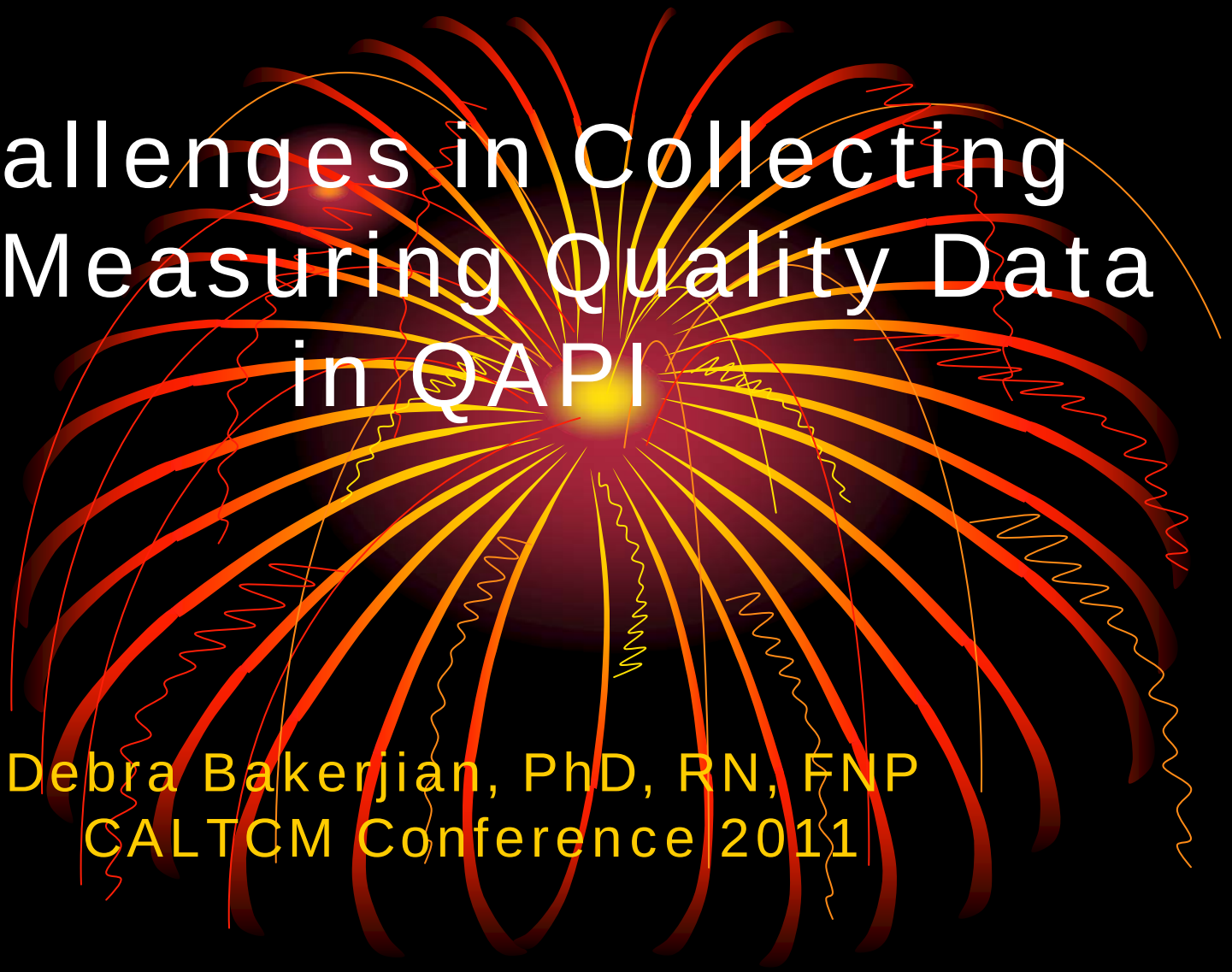
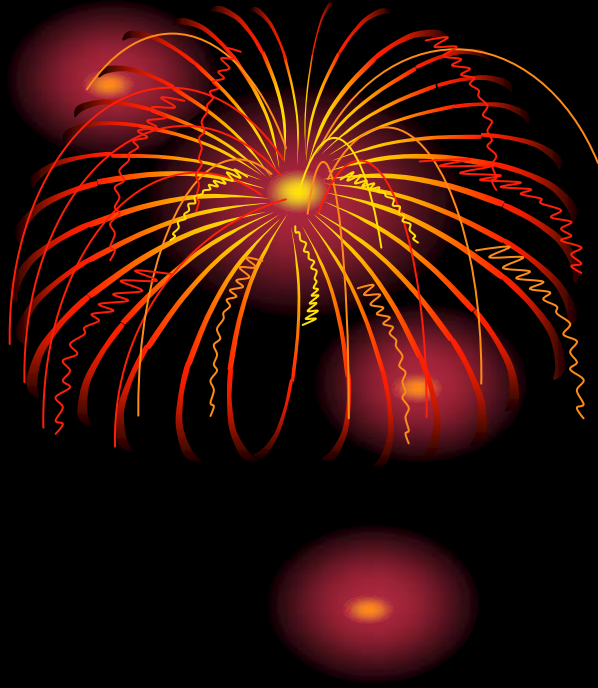
Challenges in Collecting and Measuring Quality Data in QAPI



Debra Bakerjian, PhD, RN, FNP

CALTCM Conference 2011

Quality Terms



- Quality Assurance (QA)
- Quality Improvement (QI)
- Performance Improvement (PI)
- Quality measures (QM)
- Quality Indicators (QIs)
- Continuous Quality Improvement (CQI)
- Total quality management TQM

What is QA?

