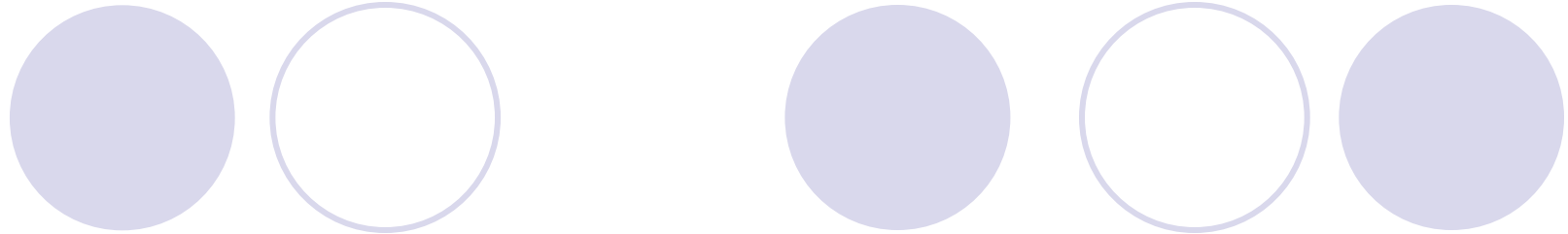


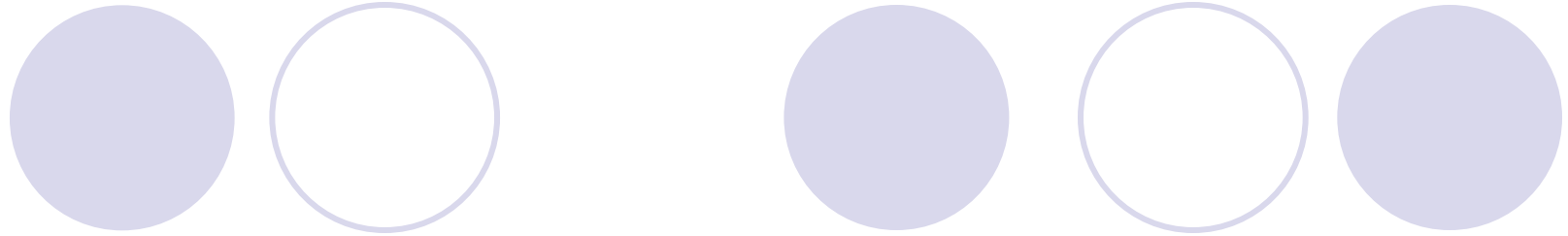
Improving Drug Treatment Services: Process Improvement and Data-driven Decision-making

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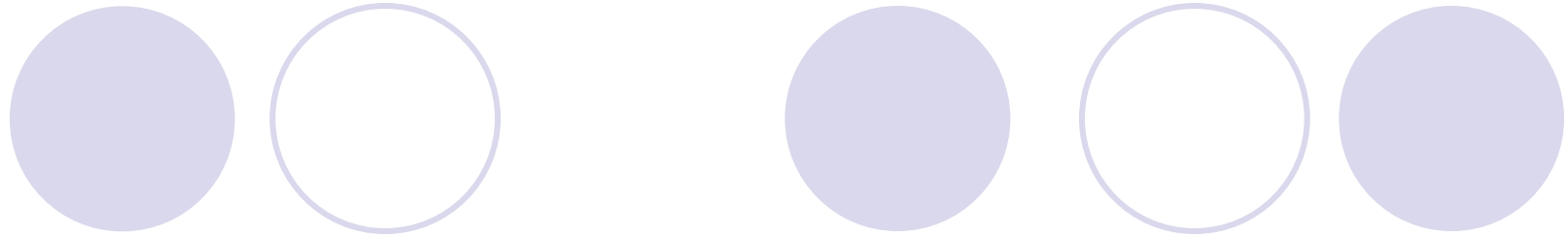


- The new (2006) Institute of Medicine report on services for drug, alcohol, and mental health treatment recommends
 - promoting patient centered care
 - fostering the adoption of evidence based practices
 - developing and using process and outcome measures to enhance quality of care, and
 - mandating the use of quality improvement measures

