# Quality Assurance in Action: What do we mean and how do we implement?



Jodi Petersen, PhD jodi@petersenresearchconsultants.com

#### JJ Reform Context

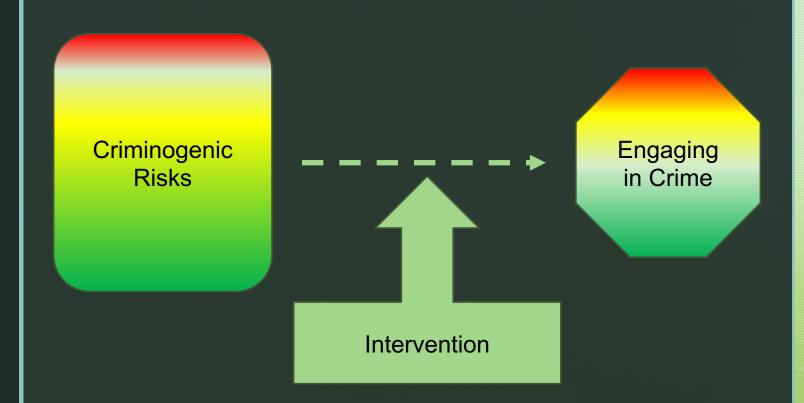
- Change Child Care Fund reimbursement to 75%
- Use a validated risk-need screen & assessment, mental health screen, detention screen
  - Probation standards
- Employ a local quality assurance specialist to support the county with implementing research-based practices, excluding counties or tribes receiving the basic grant
- Discussion today is based on content expert recommendations, not SCAO/DHHS requirements/recommendations

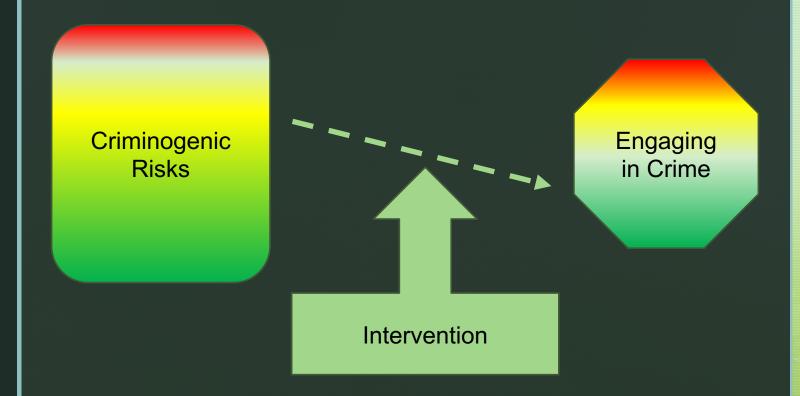
#### Today's Topics

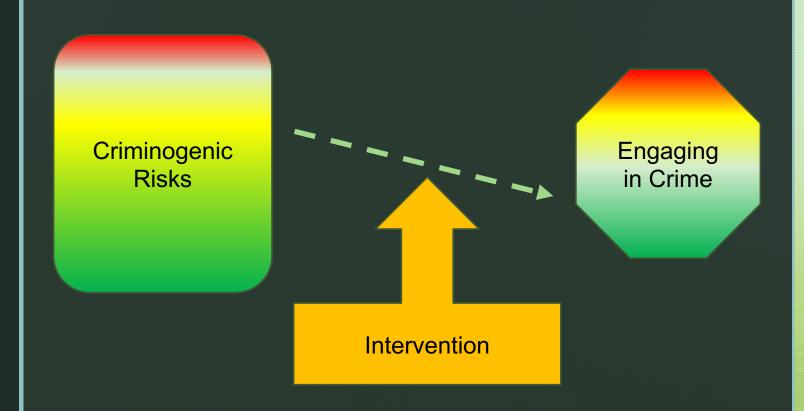
- Why are we talking about quality assurance?
- What is quality assurance?
- How do we implement?

Life
Circumstances
& Response
Patterns

Behaviors









Intervention = Program, Service, Treatment

Inconsistent recipe = inconsistent outcomes

Quality Assurance = Making sure recipe -> outcomes

Except kids and courts aren't recipes or widgets in factories.

#### What is Quality Assurance?

 Ongoing monitoring to ensure that services meet quality standards, resulting in reliable, dependent, and consistent processes, experience, and outcomes

 If we define QA under JJ reform as "do you have complete data" we're missing the boat.