- Donabedian – Father of Quality Medicine
- How does Donabedian define QA?
- How does that different from QI or PI?
- What were Donabedian's "components" of quality?

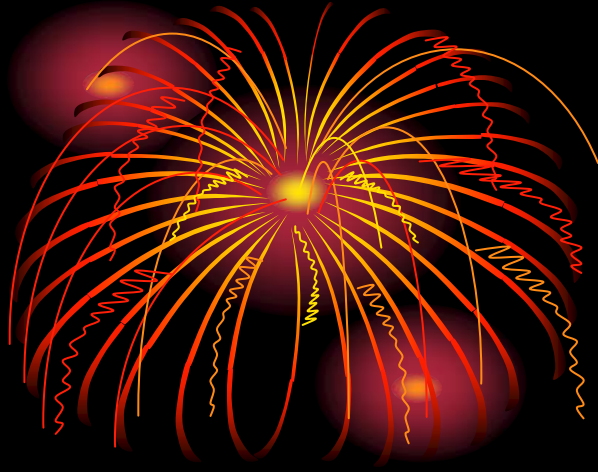
Improvement of the quality of care provided is and always has been the fundamental goal of health care quality assurance

QAPI

QA vs PI/QI

- QA - demonstrate service or product fulfills or meets a set of requirements or criteria.
  - Actual processes/outcomes are compared to pre-define criteria or pre-selected requirements
- PI/QI - enhancement of product or service.
  - When enhancements are ongoing or occur repeatedly over time, process is known as continuous quality improvement

Domains of Quality



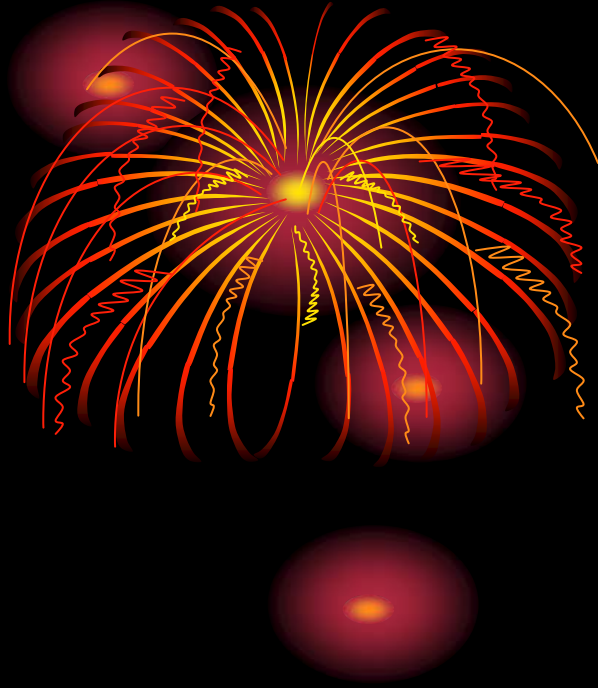
Donabedian

- Efficacy
- Effectiveness
- Efficiency
- Optimality
- Acceptability
- Legitimacy
- Equity

IOM

- Safety
- Effectiveness
- Efficiency
- Equity
- Patient Centeredness
- Timeliness

Define SPO



- Structures – foundational elements
  - Human & material resources
  - Organizational characteristics
- Processes – what we do
  - Diagnosis, treatment, education
  - Policies & procedures
- Outcomes – what happens
  - Desirable (& undesirable) changes in health status
  - Satisfaction

Structure ➡ Process ➡ Outcome

Bakerjian Model
SPO Conceptual Framework

STRUCTURE

Resources
Trained staff
Sufficient treatment supplies
Adequate time

Clinical Info Systems
Appropriate documentation forms

Facility Characteristics
Culture supports QI/PI

Organizational Support
Administrative support for process

Patient characteristics
Risk Factors
Complicating diagnoses

Policies & Procedures
System-wide policy for management of pressure ulcer
Evidence based procedures
Consistent with Federal regs
QI/PI System Structure/Guidance