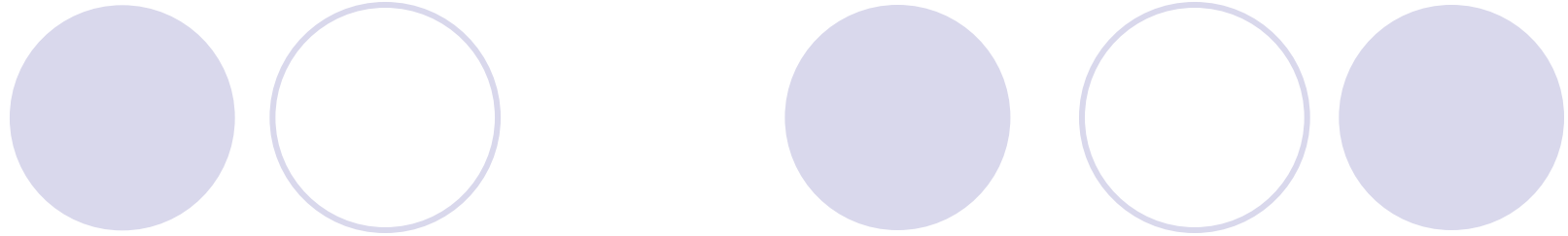


Improving the quality of care requires...

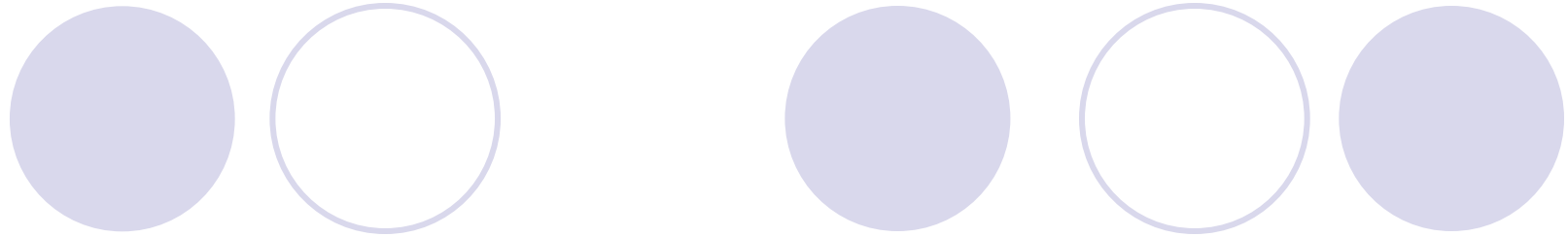
- Identifying problem areas accurately
- Creative interventions
- Capturing and tracking essential measures of performance and quality, which requires staff to collect, analyze, and learn from data



- Drug treatment agencies have extensive reporting requirements ... but few agencies have access to well-developed information systems.
- Agencies spend enormous resources collecting data, but... very little data is used for clinical decision-making or program planning
- For most agencies, it's just "paperwork."
- How to help agencies learn to use data?



- **Targets for process improvement:**
 - Reduce waiting times (access)
 - Increase retention
 - Reduce no-shows
 - Increase admissions
- **Plus ...**
 - increase agencies' ability to make data-driven decisions to improve processes
 - Increase customer focus



- Improving process measures may enhance:
 - Clinical outcomes (reduced drug use)
 - Efficiency (reduce cost of treating same clients multiple times)
 - Public health (reduced risk behaviors)
 - Safety (fewer illegal behaviors)

A decorative graphic at the top of the slide consists of two groups of circles. The first group on the left has a solid light purple circle on the left and an outlined light purple circle on the right. The second group on the right has a solid light purple circle on the left, an outlined light purple circle in the middle, and a solid light purple circle on the right. The word "Research" is written in black text, with the first solid circle partially overlapping the letter 'e'.

Research

- What is the impact of a process improvement intervention on drug treatment agencies' ability to:
 - Impact access and retention
 - Learn to make data-driven decisions

A decorative graphic at the top of the slide consists of two groups of circles. The first group on the left has a solid light purple circle on the left and an empty light purple circle on the right. The second group on the right has a solid light purple circle on the left, an empty light purple circle in the middle, and a solid light purple circle on the right. The word "Methods" is written in black text to the left of the first group of circles.

