Promoting and Sustaining Quality Improvement in IDD Service Systems

Presented by

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Our Focus Today

- Establishing a meaningful organizational culture for quality and safety
- Designing QI systems that effectively use information and data to promote quality and safety
- Recognizing the critical role of human behavior – and human error
- Sustaining change once it is established
- Real life examples of how a few important analytic tools have been used to promote quality improvement
- “Take away” resources to use at home – or to “think about”
Quality v Compliance

*a quick note on an important difference*

**Compliance**
- Putting out effort to meet minimum requirements
- Usually determined by someone else (e.g., CMS, JCAHO, licensing)
- Impetus is correction (when cited) or avoidance of citations
- Does NOT automatically lead to quality
- Necessary but not sufficient condition for quality and safety

**Quality**
- Comes from systematic and continuous improvement process
- Determined by YOU
- Based on Goals and Objectives
- Measurement is critical
- Resources become aligned to achieve goals
- Methods to sustain positive change are included
- Organizational culture expects quality
- Compliance is automatic when continuous quality improvement is present
- Focus is prevention of harm and a better quality of life for service recipients
Ummmmm ...

There is a lot of talk about the importance of quality, but ........

If we could maximize utilization and increase funding.....

Or getting certified.....
Culture sets Expectations
an organization’s culture is the foundation for establishing and sustaining real quality

A very wise man once said:

Quality is not an act; it’s a habit!

Aristotle

We – individually and collectively - are what we repeatedly do – and, don’t do. Especially when no one is looking!
Culture

- A common and shared way of life
- General customs and beliefs
- Typical activity and actions of a group
- A worldview and a way of thinking and acting

Organizational culture is the *Zeitgeist* or the “spirit” and dominant set of ideals and beliefs that motivate and guide the actions of all the members of a group – a natural way of behaving – based on shared beliefs.

Example: *front-line support staff – supervisors – managers – executives – board of directors – ALL believe it is important to know about not only reportable incidents but “almost” incidents in order to guide prevention intervention. Everyone seeks out data and information and staff is rewarded – not punished for identifying problems.*
Establishing a Strong Culture is Essential for Quality Improvement

- **Systems approach** is absolutely necessary
- **Prevention** of errors - not punishment should be your focus
- **Analyze information** (focus on “good” data and dump useless data)
- **Involve frontline staff** – share findings widely
- **Don’t let “good enough” be good enough**
- **Seek constant improvement** (not just when you are told to)
- **Belief:** people don’t try to mess up – but most of us make mistakes sometimes
- **Ask why** - Look beyond “fault” – seek to understand why a mistake took place
- **Learn from mistakes** and “close calls”
- **Encourage reporting** - without fear – to promote organizational learning
- **Sustain positive change** - in a planful fashion
- **Expect quality** – make it a habit for all people in your organization

This is VERY, VERY hard!
Just Culture\textsuperscript{1} goes a long way toward establishing a true culture of quality

- Sense of fairness and openness
- Managers do not “jump to conclusions” and automatically place blame
- Use adverse events or failures as LEARNING opportunities
  - Ask: “How can WE redesign systems to reduce errors and improve services?”
  - Consequences based on understanding WHY
- Must know if incident was due to
  - Human error (not intentional)
  - At-risk behavior (thought it was a better way to do it)
  - Reckless behavior (intentional – deliberate disregard)
- Different consequences (do not always punish)

5 Deming Truths

*a few essential quality improvement principles to help establish a Meaningful Culture of Quality*

- Quality improvement = process management with a focus on the system.
- Quality improvement is not simply people management.
- If you can’t measure it – you can’t improve it (and you certainly can’t maintain the improvement).
- Must have **right data** – in **right format** – at the **right time** – for the **right people**.
- Always include your “smart cogs” (people who know what is really going on).
What do we mean by the system?

DD Service System

Protocols & Tools
staff use to do their work

Technology - Equipment
Protocols - Specialists

Tasks & Activities
staff perform

Support – Care – Teaching
Transport - Supervision

Organization & Culture
within which staff work

Culture – Rules – Structure
Policies – Supervision - Training

Settings & Environment
where tasks & activities occur

Buildings – Communities
Businesses - Vehicles

Staff

Latent Faults in System

Must Focus on System Change to Improve Outcomes

• The SYSTEM must be the primary target for improvement and change!
• Cannot focus only on changing people
• Address systemic faults that set the stage for the human errors
• To improve outcomes use a comprehensive approach
• Target change to the whole system and not just to individual staff.