PROCESS

Resources
Pressure Ulcer education

Care Coordinator
Integration between departments
Coordination with hospitals

Collaboration
Multi-disciplinary care
Team-work

Communication
Internal/External
Standing Committees – weight loss, skin

Transparency
Truthful reporting

Quality Monitoring/Sustainment
Planning
Monitoring
Accountability

Integrated QI Systems
Method – Focused PDCA,
Measures
Tracking

OUTCOMES

Safety
Improved Patient Safety Culture
Lower incidence of pressure ulcers

Effectiveness
Lower prevalence
Faster healing

Efficiency
Decreased system waste - supplies
Decreased cost

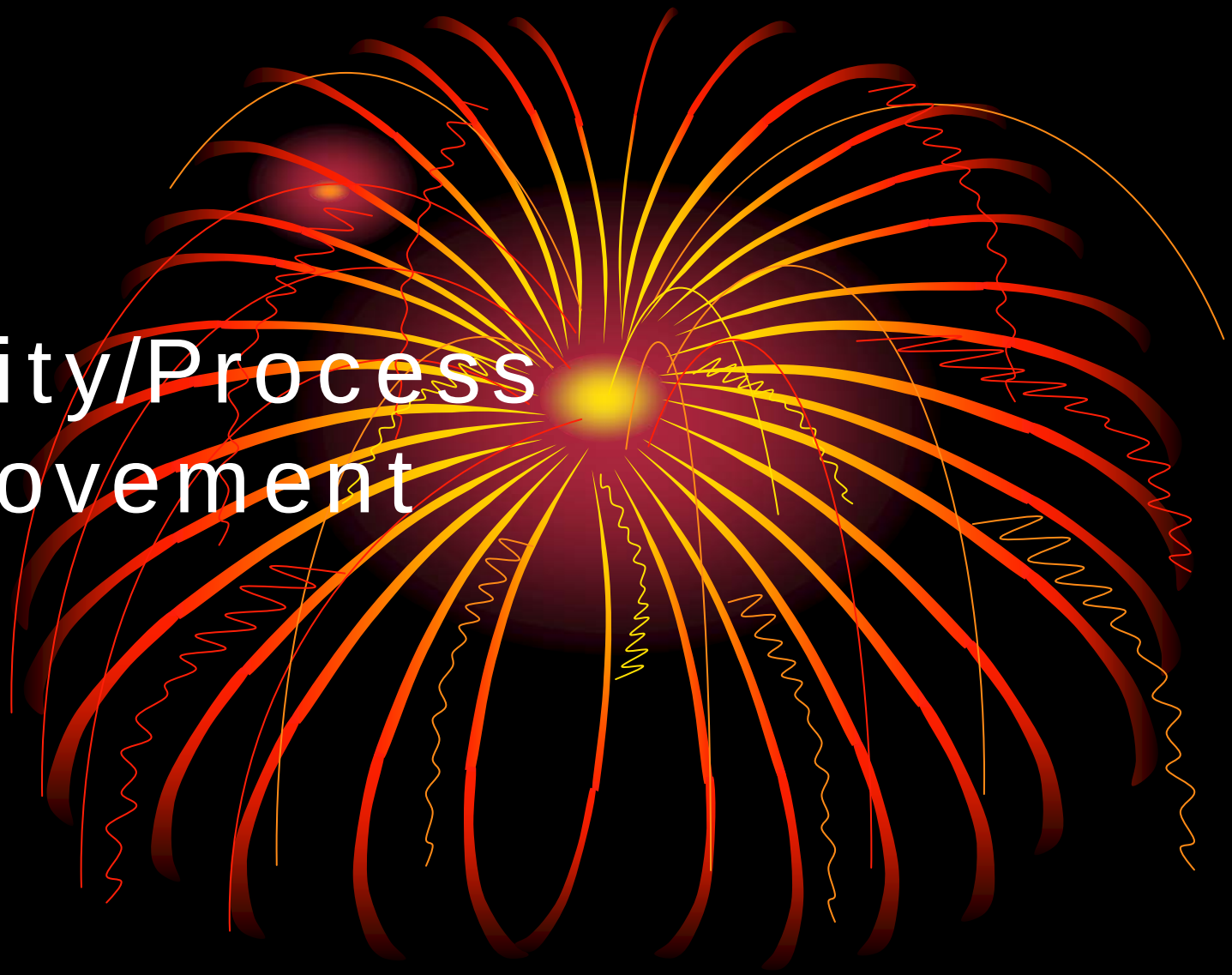
Equitability
Access to appropriate level care
Equal access for all beneficiaries

Timeliness
Full assessment within 8 hrs
Timely communication with PCP

Patient Centeredness
Patient/family involvement
Patient driven/Satisfaction
Culturally, linguistically appropriate care

Bakerjian 2006 SPO Model Adapted from Donabedian A; *Evaluating the quality of medicine*; Millbank Qtly44(3) 166-203) and IOM "Aims for Improvement"; *Crossing the Quality Chasm* (2001), Academies Press

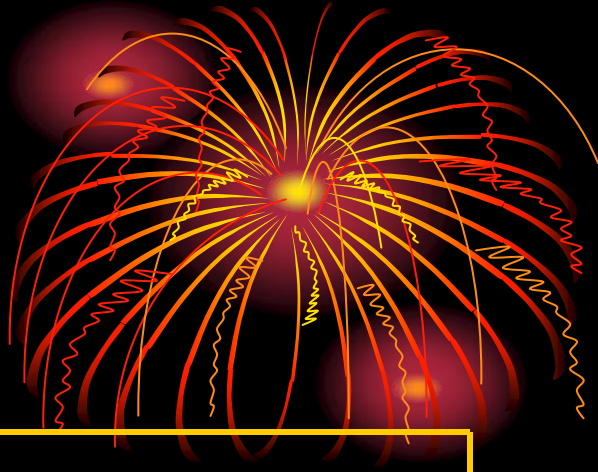
Quality/Process Improvement



Types of QI/PI

- TQM/CQI
- Six Sigma
- Lean Six Sigma
  - Lean methods
  - Six Sigma approaches
- PDSA/DMAIC
- Rapid Cycle Performance Improvement
- ISO 9000