Methods

- Quantitative data:

- agencies provided de-identified client-level data on process measures

- Qualitative data:

- annual site visits and quarterly interviews
- Data collected as participant-observers

- Analyzing first 18 months of data



Intervention: NIATx

- Mission of the Network for the Improvement of Addiction Treatment:
 - assist the addiction treatment community in making more efficient use of their treatment capacity and
 - encourage ongoing improvements in treatment access and retention.
- NIATx Process Improvement Model
 - Five Key Principles of Organizational Change (Gustafson and Hundt, 1995)
 - Plan, Do Study Act (PDSA) Change Cycles (Langley et al, 1996)

Key Principles of Organizational Change



- Understand & Involve the Customer
- Focus on Key Problems
- Select the Right Change Agent
- Seek Ideas from Outside the Field and Organization
- Do Rapid Cycle Testing



NIATx is a Collaboration

- National Program Office at Center for Health Systems Research and Analysis, **University of Wisconsin** (David Gustafson, PI)
- National Evaluation Team at Center for Substance Abuse Policy and Research, **Oregon Health & Science University** (Dennis McCarty, PI)
- **Center for Substance Abuse Treatment**-funded Strengthening Treatment Access and Retention (STAR) program
- **Robert Wood Johnson Foundation**'s Paths to Recovery Program
- 39 **drug treatment agencies** nationwide providing outpatient, intensive outpatient, methadone, and/or residential treatment (We present on findings from 23 agencies in first 18 months)

NIATx Interventions



- **Process Improvement Coaches**
 - Teach PDSA cycle (Plan, Do, Study, Act) for rapid cycle improvements
 - Support change in four aims
- **Learning Communities**
 - Twice-annual learning collaborative meetings
 - Conference calls and weblogs
- **Interest Circle Conference Calls**
 - All-Member Calls
 - Special calls for focus on the four aims, transition between levels of care and special populations (e.g., Women, Adolescents)
 - Special Focus such as Centralized intake, Sustaining change, Change leader, Workforce development



Measuring the impact of change

Process improvement coaches teach agency staff to measure the impact of their PDSA rapid cycle change cycles using the following steps to address a specific aim:

1. Define measures
2. Collect baseline data
3. Establish a clear aim
4. Consistent collection
5. Chart progress
6. Ask questions