“’You have to manage a system. The system doesn’t manage itself.’”
W. Edwards Deming
When Something Bad Happens
Must try to identify WHY it Happened (be honest)

QI focuses on the process that led to the problem

Management

**LATENT FAULTS**

How we design the system sets the stage for potential errors and bad outcomes
- Erroneous management decisions
- Confusing policies
- Inadequate training and staffing
- Bad design of system
- Supervision lacking

Front-line Staff

**ACTIVE ERRORS**

People errors:
- Slips
- Mistakes
- Deviations

*Proximate Cause*

Avoid Blaming Other People!
NOT sufficient to know what happened or who did it!

Investigations will tell you that, but focusing on mistakes by people only suppresses identifying issues and problems.

- Must identify and understand **WHY** people are or are not following best (or even prescribed) practices!
  - **WHY** are they not following a new policy?
  - **WHY** are they using outmoded methods?
  - **WHY** are they not reporting incidents promptly and correctly?
  - **WHY** are they “forgetting” to do it the right way?
  - **WHY** are “mistakes” being made so often?
  - **WHY** are staff afraid to identify and report problems?

*It’s OK to get uncomfortable*
Do you ever hear...

Listen carefully to learn about your organization’s culture

Managers and Supervisors say:
- What an idiot!
- Unbelievable!
- How stupid can you get?!
- Just fire him please – now!
- Didn’t he sign off on the training?
- What was she thinking???

Staff and Support Personnel whisper:
- Nobody saw that, right?!
- Shhhhhhh! Don’t say anything – or we may get in trouble.
- “Don’t be a snitch”
- Make believe it didn’t happen – they’ll never know.
- So what! What difference does it really make!
- You don’t REALLY need to report that, do you?
- Quickly – do it this way – we don’t have time!
- They say they need it NOW! Just get it done.
Expect the Unexpected!

our service system in very dependent on people

• People are “people” and people make mistakes
• What should happen simply does not always happen
• Distraction, confusion, miscommunication, too much to do in not enough time, changing “rules,” complex programs and new support requirements, etc.
• Human error is a fact of life
• Silly to build safety/quality systems expecting nothing will ever go wrong
People WILL make Mistakes!

Errorless performance is a fanciful idea, but not practical. How you respond will establish your culture.

- Always try to understand WHY
- Distinguish between:
  - **Human Error** - not intentional (due to slips, mistakes and lapses)
  - **At-risk Behavior** (intentional, but due to lack of awareness or a belief a deviation was necessary)
  - **Reckless Behavior** (intentional, conscious disregard for the risk)

- “One size fits all” management response is inappropriate
- If you punish the 1st two causes, the problem will keep reappearing – and inhibit building a culture of quality
- Must identify **WHY** and focus on changing the system

Reckless Behavior does often warrant discipline
The **BIG Challenge** for leaders - according to Lucien Leape:

*Figure out how to establish standards and expectations, enforce them, *BUT* create a culture where people are encouraged to report, analyze and talk about errors and near misses in order to continually work to improve.*
Discoverability is critical to improving services

- Identify issues early
- Support reporting “near misses” and “close calls”
- Encourage people to actively look for mistakes and STOP them before something bad happens
- Reward finding problems and fixing them (not hiding problems)
- Build quality and safety systems into routines
- Measure – and use the information/data – and then share it widely!
Iceberg Analogy
Continuum for Adverse Events

Sentinel Events
Reportable Incidents

Incidents – Not Reported

Near Misses
(almost an incident)

Human Errors & Failures

Only a small fraction of incidents that have resulted in actual harm are visible to the system and end up being reported - and therefore attended to. They represent the “tip of the iceberg.” A far greater number of incidents and “near misses” (almost incidents) take place every day in every service setting. Human errors and process failures are even more common – with many eventually leading or contributing to an adverse event.

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Most existing data systems have evolved independently over time

- Most data reporting is Compliance driven
- Focus is on individual outcomes and incidents

Examples of Typical Reporting and Data Systems in I/DD Organizations

- Critical Incidents
- Abuse & Neglect
- Death Reporting
- Medication Errors
- Restraint
- Licensing & Certification
Quality Management & Improvement Integrate Requires Integration

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- Critical Incidents
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Integration and Synthesis of Data and Information

Horizontal Integration

Vertical Integration
Be Careful

too much data can be just as bad as not enough data

• Confusion & indecision
• Mistrust of all data
• Ignoring the data that is there
• Bad decisions – or no decisions
• Cry for “more data!”

REMEMBER Deming:

“Right Data, Right Format, Right Time, Right People!”
Planning for service improvement

How do we get started in making service improvements – and maintaining them?

• Define the outcomes to be achieved and describe WHY
• Visualize what it will look like when the goal is achieved
• Keep it practical – don’t seek “perfection”
• Just do it! Get started
• Develop or select existing measures that can be used to assess progress
• Develop a monitoring and evaluation framework to keep track of progress
• Share information about the intervention and its progress
• Build-in how you will sustain change over time at the very beginning of your plan
(Modified) IHI MODEL FOR IMPROVEMENT

WHAT are we trying to accomplish?