PDSA



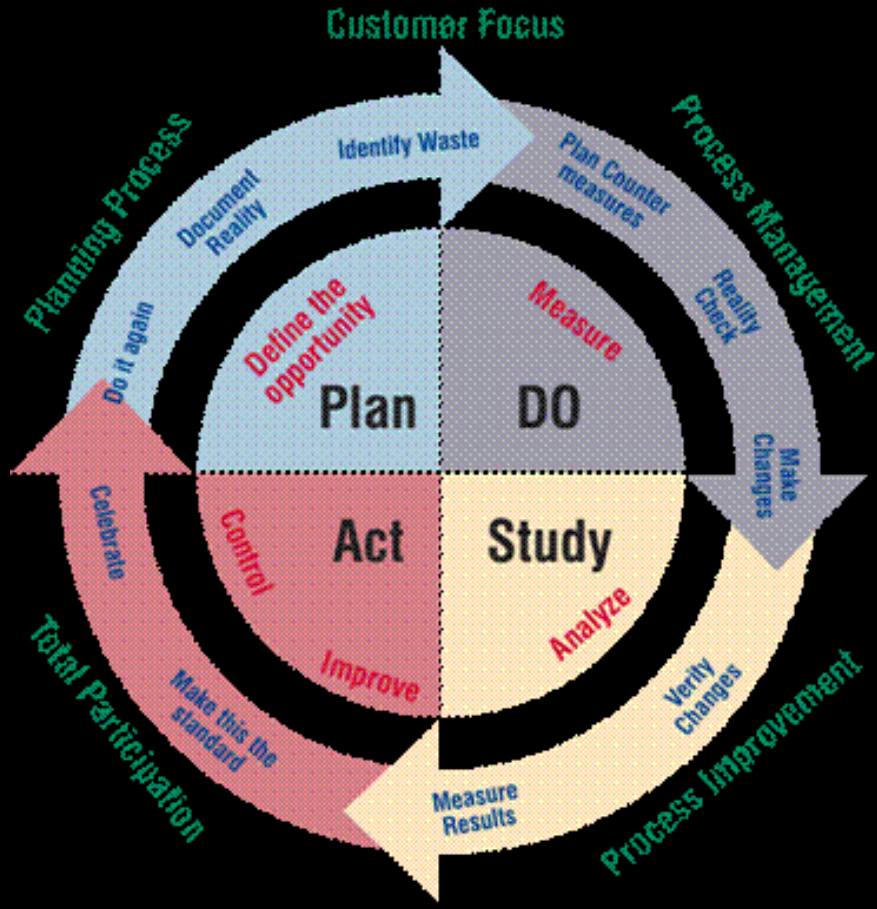
Plan
Data measurement and process change

Do
Implement the change and data collection

Study/Check
The results of the change

Act
Maintain the change and or repeat the cycle

TQM, TQSA, Six Sigma, & Lean overlay

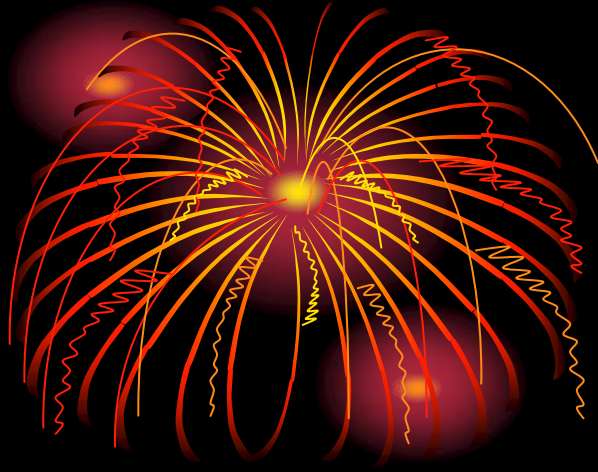


An example of performance indicator

Figure 1

Continuous Quality/ Performance Improvement

- Systematic use of process & outcome data to improve results
  - Improve process
  - Make process more consistent (reduce variation)
  - Outcomes will improve

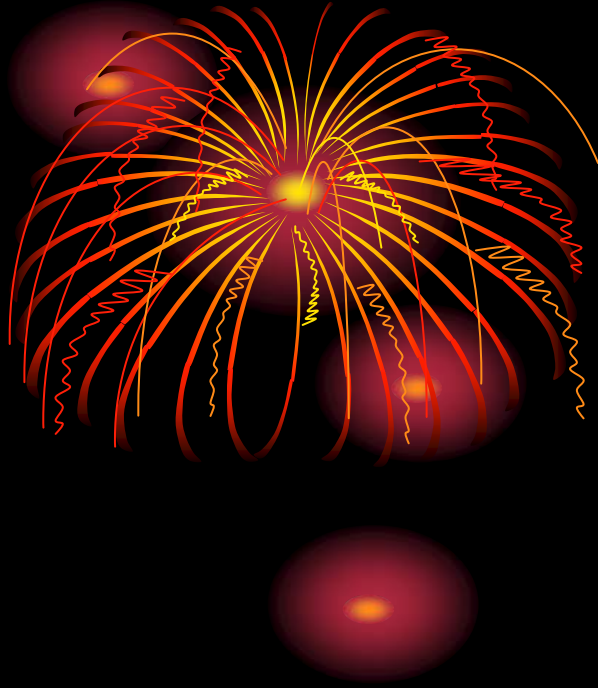


The way to actually know there is a problem is to identify potential places where a problem COULD occur based on known standards of care.

