“Often called a bike or cycle, is a human powered, pedal driven, single track vehicle, having two wheels attached to a frame, one behind the other.”

_Wikipedia_

“Perhaps the single most important element in mastering the techniques and tactics of racing is experience. But once you have the fundamentals, acquiring the experience is a matter of time.”

_Greg LeMond_
Bicycle Performance

- Bicycle performance is extraordinarily efficient.
- It is the most efficient human-powered means of transportation in terms of energy a person must expend to travel a given distance.

Fundamentals of Performance

- You want to ride further, faster or both.
- You want to improve your road race placings or complete a target event such as a time trial or triathlon in a particular time.
- You want to be efficient in terms of time invested, energy expended or progress made in a particular time period.
- If you are a cyclist or coach who has identified any of the above objectives then you have made the first step towards adopting or facilitating a structured training program.
- The process of designing and implementing an optimal program hinges on key performance indicators.

Fundamentals of Performance

- How fast am I now? (Benchmarking)
- How fast do I need to be? (Goal setting)
- What is the gap? (Gap analysis)
- What is causing the gap? (Rider profiling)
- Can I close the gap? (Realism)
- How? (Training)
- How can I measure progress? (Monitoring)
- How can I give myself the best possible chance in my target event(s)? (Event research)
### Terms of Reference for Performance

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmarking</td>
<td>to compare a set of services against the best</td>
</tr>
<tr>
<td>Goal setting</td>
<td>to develop and action plan that will motivate and guide a group towards the goal</td>
</tr>
<tr>
<td>Gap analysis</td>
<td>compares actual performance with potential or the desired performance</td>
</tr>
<tr>
<td>Profiling</td>
<td>records or analyzes a characteristic</td>
</tr>
<tr>
<td>Realism</td>
<td>accepting a situation as it is and being prepared to deal with it accordingly</td>
</tr>
<tr>
<td>Training</td>
<td>teaches a particular skill or type of behaviour</td>
</tr>
<tr>
<td>Monitoring</td>
<td>observes and checks the progress or quality of something over time</td>
</tr>
<tr>
<td>Research</td>
<td>investigates and studies the materials and sources in order to establish facts</td>
</tr>
</tbody>
</table>

### Goals vs. Standards

Not to be confused with one another
- Goals are a desired result
- Standards explain how you will achieve this result

An example of a goal is a dispatcher using correct radio terminology

There are standards that the dispatcher should adhere to.

In Canada, the Radio Information Circulars (RIC 22) are mandated by Innovation, Science and Economic Development Canada.

i.e. Speech transmission techniques must include:
- Time and date
- Phonetic alphabet

### What are performance standards?

- Observable behaviours
- Actions which explain how the job is to be done
- Results that are expected for the job performance
- Based on what is required of the position, not the individual
- Meaningful, reasonable, and attainable
- Expressed in terms of quantity, quality, timeliness, cost or outcomes
**Do we need performance standards?**

**YES!!!**

**WHY??**

- Provides the employee with specific performance expectations
- Tell us how we are progressing towards achieving our goals
- Reduces stress and ambiguity
- Removes or decreases the need for direct supervision
- Enables performance appraisals to be based on accurate, relevant performance based data
- Provides consistency in the approach to the work and deliverables

---

**The Father of Quality**

- William Edwards Deming (1900-1993)
- By adopting the principles of management, organizations can increase their quality and reduce costs
- The key is practical continual improvement

\[
\text{Quality} = \frac{\text{Results of work efforts}}{\text{Total Costs}}
\]

---

**Quality Assurance/Improvement**

**Quality Assurance:**
The actions taken to ensure that a standard or procedure is adhered to and that delivered products or services meet performance requirements

**Quality Improvement:**
An organized system that assesses and evaluates the process to improve the quality of services provided

**Are they both necessary?**
Your agency?

- Does your agency evaluate call taking performance?
- What standards/protocols do you have and what methods are used to evaluate your call taker’s performance?

The **BIGGER** question is, does your agency evaluate radio communication performance?

My agency?

- Our goal is to deliver the highest possible level of service not only to those reporting the emergency, but also to the responders we send to help those people.
- We have a well established QA/QI program in place for call taking
  - use of IAED medical and fire protocols
  - call reviews based on performance standards
- We did not have a process to evaluate radio communications
  - held people accountable based on memos, emails, guidelines
- We needed to develop an approach to evaluate compliance
  - We needed to establish standards

My agency?

- We had legacy processes in place
- Memos, post it notes, emails
- “Guidelines”

- These became part of our training and how we did business
- There was no formal documentation outlining the expectations while at the dispatch console

We had a lot of work ahead of us!!
What is the goal?

- What are we measuring?
- Will we retrospectively listen to the radio transmissions or will it be live?
- Will we review the CAD record associated with the incident?
- Will we base the standards on legislation, policies, procedures that are already in place?
- Will all the interactions carry the same level of consequence?
- How will we evaluate the incident?
- How will we deal with non compliance?

What we did to get started?

- Asked for volunteers to be on the Dispatch standards committee
- Welcomed all and ensured there was diversity within the members (junior, senior, union, supervisory staff)
- Began loosely creating the document and realized we needed subcommittees.
- The document needed to be comprehensive and concise, not leaving room for multiple interpretations
- Tasked each committee member with a portion of the standards

The Key Elements

The document includes the benchmarks from the time the incident arrives at the awaiting dispatch queue to the time the incident is closed.