#### What does that really mean?

- There is no set definition of quality assurance standards for juvenile justice
- Most aspects of "quality" are also undefined in juvenile justice
- Potential Components of JJ Quality:
  - Outcomes
  - Experience
  - Access
  - Processes
  - Data
  - Financial
  - Employer Environment
  - Values alignment

#### QA examples from other sectors

- In manufacturing
  - Set product (outcome) specifications/expectations
  - Assess which points in the process contribute to which specifications
  - Monitor specifications for those points in the process
  - Train staff to expectations
  - Monitor and adjust
- Six Sigma expectation allows 3.4 "defect features" per million opportunities

#### QA examples from other sectors

- In Healthcare
  - Define positive and negative outcomes
  - Create data points for those outcomes (patient surveys, record reviews, lawsuits, etc.)
  - Monitor regularly and implement process changes where outcomes are unsatisfactory
  - Example: <a href="https://www.medicare.gov/care-compare/">https://www.medicare.gov/care-compare/</a>
  - Timely & Effective Care →

Percentage of patients who received appropriate care for severe sepsis and/or septic shock

★ Higher percentages are better

**63%** <sup>2</sup>-- of 99 patients

National average: 60% 25,26

Michigan average: 58% 25,26

### Frameworks to Consider

- PDCA: Plan, Do, Check, Adjust
- DMAIC: Define,
   Measure, Analyze,
   Improve, Control

#### **PLAN**

Establish and define:

The objectives to be achieved

The processes neccessary to deliver results

The expected output

Clear management direction

Responsibilities for the objectives

Ensure how the plan is communicated

MALEMENT &

#### IMPLEMENT

Implement the plan
Execute the processes
 Assign roles
 and responsibilities
 Coordinate and
 document activities
 Monitor and record
 progress against plan
 Collect data

#### **IMPROVE**

Establish and define:

Assess results from monitor/review stage Determine changes needed in order to ensure plan's objectives can be met Adjust processes accordingly

#### MONITOR & REVIEW

Study results of implement stage

Gather feedback

Compare results to see if the plan's objectives and requirements have been met

# D ? DEFINE

- Problem Definition
- Project
   Objectives
- Scope Definition
- Stakeholder Identification

MEASURE

- Data Collection
- Metric Selection
- Data Analysis
   Tools
- Baseline Creation

A Q ANALYSE

- Root Cause Analysis
- Hypothesis Testing
- Data Validation
- Data Visualization

IMPROVE

- Solution Generation
- Pilot Testing
- Implementation
- Monitoring and Adjusting

CONTROL

- Monitoring Systems
- Documentation
- Standardization
- Training and Communication

SPRINT

#### Defining is the most important part!

- Quality of Outcomes, Processes, Experience
- Outcome
  - Recidivism
  - Risk reduction
  - Successful completion of programming
- Process
  - Assessment drives programming
  - Program A is the same for everyone who receives it
  - Funds are being as efficiently as possible
- Experience
  - Information is provided the same way for everyone
  - Free from bias
  - Access is ensured

#### Jodi's Recommended Process

- Start tracking inputs and outputs
  - How many petitions and juveniles do we serve?
- Define high level Key Performance Indicators (KPIs) for case outcomes first –Start tracking those
- Define & track process points and "who"s subgroup/demographic data
- Define what happens within a case
  - Start tracking at a high level what programs/services do juveniles receive?
    - What happens inside those programs?

#### Define: WHO - Inputs and Outputs

- Inputs = who comes into the court
  - Start with case info, add in juvenile descriptors as feasible
- Outputs = how many leave the court and in what ways?
- Can answer questions like:
  - How many petitions did we receive this month? This year?
  - How many juveniles are on our caseload currently? So far this year?
  - How many juveniles were on formal probation supervision this year vs informal processing?
    - Consent diversion standard probation intensive

#### **Define: Outcomes**

- Reduction in risk and recidivism are our primary goals. (Why both?)
  - Risk need multiple timepoints of a valid risk
     assessment (can't compare screen with full assessment)
  - Recidivism define this!
    - Any new petition within two years of the current petition
      - New adjudication? Do PVs count? Time after case close?
      - Why two years? Can we start with shorter follow ups?
      - Local county vs wider data
      - Adult and juvenile systems

#### Inputs, Outputs, + Outcome KPIs

- Can answer questions like:
  - What's the average risk score for juveniles on our caseload right now?
  - How many low, moderate, and high risk juveniles have we had year to date?
  - What's the average risk score for juveniles on consent calendar vs probation?
  - How much does risk score change between a juvenile's initial and last assessment?

# Define: Process Points & Demographic/Subgroup Data

- Process Points
  - Define important dates or process markers
    - Start and end first, then in between
    - Petition Authorized, Adjudication, Disposition,
       Placement/Detention Dates, Case Close
- Demographic/Subgroups
  - Define what you want to track
    - Race, Ethnicity, Gender
    - School status, special education status, zip code, gang affiliation, etc

# Inputs, Outputs, Outcomes, + Process Points & Subgroups

- Can answer questions like:
  - Do all genders' risk scores change the same amount while on court supervision?
  - Are juveniles of all races and ethnicities equally likely to be processed formally or informally? How does their risk score play into this?
  - Do more court-involved juveniles come for certain schools than we'd expect given that school size?