IMPLEMENT A QI PROJECT

12 Steps to QI

1) Identify important QI problem – Set Goal
2) Assemble the team
3) Identify a champion
4) Gather leadership support
5) Conduct a root cause analysis
6) Design measurable intervention
7. Establish achievable & time limited goals
8. Implement the plan
9. Collect data
10. Evaluate the data
11. Revise or continue the plan
12. Continue collecting data

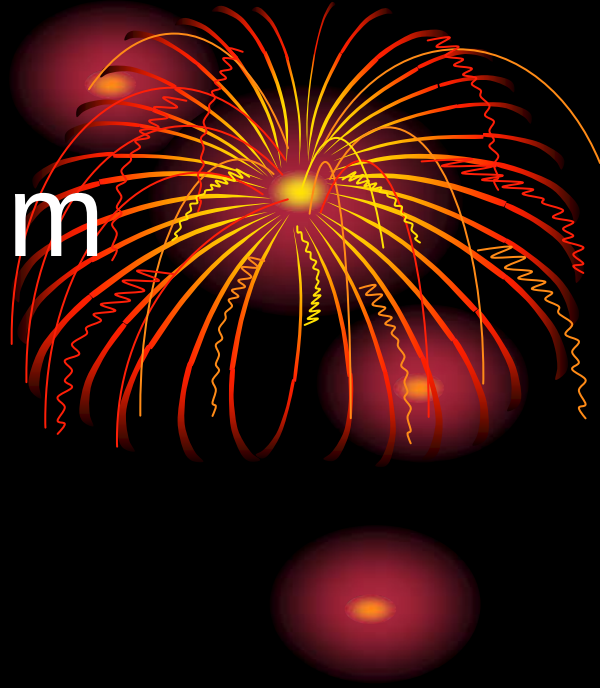


EARLY STEPS

Identify Important Issue

- How to identify a problem
  - Survey
  - Complaints
  - Staff identified
- What needs to be improved immediately?
- Set priorities

Assemble the Team



- Multidisciplinary
- Representative
- Knowledge base

Identify a Champion

- Who will “rally the troups”?
- Who feels passionate about this issue?

Leadership Support

- QI projects will not succeed without leadership support
  - Permission to take staff off duty
  - Protected time for meetings
  - Support in collecting data
  - Support to recognize success
  - Support in desire to “respond” to findings

Goal Setting

- Have clear reason why this goal is very important
  - Are we really willing to do what it takes to make this change?
  - Is this a high risk, problem prone issue?
  - Is this the most important quality issue now?
  - Are there other reasons why this goal is important?
  - Will we really be & celebrate when we achieve this goal?

Goal Setting: Set SMART Objectives

- **S**pecific (How many, how much?)
- **M**easurable (Need data collection)
- **A**ctionable (Can you control outcome?)
- **R**ealistic (but also set a **stretch** goal that challenges you to get going right away!)
- **T**ime limited (Set a target date)

Complexity comes free, its simplicity you have to work for...

ROOT CAUSE ANALYSIS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INCIDENT
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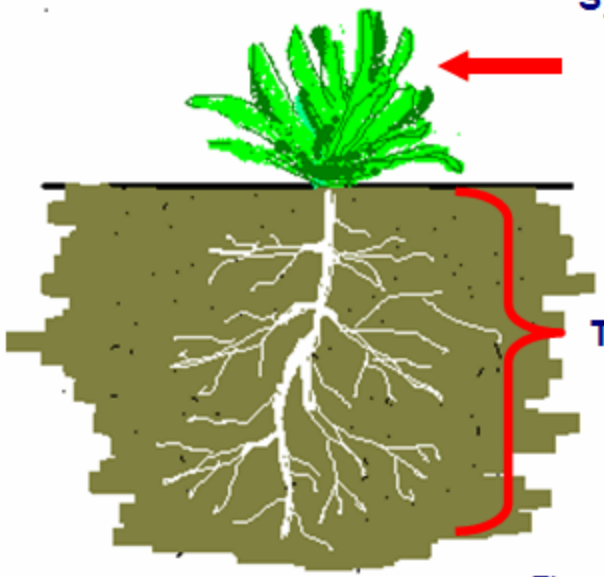
I'M GOING TO NEED A LITTLE MORE FOR THE ROOT CAUSE THAN, WHO'DA THUNK.

Root Cause Analysis (RCA)