Results: Examples of NIATx-supported interventions

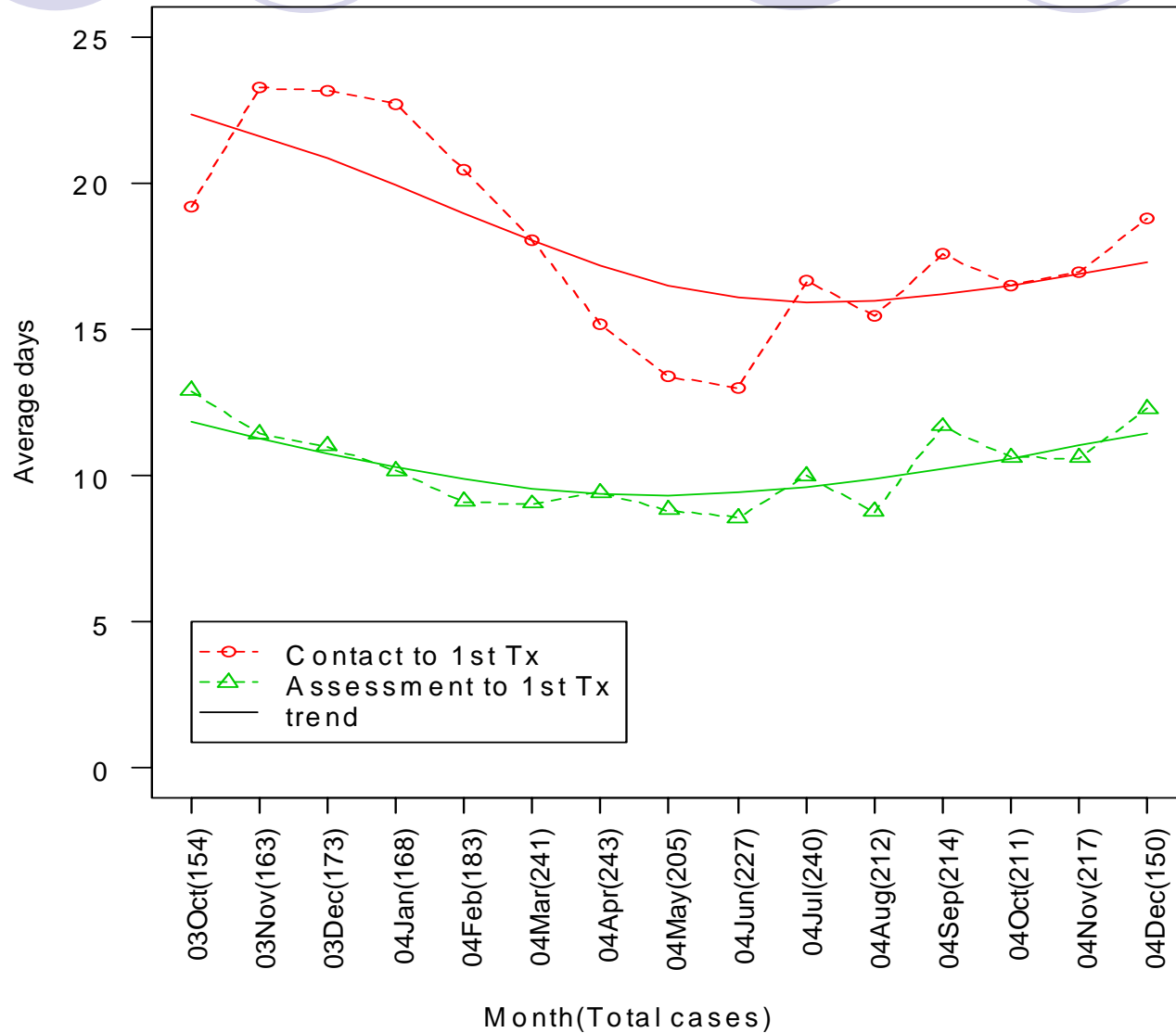
- Open Access/Treatment On Demand
- Paperwork Reduction
- Contingency Management
- Reminder Calls/Follow-up Calls
- Engagement Between Levels of Care
- Counselor-Specific Feedback
- Motivational Interviewing (MI)-Like Communication