## Define: WHAT happens within a case?

- What all is done while under court supervision that is intended to make a difference?
- What programs/services do juveniles receive?
- Can start by just tracking program referrals
- But it gets more complicated...
  - Evidence-based programs vs new/homegrown/individualized\*
  - Program referrals vs Intakes vs completion
  - Services/Practices that are more informal

#### QA: Evidence-Based vs Homegrown Programs

- Evidence-based programs proven to reduce criminogenic risk
  - Must be implemented with high fidelity
  - Changing the "recipe" will change the results
    - Monitor fidelity if you intend to implement as evidence-based
    - Track if you change anything. Assess the impact of changes.
- Home-grown
  - Need to track internally
  - What is the program intended to address?
  - How does it do that? Is it the same for all juveniles?
  - How do we know if juveniles are "done" with the program?
  - Does it impact what it intended to address?

#### **Defining Completion**

- If you send 10 juveniles to a program, do they all get the same result at the end?
- We need to track how juveniles "do" in programs
  - Referral → Intake → Participation (varying dosage)
  - Completion –Standard (score 175) vs Benchmarks:
    - Successful completion did everything they were supposed to do, showed growth in the intended areas, "passed" internal pre/post, etc
    - Maximum benefits service provider tried everything they could, juvenile did the best they could, doesn't meet successful completion criteria, but this is the best outcome we can realistically hope for.
    - Unsuccessful court or service provider determination program determined not to be a good fit anymore
    - Unsuccessful juvenile/family determination did not follow through on referral, did not attend/participate, etc

# Informal Services/Practices & Supervision Models

- Informal Services/Practices
  - Ex. Applying for jobs or signing up for leisure activities
  - Community service on juvenile's own
  - Apology letter
- Supervision models
  - EPICs a model of "how" we do supervision
  - If everyone receives it, we need to monitor delivery fidelity

# Inputs, Outputs, Outcomes, Processes, Subgroups + Programs

- Can answer questions like:
  - What risk profiles does MRT work best for?
  - At what length of group therapy do we see the biggest impact on risk reduction?
  - Do juveniles of all races receive equal risk reduction when they complete substance use intervention A?
  - Do we have the right or enough programs for the risk profile of our juveniles?

## More on experience or environment?

- Are case processing times similar for all juveniles?
- Are we providing the same number of probation officer contacts for all juveniles at the same supervision level?
- What's the role of juvenile, family, or other stakeholder feedback in quality assurance?
- How do we assess quality of environment?
  - Do court staff have what they need to do their jobs well?
  - Do we create a court environment that aids in or inhibits responsivity?

#### Adding in Fiscal Quality Assurance

- Do we get a similar risk reduction for programs that intend to do the same thing?
  - Is the risk reduction or difference in programming commensurate with the cost differences in programming?
  - Example (oversimplified) –

Substance Abuse Program	Average risk reduction for successful completion	Cost per participant	Cost per point of risk reduction
A – individual at provider A	1.7 points	\$150	.011 points per dollar
B – group at provider A	.95 points	\$50	.019 points per dollar
C – group at provider B	1.2	\$90	.013 points per dollar

#### General Data Quality

- Do we have all of the information recorded for each case?
  - Case close (or checkpoint) audits
  - Can tell us: 98% of juveniles had petition, adjudication, disposition, and case close dates available.
    - The average time from disposition to close was 174 days and the range was 20 to 742 days.
- If we haven't thought through & monitored the other aspects of QA, what does data quality actually tell us?

#### Jodi's Recommendation

- Define & Track:
  - "Who"s inputs and outputs
  - Outcomes risk & recidivism
  - Process points
- Set up ongoing QA process & a plan
  - Process
    - What data are we going to monitor? Start small-ish, accomplish, and then grow
    - Who is going to monitor it?
    - How often?
    - Where will biases or inequities in treatment show up?
    - Consider the staffing and organizational culture for these conversations

#### Jodi's Recommendation

#### Plan

- After we've gotten data for "who", outcomes, and processes, how are we going to work through the programming "what"s?
  - Start with evidence-based or "stable" programs and models
  - Then homegrown or individualized programs
  - Then services, practices, and other informal interventions
  - Then consider fiscal QA

#### Reminders

- If it isn't feasible to implement, it can't get you the outcomes you want
- You (locally) still need to decide, "Is this number good or bad? What does it tell us?"
- Data should inform or drive decisions, not make decisions. People make decisions.



# Questions & Discussion