Root Cause Analysis Basics



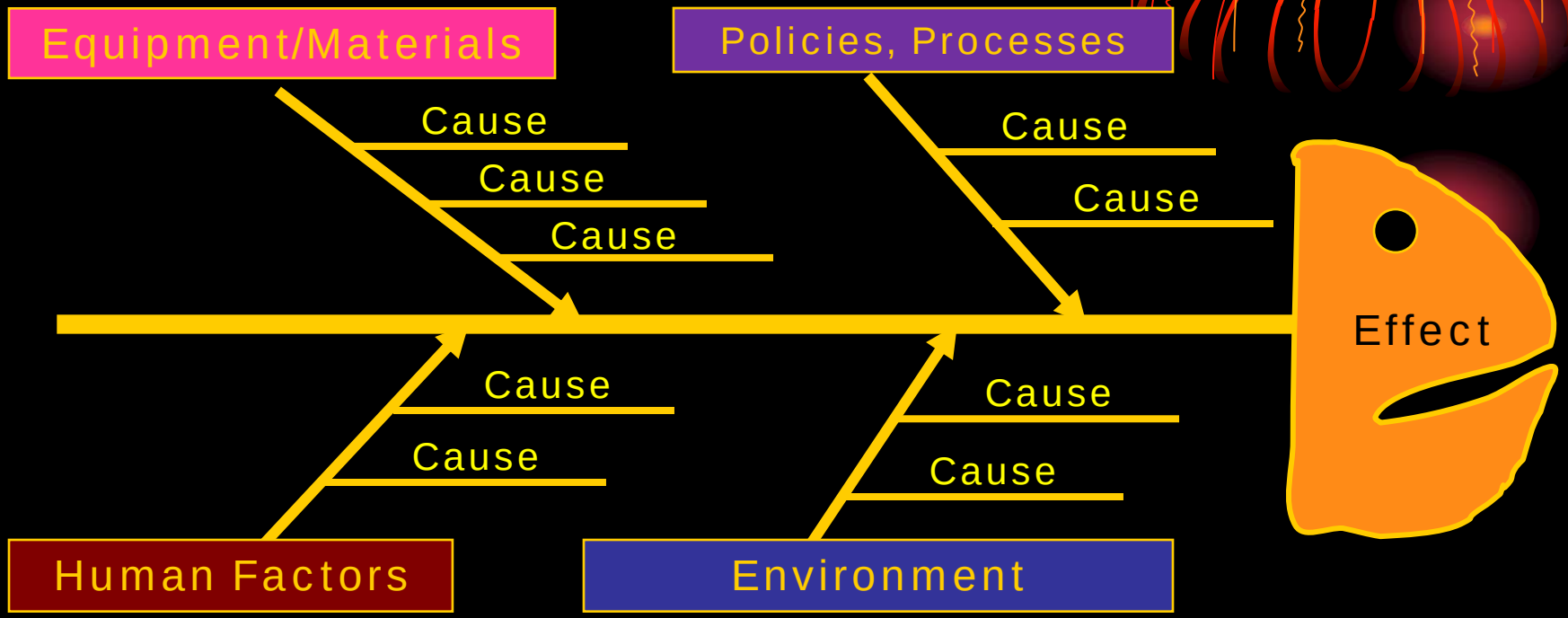
Symptom of the problem.
"The Weed"
Above the surface
(obvious)

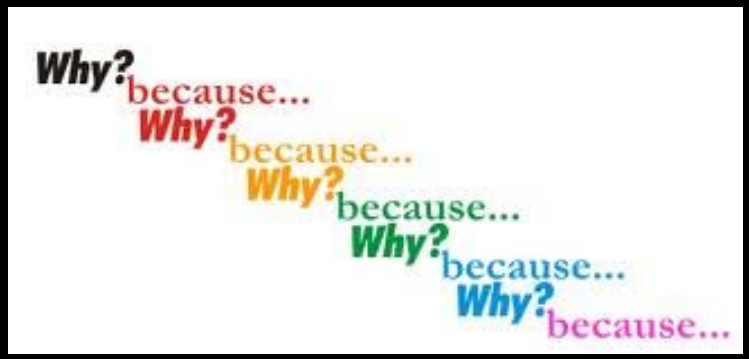
The Underlying Causes
"The Root"
Below the surface
(not obvious)

The word root, in root cause analysis, refers to the underlying causes, not the one cause.

Fishbone Diagram

(cause and effect)





Steps to Using a Cause and Effect Diagram

Define the Effect - Be specific.

Choose Categories:

Fishbone template is set up with most common set of categories - You can add or remove categories based on your specific case

Brainstorm Possible Causes:

Using fishbone diagram while brainstorming

Ask Why?:

You really want to find the root causes

Use the 5 Whys technique: asking "Why?" or "Why else?"

Investigate:

Now that you've come up with possible causes, it is time to go gather data to confirm which causes are real or not.

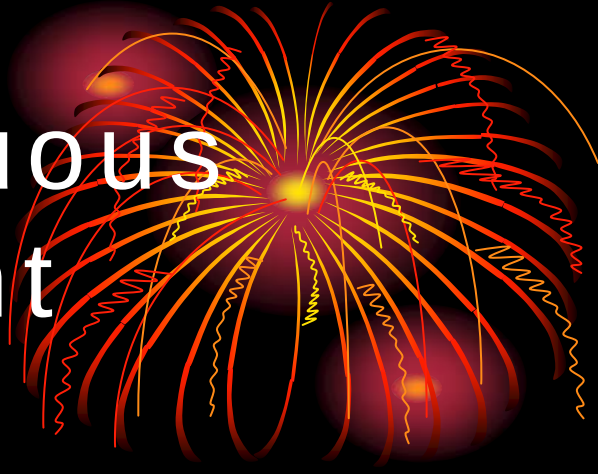
"The goal is to transform data into information, and information into insight".... Carly Fiorina

MEASUREMENT AND DATA COLLECTION

Measurable Intervention

- Can you measure the outcomes of the intervention
  - Systematic
  - Reliable
  - Valid
- Does the measure tell you what you want to know?

