**Literature Search**

Your QI efforts can and should be built on the foundation of work done previously. If someone, somewhere has figured how to do something in this area you should know that and incorporate it as appropriate.

A literature search allows you to compare your problem and potential interventions with what has been published.

Early searches, typically in the Investigate phase, are key for benchmarking purposes within your problem statement and to creating a sense of urgency for change.

Later searches, usually in the Hone phase after you have an intervention in mind, should use the PICO system to methodically understand what has been published. It utilizes keywords that are put into a searchable database like PubMed, MEDLINE, Embase, Google Scholar or ScienceDirect.

The four core search elements are the **P**opulation/**P**atients, **I**nterventions, **C**omparison group, and **O**utcomes.

**Step 1:** Identify the patients or population you are interested in. You may require more than one group of patients, e.g., ‘mechanical ventilation,’ ‘mechanical ventilator,’ and ‘artificial respiration’ to capture all of the ways this information may have been published.

**Step 2:** Delineate the intervention you are considering, e.g., ‘weaning’ and ‘protocol.’

**Step 3:** Identify a comparison group, e.g., ‘non-protocol’ patients.

**Step 4:** Clarify the outcome you are looking for, e.g., ‘ventilator days’ or ‘mortality.