HOW will we know that a change is an improvement?

WHAT CHANGES can we make that will lead to meaningful improvement?

WHY? What is the purpose?
What is it we want to see happen?

How will we know change has occurred?
What measures of change can we use?

All improvement requires change. But all change does not lead to improvement!

What changes will have the biggest impact?

short term  long term

How will we sustain the change?

Adapted from IHI ~ Institute for Healthcare Improvement
www.IHI.org

UMASS MEDICAL SCHOOL|E.K. SHRIVER CENTER
CENTER FOR DEVELOPMENTAL DISABILITIES EVALUATION AND RESEARCH
Prioritize

Focus on both short-term (easier) and long-term (harder but bigger impact) improvement outcomes

- **Shorter-term**
  - High Impact and Low Effort strategies are good candidates for early action
  - Do Something Right Away!

- **Longer-term**
  - High Impact and Moderate to High Effort strategies may need more planning and allocated resource before implementation
  - (Why Bother?)
Consider Strength of Solution
and include all 3 in an improvement plan when possible

LOW IMPACT
- Quick fix
- Can be implemented immediately
- Low cost – minimal resource requirements
- BUT – do not usually address the problem on a long-term basis

MODERATE IMPACT
- Intermediate in scope, cost and time
- Can be implemented as interim “solution”
- Do NOT usually lead to permanent or system-wide change

HIGH IMPACT
- Major changes to a system or process that require the something takes place in a different manner.
- Higher cost and longer time to implement
- Can have a long-lasting impact
- True quality improvement
Sustaining Improvement can be even harder than generating improvement

- Hard won improvements tend to quietly vanish as new priorities pop up
- Staff revert to old ways (habit?)
- Same old issues repeat

Problem 1 Reappears

Problem 2 Reappears

Problem 2 Reappears

Problem 2 Reappears

Problem 2 Reappears
How to Sustain Change
A few ideas from healthcare literature

- Move beyond Quality Improvement and incorporate Quality CONTROL methods (not just inspection)
- Quality improvement initiatives must result in a new way of working rather than something added on
- Include how to sustain positive change from the very beginning – incorporate strategies into the QI plan
- Vertical & horizontal integration of information and communication
- Use of triggers when data suggests process abnormalities
- Begin with small incremental steps to build “will” for bigger QI initiatives
- Senior leaders must be committed to QI – BUT frontline supervisors are critical for sustaining positive change

A Few Examples
of QI for common concerns across IDD service providers

• Using Mortality Data & Reviews to Target Quality Improvement Initiatives
  • Hospice Use
  • Falls Prevention
  • Aspiration Pneumonia

• Using FMEA to Target Improvement
  • Transportation injuries

• Lessons from sentinel events
Hospice Use by People with IDD

- **Issue: Informal trend**: Mortality Review Committee concerned people with terminal conditions were not benefiting from a good death.
  - Data collected for decedents with IDD: 29% utilized hospice services; lower than state rate for general population
- **Confirmed the issue**: applied low effort strategies to gather more info on WHY hospice use was low
- **Actions**: Increased awareness of hospice and end of life planning by:
  - **Data collection**: Amended mortality form and health care record
  - **Education/discussions** with service and hospice providers
  - **Policy change** to address identified barriers to hospice
- **Impact**: Increased use of hospice by 10% within 3 years
- Continue to monitor and collect data re: use of hospice
Falls Prevention

• **Issue**: Observed accidental deaths, particularly due to falls in *aggregate mortality analyses*
  - **Confirmed** trend in analysis of reasons for ER visits: 41% of all reported ER visits for injuries were related to a fall
  - Benchmarked Falls Risk - higher than in the elderly in general population

→*We’ve confirmed the problem, now what’s the solution?*

• **Understanding falls & falls risk:**
  • We know that falls are connected – one fall heightens the risk of a future fall.
  • Major injurious falls often have earlier falls without injuries.
  • Whether a fall is injurious is largely due to chance.

• Few resources exist for falls in people with ID
Falls Prevention

• Actions:
  ▪ Distributed training materials to all service providers with fall risk factors, universal prevention strategies, and risk assessment tools
  ▪ Piloted a multi-faceted falls prevention intervention focused on site and individual level factors, including post-fall review
    1. Baseline **Fall Risk Assessment** used for people with learning disabilities to identify fall risk factors before a fall occurred
    2. Support workers were asked to track falls
    3. After each fall, support workers asked to complete **Post-fall Assessment**

• **Outcome/Improvement:** 33% reduction in the monthly rate of falls
• Additionally created a post-fall strategy guide to targeting action based on personalized falls risks
Aspiration Pneumonia

• **Issue:** Aspiration & related pneumonia significantly contribute to morbidity, mortality and health service utilization for people with IDD.
  