Rapid Cycle Continuous Quality Improvement



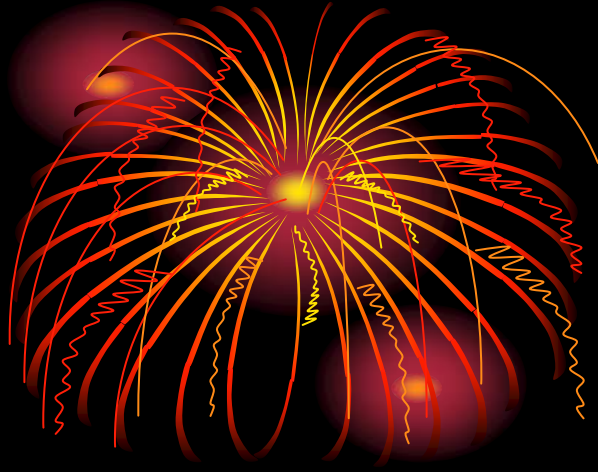
- Focus on “just enough data”
- Focus on **action** and **learning**-- “what change can I make today that will make a positive impact?”
- Focus on small scale trials before widespread implementation
- Create learning organizations with involvement of all staff in improving outcomes

WHERE TO GET DATA...

Data Collection Issues

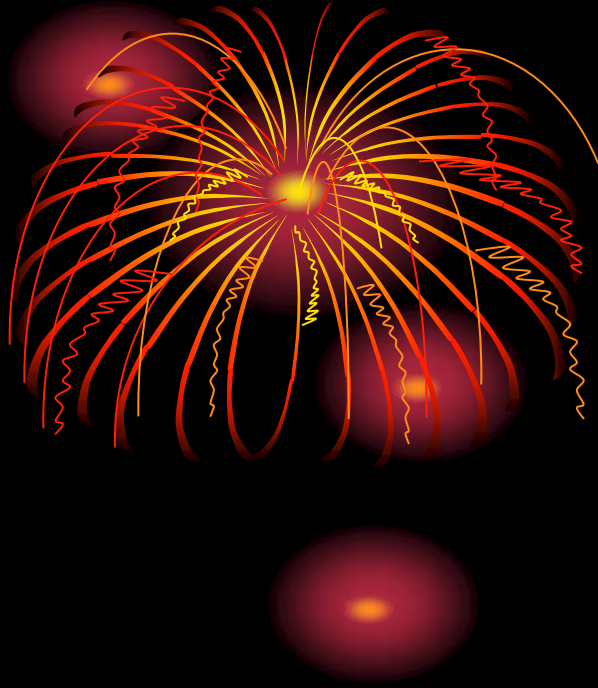
- What data to collect
  - Does it answer the question?
  - Can it be found
- How to collect it
- Who collects data
- Ensuring standardization- reliability
  - Tools
  - Training

Data Sources



- Charts
- Policies, procedures, standards
- Observations
- Interviews
- Surveys
- Secondary Data

Types of Data



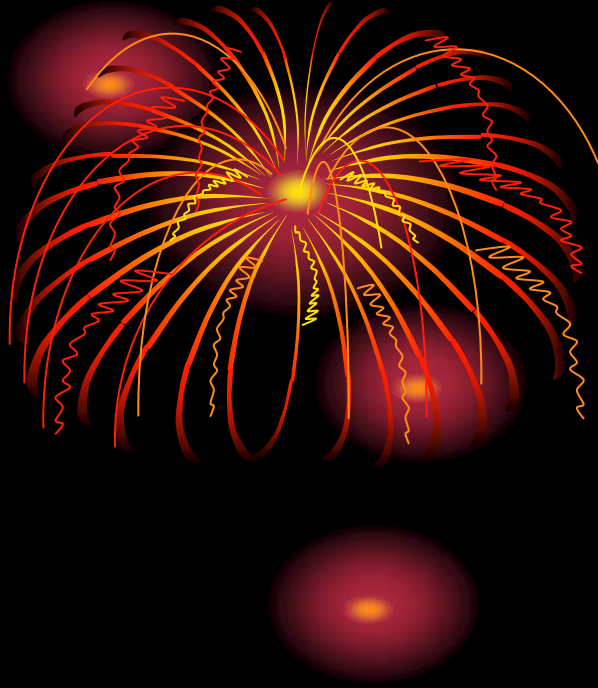
- Qualitative
  - Experiences
  - Observations
  - Expert panels
- Quantitative
  - Numbers and counts

Data Collection for QAPI

- Start with baseline
- Establish process for “audits”
  - Develop audit tool
  - Develop tool for reporting
- Timing of audits
- Be realistic in data collection

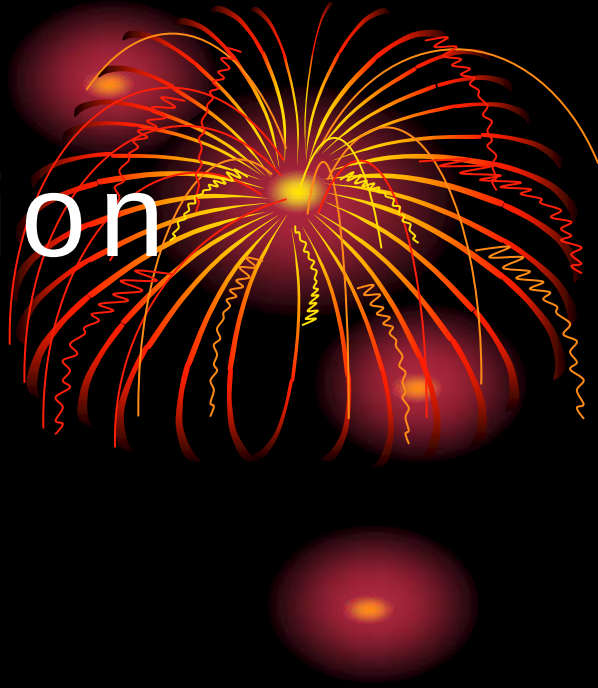
Where to get ideas, data and measures

- Advancing Excellence
  - www.nhqualitycampaign.org
- National Patient Safety Goals
  - http://www.jointcommission.org/assets/1/6/2011_NPSG_LTC_3_17_11.pdf
- MDS reports (QI/QMs)
- National Quality Forum (NQF)
  - www.qualityforum.org