Results

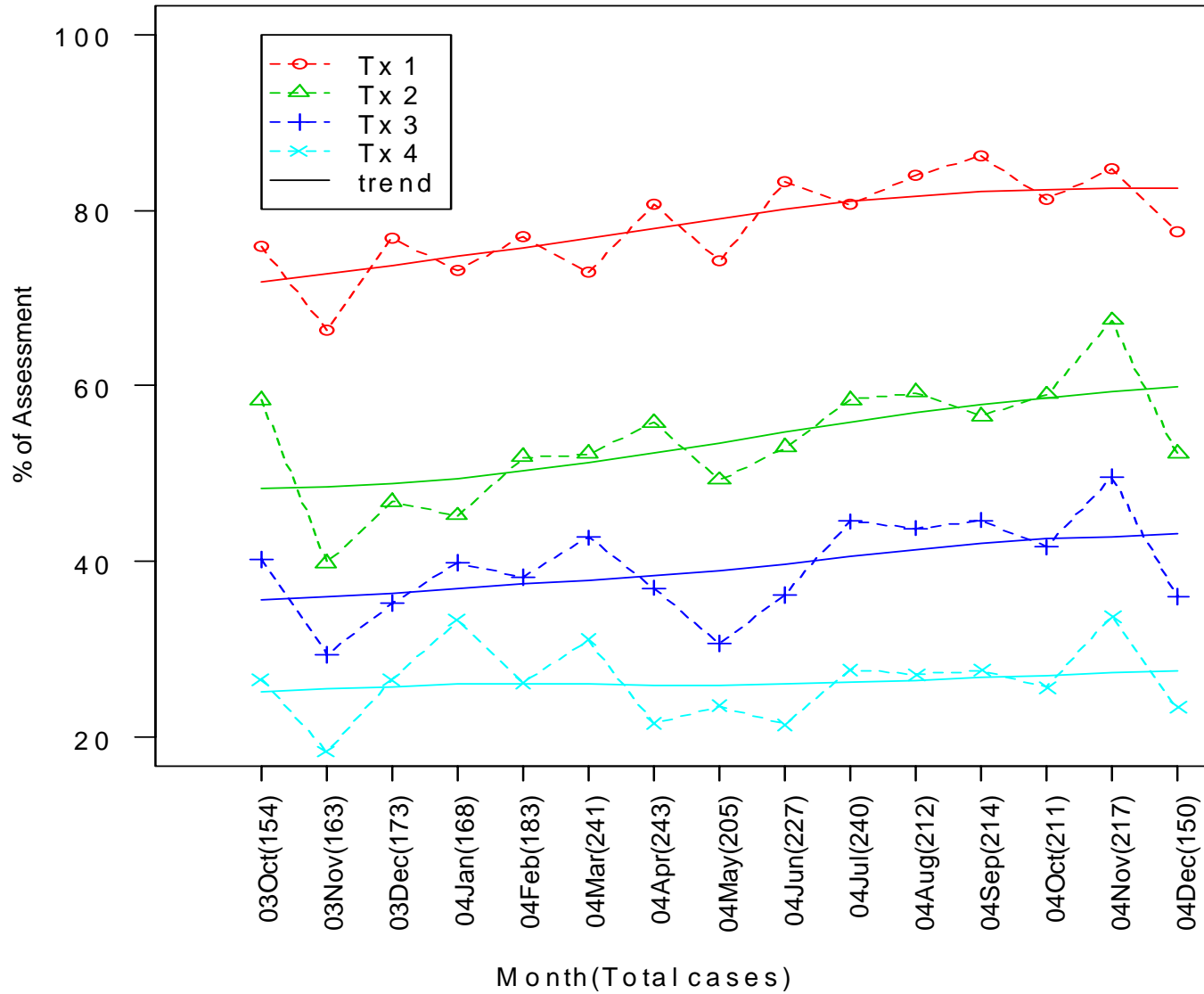


- Improvement in timeliness?
- Improvement in retention?
- By level of care
 - Outpatient
 - Intensive Outpatient
 - Residential

