficiency. As with touch time, if we’re able to dig into the P-pages, write a better damage analysis and negotiate 12 hours for the sample repair and the technician completes the repair in eight hours, efficiency is improved to 150 percent (12 sold hours / 8 hours worked x 100)!

Efficiency can also be measured manually, but this important KPI is best measured with a computerized shop management system.

**Getting Started**  
Before we start tinkering with our production systems, it’s best to determine our baseline production KPIs. What’s your current repair cycle time? How is that defined and how are we going to measure it? What’s our current touch time and how are we going to measure it? What are our current production efficiency ratios and how are we measuring them?

It’s important to define our current state as well as what we’re measuring and how we’re measuring so that we can be consistent in measurement methodology as we change and improve our production processes. If we change a process and the KPIs don’t change, we know that our process change didn’t work. On the other hand, if we make a change and there’s measurable improvement to our KPIs, we know that the change worked and should be written as a standard procedure to be followed until an even better way or process is found.

**Stops and Starts**  
Let’s look at a “conventional” collision repair process: The estimate is written in the parking lot and the customer signs a repair order. The parts are ordered from the original estimate and the repairs are scheduled. The customer drops off the vehicle and the adjuster comes by to negotiate the repair. The job is assigned to a technician who begins work, only to find supplemental damage requiring additional parts and labor.

Repairs stop while the additional parts are ordered and the adjuster calls for a reinspection. Later, the parts arrive, but there’s no adjuster around, so the car sits. Eventually, the adjuster arrives, the supplement is approved and repairs begin again. The vehicle is sent to paint, but is then sent back due to a missed dent. And on and on it goes.

In the conventional process, vehicles enter production and the process stops and starts over and over until finally the repairs are completed and the vehicle is returned to the owner.

Each of those stops and starts will delay production and costs the shop money. Stopping and starting is the most expensive form of waste in any productive process, but many repairers see the stopping and starting as “part of what we do.” Those who look to increase production efficiency and reduce repair cycle time, however, look at those stopping and starting events as opportunities to improve.

Our goal should be to eliminate the stopping and starting events, one by one. How? By looking for the “root cause” of delays as they occur and developing systems to eliminate the root cause, thus eliminating the delay forever.

**Complete Analysis**  
Start with a complete and accurate damage analysis! When asked, “If you could name one thing that had the greatest impact on cycle time reduction, what would it be?”, the principle of a large MSO with a documented improvement in cycle time answered, “The key to improving shop productivity is taking the time to generate a complete and accurate damage analysis and creating a blueprint procedure.”

In the January 2011 issue of BodyShop Business, we discussed the importance of creating a complete and accurate damage analysis. Taking the time to get it right at the beginning of the process not only improves sales and reduces the number of supplements but speeds up production.

Progressive repairers have instituted a “blueprint” process where damaged vehicles are dismantled completely prior to allowing them into the production flow. Then, a qualified tech, damage evaluation specialist and paint tech team up to ensure all damage is diagnosed and all needed parts and refinish operations are documented and included on the estimate.

Repairs shouldn’t begin until all parts and insurance authorizations have been received. Think about it – Ford would never place a chassis on an assembly line unless it had every needed part, nut, bolt, clip, seam sealer or other required items. Otherwise, the entire assembly line would stop, waiting for the missing item. Imagine the cost!

**Level the Load**

Scheduling issues rank right up there with poor estimates as the root cause of delays in collision repair. Do you have a scheduling system, or do you just “take ’em as they come”? The good ol’ “bring ’em in on Monday, get ’em out by Friday” is even worse.  The goal of scheduling is to level the workload.

There are some good scheduling systems available. A computerized management system can be a great tool in repair planning and scheduling. If nothing else, determine the number of vehicles you can get through your booth in a day and schedule that number into the shop every day. Allow some slots for tow-ins.

Insurance problems are often cited as causes for delay. It’s best to resolve any insurance issues early in the process, before repairs begin. Whether it’s an insurer you have a DRP with or not, get the negotiations over with before the repair begins or the process will stop, costing all involved with significant delays and increased cycle times.