IMPLEMENT THE PLAN

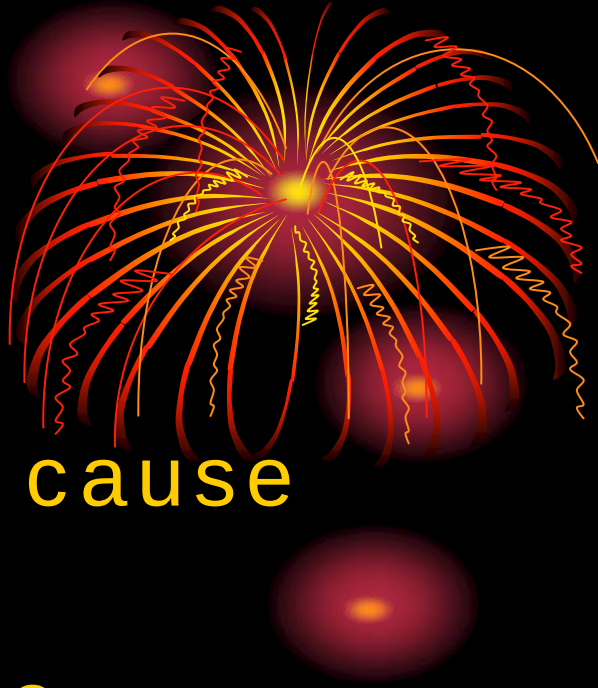
Plan Implementation



- Educate staff prior to implementation
- Follow up regularly
- Provide feedback

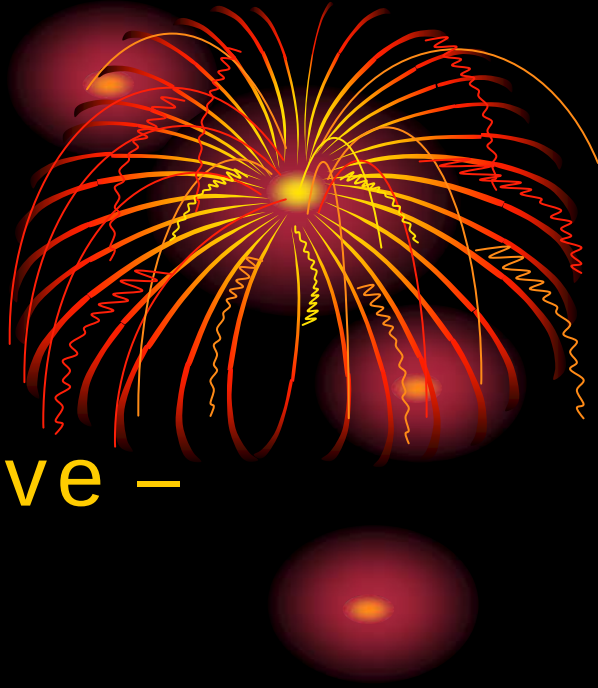
DATA EVALUATION

Interpretation Challenges



- Cannot always assume cause and effect
- Results may be negative
- Results may be positive
- Results may be “mixed”

What Next?



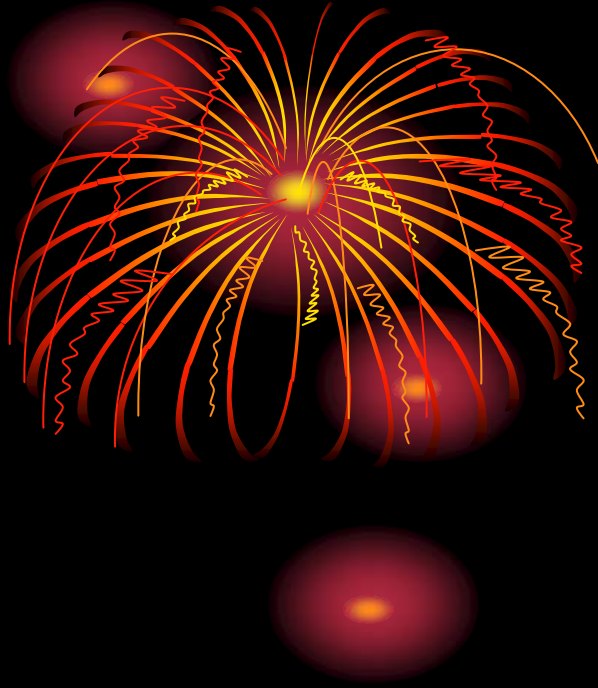
- If data outcomes improve – continue the plan
  - Expand to other units
  - Expand to add more data
- If data outcomes poor – consider revising the implementation plan

Continue Data Collection

- Continue collecting data monthly for at least 6 months after it is stable
- Reduce to quarterly for 12 mos
- Reduce to semi-annually
- Reduce to annually

Timing

- Most QI projects take a minimum of 6 mos to show improvement
- QI takes at least a year of ongoing data collection for stability



QUESTIONS, THOUGHTS...