Forensic Science for Michigan
Rising to the demands of an exceptional criminal justice system

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Working with a Purpose
Balancing Capacity and Demand with Improved Business Practices
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Five Forensic Catastrophes in Michigan

1. Closure of Detroit Police Crime Laboratory after 80 years of service – significant errors discovered

2. Haz-Mat / EPA scene at the closed DPD laboratory (2011)

3. Lay-off of 100 newly trained state police troopers to allow for the hiring of forensic scientists – *culturally devastating*

4. Discovery of 11,300 sexual assault kits with unknown forensic disposition (*MSP takes in 1,500 – 2,00 per year*)

5. 20,300 case backlog at the Michigan State Police laboratories – horrific turnaround times
Maintaining balance between capacity and demand is a management and business imperative in crime laboratories. Three principles to remember:

- Not always about more money, people, labs
- Solutions of economy must precede expansions of physical capacity
- Customer knowledge and collaboration increase overall laboratory capacity!
Building physical capacity is one of the most dangerous activities an organization can undertake.

Build **physical** capacity for what?

DNA testing for stolen bicycles?

In lieu of solutions of **economy**?
Biggest Challenge in Forensic Science

Balance police need for rapid and responsive lab testing with prosecutor need for thoroughness and jury satisfaction

FORENSIC SCIENCE IMPACT CURVE

- A viable business option?
- No charge for services
- Fee based services
- Major causative factor in crime laboratory backlogs
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Incorporated in 1911
Became a victim of “chaos”
Signs of chaos in forensic science laboratories:

1. No well-understood baseline of “free” services (*identity*)
2. Not being able to regulate demand with service pricing
3. Not having physical capacity even for baseline services
4. Not having an immediate impact on public safety – backlogs
5. Not measuring and producing customer satisfaction
6. Customers not knowing how they affect capacity
Understanding the Customer Service Model

Customer Direction vs. Provider Discretion

Watch Repair
Maximum Provider Discretion
Minimal Customer Direction

Food Service
Maximum Customer Direction
Minimum Provider Discretion
Example: Customer / Provider Collaboration

For All Your Automotive Needs

NL Automotive
Grand Rapids, MI

616-452-0030

NL Automotive
Grand Rapids, MI

Automotive service requires collaboration between customer and provider.
Case Management in the Health Care System

“FRONT END”

Hospital

Emergency Room

Doctor’s Office
Case Management in the Forensic Science System

Crime Lab

Legal Review

Evidence & Property

FRONT END FORENSICS
Service Baseline Policies
### Gross Backlog by High Volume Units

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>Current</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNA / Bio</td>
<td>4,146</td>
<td>2,500</td>
<td>- 40%</td>
</tr>
<tr>
<td>Toxicology</td>
<td>1,626</td>
<td>1,881</td>
<td>+ 16%</td>
</tr>
<tr>
<td>Firearms</td>
<td>6,250</td>
<td>2,658</td>
<td>- 57%</td>
</tr>
<tr>
<td>Fingerprints</td>
<td>2,276</td>
<td>734</td>
<td>- 68%</td>
</tr>
<tr>
<td>Drugs</td>
<td>4,425</td>
<td>1,742</td>
<td>- 61%</td>
</tr>
</tbody>
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Average case backlog reduction per month since peak of 20,300 cases at the start of 2010 has been 464 cases – we have a long way to go!

Average turnaround time went from 96 days to 68 days.
Takeaways - What can you prioritize as customers:

1. Commit resources to proper management of forensic evidence – the better your lab, the bigger your burden.

2. Be a knowledgeable and supportive consumer of services.

3. Create “Forensic Evidence & Technology Committees”

4. Develop customer satisfaction surveys to share with labs.

5. Encourage your lab to develop strong customer service and consultative competencies.

6. Collaborate in the development of baseline service policies.