The Process of Benchmarking

Organisations that benchmark, adapt the process to suit their own needs and culture. Although the number of steps in the process may vary from organisation to organisation, the following are steps contained in all benchmarks:

1. What to benchmark
2. Understand existing performance
3. Plan
4. Study, observe
5. Learn from data
6. Use findings
Bob... Did you hear?
They are going to start performance managing us.

Awaiting Dispatch to Crew Activation

- Dispatcher acknowledges the incident in awaiting queue
- Resource assignment
- Provision of call details
- Ensures responding status is entered by crews
- Contacts units or apparatus on air if required
- Consideration given to scope of practice/levels of training

Broadcasting of Calls

- Dispatcher to speak clearly and concisely
- Broadcast to include:
  - address of the emergency including common place names, apartment numbers, entry codes
  - high and low cross streets and compass
  - priority of the incident
  - location narrative including gender, age, chief complaint
  - supporting location information such as critical hazards
  - tactical channel
  - information regarding safety concerns and staging locations
Responding Status

- Dispatcher to confirm that unit has arrived on scene
- Dispatcher to provide the geographical location and directions to the incident if requested by the responding unit.

On Scene Status

- When a unit has been on scene for 30 minutes, the Dispatcher inquire if any further assistance is required.
- The Dispatcher shall send any additional units that are requested by Incident Command or unit on scene.
- The Dispatcher shall document all pertinent information related to the incident.

Transporting Status

- The Dispatcher shall visually confirm that the crew is in transporting status.
- The Dispatcher will enter the hospital transport code as given by the crew into the CAD record, including multiple patients if applicable.
At destination status

- The Dispatcher shall inquire with the unit regarding their offload status
- The Dispatcher will request updates from the crews and document in the CAD record
- The Dispatcher will make note of hospital redirections and advise field crews of same

Emergency activation from crews

- The Dispatcher will acknowledge and follow the emergency threat protocol when initiated by a field crew.
- The Dispatcher shall respond to all emergency traffic requests and Mayday distress signals

Shift change reporting

- The Dispatcher shall provide a complete verbal report in addition to any written notation to the on-coming Dispatcher.
- The report should include:
  - Reason for unavailable units
  - Calls waiting in the queue
  - Units on breaks
  - Units in an extended status
  - Offload delays
  - Units at training
  - Degraded resources
  - Unit statuses not working
Radio transmission procedures - Radio Industry Canada

The Dispatcher shall:

- Transmit messages in order of priority: distress, urgency, safety, followed by all other communications.
- Preserve the privacy of communications.
- Reference assigned radio call signs or fleet numbers.
- Transmit messages using a constant rate of speech using plain language and word pronunciation.
- Use the 24 hour clock to express time.
- Use the phonetic alphabet when transmitting difficult or unusual words.

- Transmit numbers by pronouncing each digit separately.
- Never use slang expressions.
- Listen to the desired radio communication channel for a period long enough to satisfy that their transmission shall not cause harmful interference to communication already in progress.
- Always identify the station being called first, followed by the words “this is” and then the Dispatcher’s station identifier.

- Reply to a call for them as soon as possible and advise the calling station to proceed with the message with the words “go ahead”, or not to proceed with the message with the words “standby”.
- Use the word “correction” when an transmission error has been made, followed by the last correct word or phrase and then by the corrected version of the transmission.
- Plan the content of the message, listen briefly before transmitting to avoid interference, and then deliver the message clearly and concisely using standard phraseology.
Signal/Radio check

When performing a signal/radio check, the Dispatcher shall call another station and request a signal check.

The signal check consists of:
“Radio check 1, 2, 3, 4, 5. How do you read me? Over.”

The following readability scale shall be used:

• Bad (unreadable)
• Poor (readable now and then)
• Fair (readable but with difficulty)
• Good (readable)
• Excellent (perfectly readable)

Documentation

• The Dispatcher shall record pertinent facts and findings. This will aid responding crews and provide data for retrospective auditing purposes.

• The Dispatcher shall document with accuracy and never state opinions, but rather capture details of the incident. The CAD record is an electronic legal document and therefore the confidentiality and integrity of the information written is paramount.

• The Dispatcher shall document:
  - Delays in response
  - Notifications
  - Degradation of resources
  - Updates to location of the emergency or access
  - Working incident benchmarks
  - Pertinent information and actions taken

• When an incident is unusual, significant in magnitude, protracted, likely to attract significant media attention, Dispatch will notify the appropriate officer. The primary means of notification to crews will be performed via the radio.
**Miscellaneous**

- Apparatus change overs
- Relocation of apparatus/units
- Interoperability channel patching
- Status errors
- Rosters (training and scheduling)

---

**How will the performance be measured?**

- The mentor on the shift will randomly choose incidents to review
- Audio and CAD records will be retrieved and compared to the applicable dispatch standard for that incident

----- It’s not about the person, it’s about the behaviour ----- 
----- It’s about tracking trends and improving performance ----- 

---

**Dispatch Standards Quality Improvement Plan**

Three phases (I, II, and III)
- Issues that need to be addressed/provision of feedback (limit to three)
- How will the Dispatcher’s performance be monitored?
- What is the action plan?
- What resources will be made available to assist with performance improvement?

- The phases of the improvement plan are non-culpable and this information will be kept in the employees’ training file.
- There should be a recommended time for intensive monitoring and improvement
- Schedule follow up meetings to discuss and review
- Include all of this in a letter to the employee