  • U.S. adults with IDD receiving state disability services have ~30 times the risk of dying from aspiration pneumonia than the general population.
  
  • It was unclear how much of this risk could be mitigated, which were the most frequent contributing factors, and which strategies to pursue.

• **Actions:**
  
  • Case review tool developed from existing literature and clinical expertise.
  
  • Retrospective reviews: deaths (N>300) and unexpected hospitalizations (N>500) with suspected aspiration or aspiration pneumonia in people with IDD receiving disability services across 14 U.S. states.
Asp. Pneu. – Risk Factors

Reviews indicated a range of contributing factors generally falling within physical disabilities, behavioral risks, and/or therapeutic-related risks.

• **Recurrent Pneumonias**: 1 in 5 people in 120 days.

• **Swallowing Difficulties**: 3 in 4 people had known conditions related to swallowing issues, or reflux. 20% feeding tube.

• **Alzheimer’s Disease, Dementia**: Small subgroup had swallowing difficulties due to advanced Alzheimer’s Disease or Dementia. Adults with Down Syndrome known to be at increased & earlier risk.
Asp. Pneu. – Risk Factors

Array of lesser-known risk factors:

- **Behavioral risk factors:** Eating quickly, stealing food, or tendencies to stuff food were associated with aspiration.

- **Post-sedation & post-dentistry aspiration:** As many as 1 in 5 people had dental work or were sedated in the 15 days prior to the aspiration.

- **Oral Health:** About 1 in 3 people were known to have poor oral health prior to developing pneumonia.

- **Seizures:** a subset of people aspirated during seizures.

- **Medications:** Use of anticonvulsant, antipsychotic, sedatives or anti-anxiety medications were associated with increased aspiration risk. Risk increased for people on multiple of these classes of medication.
Strategies

- Range of risk factors underscores the need to assess multiple areas of potential risk factors in order to target appropriate preventive efforts and interventions.

- Greater awareness, assessment and mitigation of lesser-known risks due to:
  - food-related behaviors,
  - medical sedation and dental work,
  - poor oral health, and
  - psychotropic medications

**Current work to interrupt risk patterns:**

- Adjust our understanding of who is at risk
- Time-sensitive procedural changes to minimize risk and monitor
- Upstream interventions
Transportation Injuries: Wheelchair Van Use

- **Issue:** Incident Reports and Staff Notes indicated a rising number of injuries and “near misses” for service recipients being transported to and from Day Programs
  - Data analysis identified most incidents involved people in wheelchairs exiting and entering wheelchair accessible vans across program sites

- **Actions:** Observation of procedures being used suggested inconsistent methods for using lifts
  - **FMEA Analysis:** Team formed that included van drivers and day program personnel
    - Task analysis of written procedure
    - Identification of error prone steps
    - Risk Priority focus on 5 steps needing change
Transportation Injuries: Wheelchair Van Use

- **Actions (cont.):**
  - **Improvement Plan:**
    - Short term – re-orientation of staff, use of signs
    - Moderate term – rewrite procedure, train staff, spot-check by supervisors, design checklists
    - Longer term - increase surveillance (video), phase in purchasing of modified and better vehicles
  - **Measurement:** encourage reporting of near misses; share incident data summaries and graphs of transportation injuries

- **Impact:** Immediate reduction of injuries for persons in wheelchairs during transportation

- Continue to monitor and enhance collection and reporting of data; highlight and reward improvements and better outcomes
Lessons from Sentinel Events

Could this happen in your system?

• Issues:
  • Weaknesses in quality and info from other systems can carry problems into your system
    • Errors by medical professionals perpetuated within medication administration systems
    • Erroneous or missing information about people coming into services
  • Erroneous assumptions – Signs/symptoms of illness considered “normal” for certain people
  • Pressures of ‘emergency’ service needs, limited service options can lead to misalignment of needs and services

• Consider: How are the quality defenses in your system set up to identify and respond to these issues?
  • Tools: Incident Review, Root Cause Analysis, FMEA
Lessons from Sentinel Events

• If your staff see something, will they actually say something?
  • Resource: How Strong is Your Organization’s Culture of Quality?

• Are there other influences that may be more powerful than the procedures, protocols and systems?
  • Consider things such as:
    • Verbal & non-verbal responses from supervisors in response to reported problems
    • Local staff culture
    • Competing priorities on & off the job
    • “Not a big deal” perspective
Thank you!

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