**Parts Issues**  
Parts issues often cause delays in the collision repair process. Every repairer should have a written parts process.

Begin with a complete order, including all of the clips, fluids and parts required to complete the repair. Fax or e-mail parts orders to avoid sitting on hold. Ask your vendors to review the order and confirm parts prices within a reasonable time period, say two hours. That way you can update your estimate with correct prices before submitting it to the insurer, thereby avoiding supplements. Get your vendor to agree to a process for notifying you about back ordered or delayed parts immediately, rather than discovering the problem during reassembly.

Establish a delivery process so that parts are received and checked in as correct. Open the boxes and make sure the parts are correct before accepting them. If a part is damaged or wrong, don’t accept it and ask that the invoice be updated immediately to avoid the administrative issue of receiving the part, then returning the part and processing credits.

Use parts carts properly. They’re not meant to hold junk and be placed in corners or against the walls. They should be used to hold parts for vehicles during repair. When the repair is completed, the parts cart should be emptied, cleaned and returned to storage, ready for the next job.  
Some repairers have refined their parts receiving systems to the point where orders are received on the day they’re needed, and only as complete orders. Boxes are opened and parts are matched to the old or damaged parts to ensure correctness. Old parts are discarded and new parts are loaded onto the parts carts and transported directly to the vehicle being repaired.

**Technicians**  
Back in the good ol’ days, we assigned a job to a technician and he or she repaired the vehicle from start to finish. Today, with technician shortages and tight labor rates, the industry has been forced to change.

Use a computer shop management system to monitor technician or team workload and schedule work to the tech or team with the most available time. Jobs should be assigned to technicians based on skill level and cost. Why pay a journey-level tech for R&I operations? In the near future, we’ll likely see multiple labor rates based on the complexity of the repair, so we might as well assign repairs that way now.

Track technician profitability and efficiency and assign jobs to the fastest or most profitable tech based on the type of work.

**Quality Checks**  
Nothing in collision repair is as expensive as re-work. You cannot inspect quality into the repair!

Create systems to find quality issues as quickly as possible. Compare the cost of a missed dent in a repaired panel. If the dent is discovered before the vehicle enters the paint shop, the cost of correction is small. If it’s discovered after the panel has been refinished, the cost of repair is significantly higher. If the customer finds the dent at delivery, the cost is extremely high.

The transition of the repair from body to paint presents a major opportunity to catch quality issues early. Create a standard for the movement of a repair into the paint shop that includes your approved filler finish grit and where parts to be painted are to be checked and located. The process should provide a method to check for additional damage or dents, before the vehicle is allowed into the paint shop.

**Communications**  
The root cause of most production problems in collision repair shops is lack of communication – from the technician not reading the estimate to the estimator not telling the detailer to polish out an additional scuff on a bumper.

Look for simple visual tools to communicate to everyone in the facility how different tasks should be performed. Once you’ve developed a parts receiving process, print it on a poster and hang it in the parts receiving area. Likewise, the standard for transitioning work from the body shop to the paint shop should be posted in the area where vehicles are accepted into the paint shop.

“On-vehicle notes” are great communication tools. Using an appropriate marker, write notes and instructions directly on the vehicle. Basic RO information can be written on a window, and repair notes can be written on the vehicle itself.

On-vehicle notes can be part of a good vehicle drop-off procedure. Review the damages with the customer at drop-off and note old damages, customer pay or additional repairs right on the car. Use different colors, such as red for old damage.  Have the customer start the car, making sure the dash lights go out. Note radio settings and the location of the radio lock code at the beginning of the process to avoid problems at the end.

On-vehicle notes have found a home with those who are actively blueprinting repairs as a way to communicate all of the damages and what should be repaired, replaced and refinished.

**Never Stop**  
Improving production systems is a never ending job for the collision industry. Begin the process by determining your current state through the KPIs I mentioned. Then look for any opportunity to systematically eliminate any of those expensive starts and stops that plague our shops. Look for ways to improve damage analysis, create a blueprint process, speed up parts handling and improve communications throughout the facility.