Key Driver Diagram

A Key Driver Diagram is a simple pictorial display of a structured improvement roadmap. It organizes your improvement aim, the key drivers (the “what” you need to accomplish that aim) and the interventions (the “how” - change concepts; also known as secondary drivers) into a learning and communication framework. Preparation of these diagrams promotes the essential project planning and analysis that improvement teams utilize to focus on identifying those key factors and associated interventions that ensure achievement of their aim. An example of a Key Driver Diagram for an ED Asthma Project is below.

**AIM**

Reduce median time to first albuterol treatment from triage to 15 minutes for all patients ages >= 2 to <18 years

**Primary Drivers**

- Time delay from triage to MD/NP/PA assessment
- Time from MD order for albuterol placed to RN acknowledgement of order
- Time delay from RN order acknowledgement to treatment given
- Time delay from triage to primary RN assessment
- Efficient triage
- Knowledge of PASS score usage/importance

**Interventions**

- Nurse to nurse communication for high acuity asthma patients
- Standardize method of communication in ED
- Nurse Initiated Albuterol Protocol via Triage
- Increase use of verbal notification to MD/PA/NP for patients with PASS 2-3
- Direct bedding/Walk Back patients with PASS 4-6 (when beds available)
- PASS score assigned by screener for “ill appearing” child to facilitate “walk back”
- Implement clinical pathway driven by PASS

**When to Use a Key Driver Diagram**

- As a core tool for improvement projects to help teams explore factors (key drivers) and changes (interventions) essential to achieving a specific overall goal.
- To visually depict the connection between the aim/outcome, key drivers, and interventions (change concepts).
- To focus the selection of changes to test by identifying the key drivers.
- To provide the basis for a measurement framework.
- To effectively communicate the structure, plan and results of your improvement efforts.
How Key Driver Diagrams Are Constructed

1. Document the improvement project global aim (as appropriate) and the specific aim the driver diagram will address.

2. Determine the most important factors/drivers that must be addressed to achieve the specific aim and connect to the aim. Brainstorm ideas and then cluster, as appropriate, into several key drivers. Key drivers selected for improvement should be within your sphere of influence.

3. Validate these key drivers through evidence, observation, data collection or discussion with individuals involved.

4. Determine the interventions—the how—for each key driver. These should be process changes that you believe will impact the outcome and are necessary and (collectively) sufficient to achieve the aim. Connect the intervention to the key driver(s).

5. Once the diagram is complete you are ready to implement your improvement project. However, detailed project planning and prioritization of interventions will be essential next steps to ensuring success.

A whiteboard video on driver diagrams can be viewed at
http://www.ihi.org/education/IHIOpenSchool/resources/Pages/BobLloydWhiteboard.aspx#DD

Christine M. Walsh-Kelly MD 1-31-18