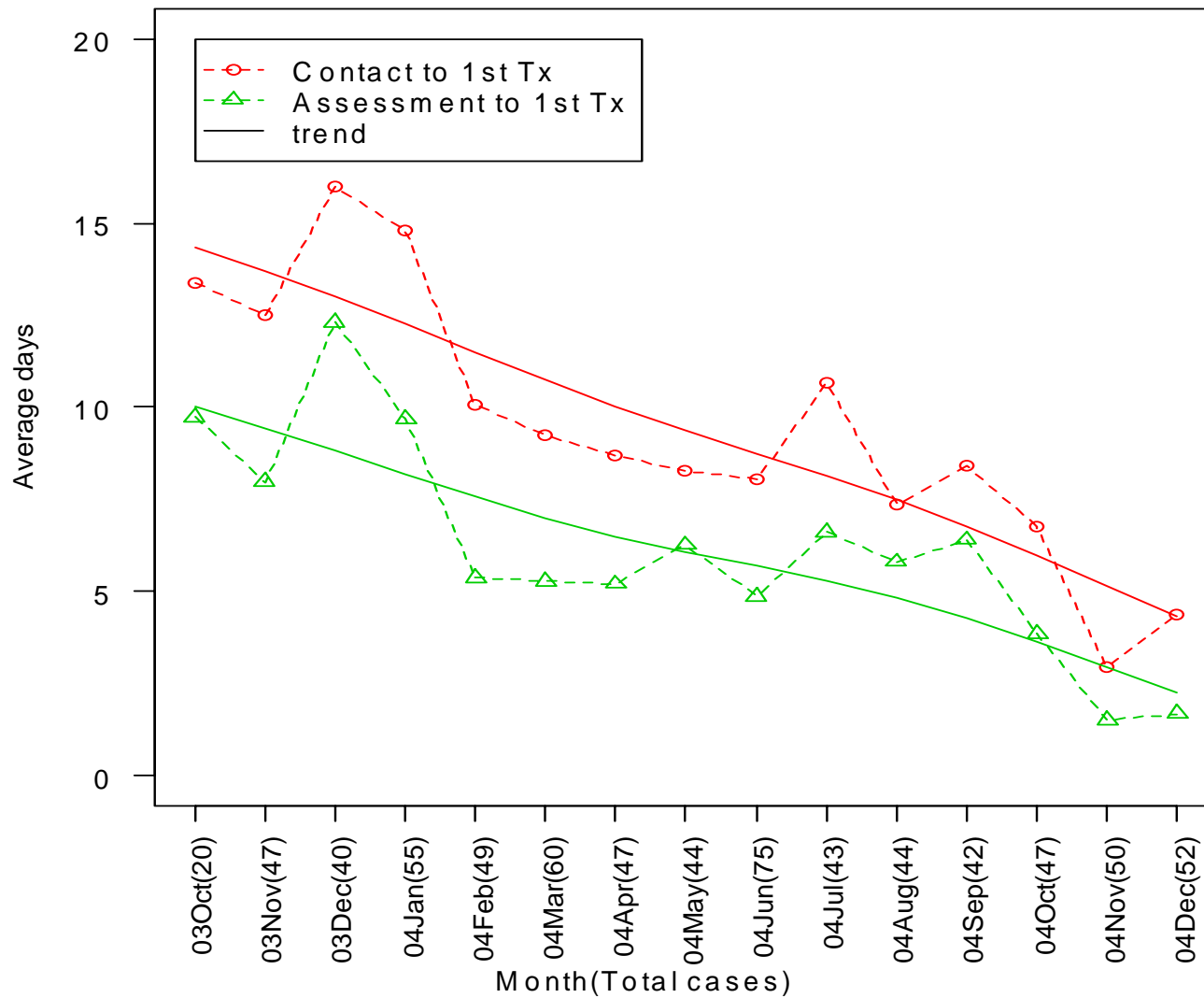
Outpatient: Timeliness



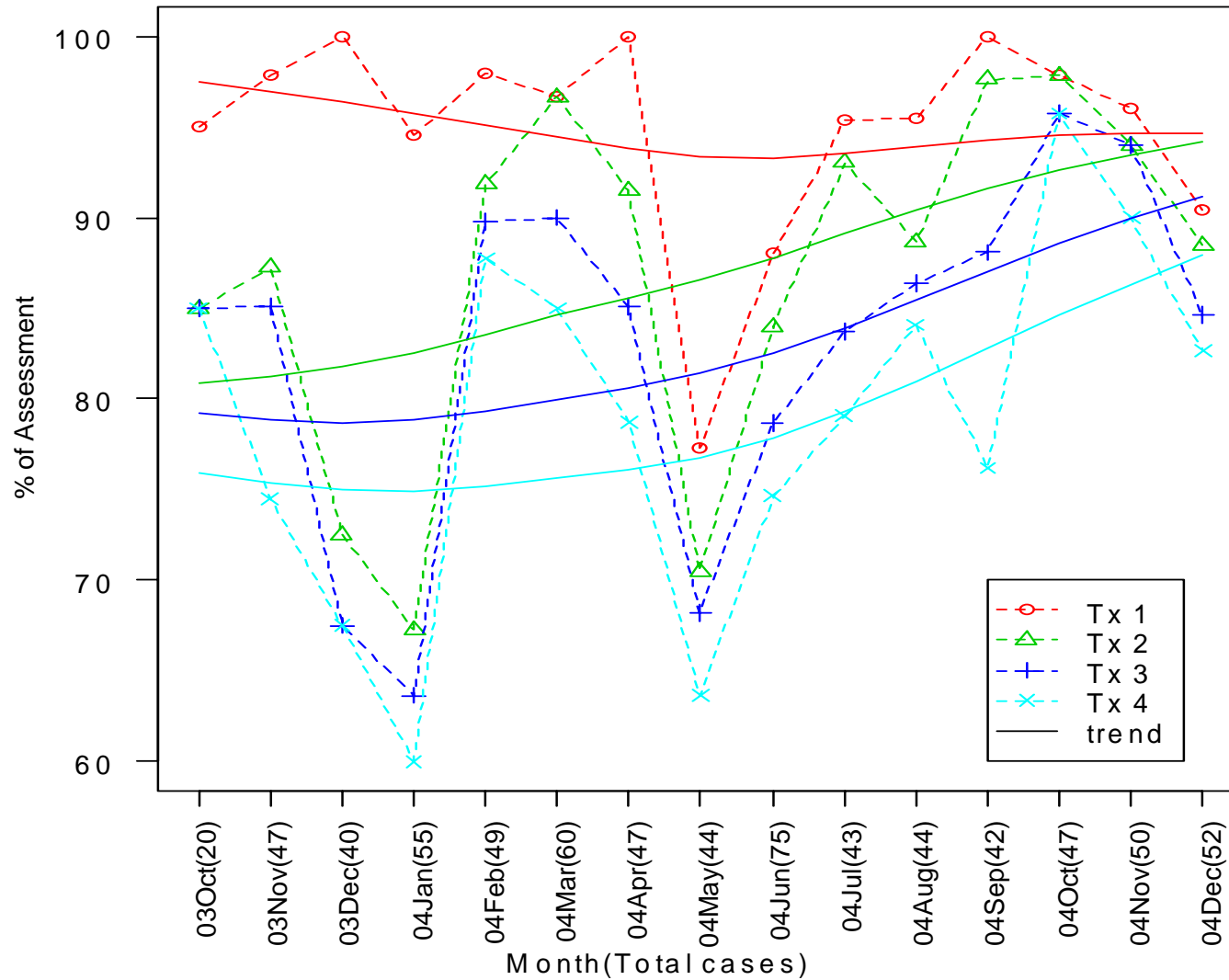
Outpatient: Retention



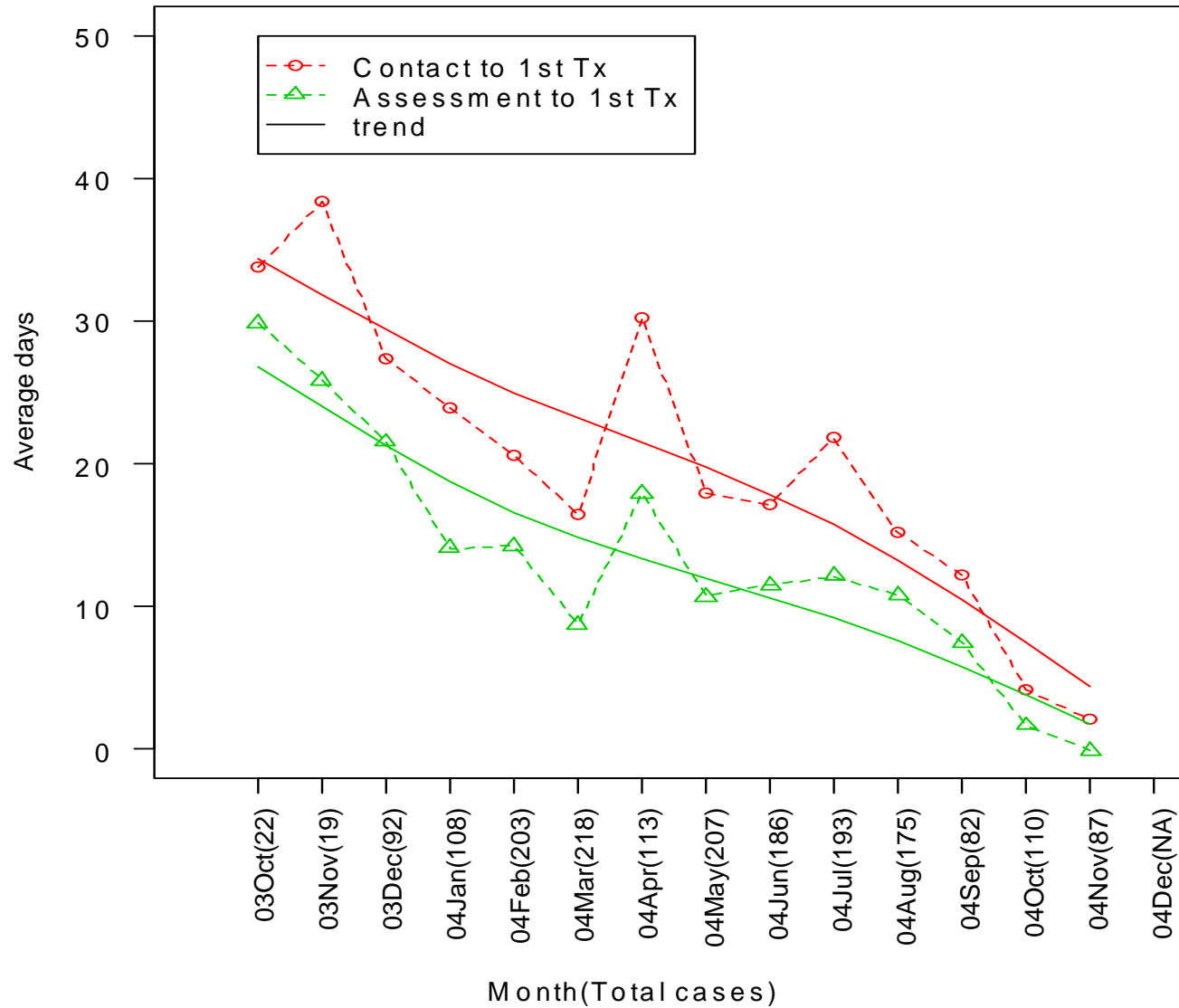
Intensive Outpatient: Timeliness



Intensive Outpatient: Retention



Residential: Timeliness



Results: Improvement in learning to make data-driven decisions?

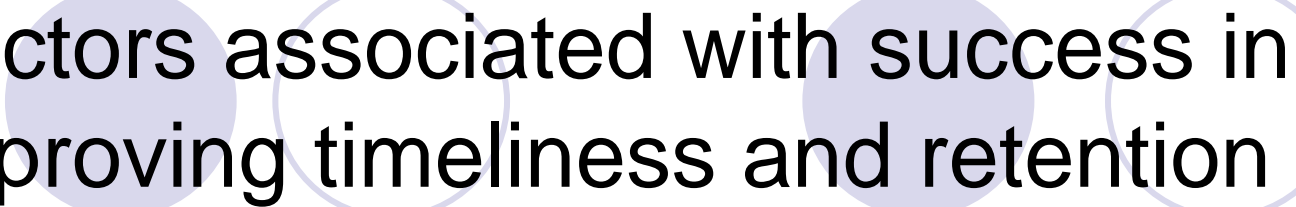
- What does success look like? We defined it as:
 - Successful use of data in process improvement decisions
 - Agency can collect data appropriate to identified goal and interpret it correctly
 - Data reported are internally consistent and reliable
 - Agency staff have expertise to resolve data inconsistencies and to explain results to others

Barriers to implementing process-focused data systems



- Time and money
- System complexity
- Expertise
- Resistance

Factors associated with success in improving timeliness and retention



- Agency leadership values data
- Resources committed to infrastructure
- Training on data issues
- Sharing of change results
- Success making data-driven decisions



Agency-reported value of data

- “Looking at the data helps us choose an area to focus on in our next improvement cycle.”
- “If we can’t measure it, we can’t monitor it.”
- “It confirmed what we already knew: we do a lot of work to get clients assessed, and they didn’t come back. Now we can figure out why and get them to stay in treatment.”
- “We’ve used the process data to get more support from our board/the state/other funding agencies.”
- “Showing the data to staff so they can see how far we’ve come really helps them get excited about the project.”



Implications

- Drug treatment agencies can adopt process-focused data systems and use data to improve client access and retention.
- Results are best when:
 - Leadership values data and makes it a priority
 - Resources are devoted to improving data systems and staff expertise
 - Data have utility for agencies in improving their services
 - Agencies have integrated data into decision-making processes to improve services
- Potential for broad application to health services...



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