"What Is a Multi-level Prevention System?"

Slide 1: Welcome to the webinar, "What Is a Multi-level Prevention System?" This is one of 11 webinars developed by the National Center on Response to Intervention (NCRTI), and it provides an overview of the primary, secondary, and tertiary levels of the multi-level prevention system.

My name is Jenny Scala. I am a technical assistance provider for the Center, and my work has included looking at the implementation of Response to Intervention in high schools and middle schools.

Slide 2: NCRTI has developed a series of webinars to cover key information for RTI implementation. This slide lists the different webinars in the series, and while you can watch these in any sequence, we recommend that you begin by watching the "What Is Screening?" and "What Is Progress Monitoring?" webinars, as I will refer to these essential components of RTI throughout the presentation. After this webinar, you can learn more about how multi-level prevention systems relate to IDEA, and about how to select evidence-based practices.

If you have not already done so, please print out the Vocabulary Handout and the Defining the Three Levels Handout, as these will help your note taking throughout the webinar.

Slide 3: This webinar will provide an overview of the multi-level prevention system and will then describe each of the three levels.

Slide 4: The participant objectives for this training are as follows:

- Understand the multi-level prevention system and describe each level

- Use screening and progress monitoring data to make decisions at all levels of the multi-level prevention system, including movement between levels.

Slide 5: One helpful way to check your understanding throughout the webinar is to complete the accompanying vocabulary handout. The handout provides a table with a list of key terms on the left side, and there are columns on the right side where you can track your understanding before and after the webinar. Before viewing the webinar, you should make predictions of the meanings of each term. During the webinar, you will complete the final meaning column, based on the definitions provided. There is also a column where you can add anything that might help you to remember what you have learned, such as a picture, sketch, or example. Here, you can see how I was able to clarify the meaning of primary prevention level after watching the webinar.

If you have not already made predictions for the key terms of this webinar, please go ahead and pause the webinar so that you can do so now. Press play when you are ready to continue.

Slide 6: The Defining the Three Levels Handout can be used to take notes throughout the webinar about the differences between each prevention level. In the left column, you will see a list of questions. Answer these questions as you learn about each of the prevention levels. Following the webinar, you may wish to review your table to gain a deeper understanding of the similarities and differences between the levels.

Slide 7: NCRTI has developed this graphic to highlight the RTI framework. Many of you probably associate the red, green, and yellow triangle with RTI. In reality, the triangle does not represent the entire RTI framework. It represents only one component: the multi-level prevention system. The Center's graphic takes into account all of the essential components and, most importantly, using data to make decisions – something that is often absent from the traditional RTI triangle.

If you look at the far left, you can see screening; to the far right, you can see progress monitoring; and at the bottom, you can see the multi-level prevention system. The three outer components require, and are necessary parts of, data-based decision making, which is why the arrows travel in both directions. If the three other components are in place, but data-based decision making is absent, then RTI is technically not being implemented.

In the center ring, you will see the phrase "culturally responsive," meaning that screening tools, progress monitoring tools, core instruction, interventions, and data-based decision making procedures should all be culturally responsive. In the same ring, you will notice the phrase "evidence based," meaning that all components are evidence based. If these components are implemented through a cohesive model, we expect to see improved student outcomes. I will now briefly review screening, progress monitoring, and data-based decision making before moving to the focus of the presentation, the multi-level prevention system.

Slide 8: The triangle graphic depicts the progression of support across the multi-level prevention system. Although discussions in the field frequently refer to "tiers" to designate different levels of interventions, the Center intentionally avoids the use of this term when describing the RTI framework. Instead, it uses "levels" to refer to three prevention foci: the primary level, the secondary level, and the tertiary level. Although the term "level" is often used synonymously with the term "tier," they can be different. The common denominator should be the intensity of the support.

This triangle represents three levels of prevention and the percentage of students we would expect to benefit from those levels of prevention in an effective system. The first, or primary, level is indicated in green. We expect most students, at least 80 percent, to benefit from this level of instruction, which uses well-differentiated instruction in the core curriculum.

The next, or secondary, level is indicated in yellow. We expect about 10 to 15 percent of students to need supplemental, small-group instruction to benefit from the core instruction and curriculum.

The top, or tertiary, level is indicated in red, and it includes specialized, individualized instruction for students with intensive needs. It typically involves small group and/or one-on-one instruction of 1 to 3 students who are significantly behind their peers. Decisions regarding student participation in both primary and tertiary levels of prevention are made on a case-by-case basis according to student need.

Slide 9: Remember, the school or local education agency (LEA) model is their interpretation of the RTI framework. Schools and districts vary widely in the number of tiers they include in their RTI frameworks. Regardless of the number of tiers of intervention a school or district implements, each should be classified under one of the three levels of prevention: primary, secondary, or tertiary. This will allow for a common understanding across schools, districts, and states. Within this three-level prevention system, schools may configure their RTI frameworks using four, five, or more tiers of intervention. The minimum number of tiers possible within a school or LEA's model is three, with one tier representing each level of intensity. In choosing the number of tiers for the RTI model, practitioners should recognize that increasing the number of tiers increases the complexity of the model. In all models, all students receive instruction within the primary prevention level (the core curriculum), which is often synonymous with tier 1.

Slide 10: Within each level of prevention and within each tier, there can be more than one intervention, but this is not a requirement. Variations in the model, including the number of tiers and the interventions used within each tier, should be based on the needs of the population. For example, one school may have three interventions of approximately the same intensity in the secondary level of prevention, while another school may have only one intervention at this level. Despite this difference, these schools will have a common understanding of the nature and the focus of the secondary level of prevention. Within each level of prevention and tier, there can be more than one intervention, but this is not a requirement.

Slide 11: NCRTI recommends different evidence standards across intervention levels. On the left side of your screen, you'll see the research-based curricula. This is recommended for primary prevention across subjects. This means that the components have been researched and found to

be generally effective, although the curriculum materials have not been rigorously evaluated as a package.

Evidence-based interventions are recommended for secondary and tertiary levels of prevention. These materials are evaluated using rigorous research design, and there is evidence of positive effects for students who received the intervention.

This will be discussed more in the presentation.

Slide 12: First, we are going to talk about primary prevention in more detail.

Slide 13: The primary prevention is high-quality core instruction that meets the needs of most students. You'll see that the focus is on all students. The instruction is a district curriculum and instructional practices that are research based, aligned with state or district standards, and that incorporate differentiated instruction. The setting for primary prevention is the general or regular education classroom. There are assessments that are correlated to the primary level of prevention, and you'll see these on the slide.

Slide 14: In the previous slide, we talked about how the focus of primary prevention is for ALL students, including those with disabilities, learning differences, or language barriers. You can increase access for all students through differentiated instruction, linguistically and culturally responsive practices, and the use of accommodations or modifications.

Slide 15: Within the primary level instruction:

- All of the curriculum materials are research based for the target population of learners (including subgroups).

- Procedures are in place to monitor the fidelity of implementation of the core curriculum. The preponderance of evidence supports that the core curriculum is delivered with fidelity, as it was intended to be delivered

- Teaching and learning are well articulated from one grade to another, and within grade levels, so that students have highly similar experiences, regardless of their assigned teacher.

- Most or all teachers differentiate instruction using students' assessment data to identify their students' needs.

- School-based professional development is institutionalized and structured so that all teachers continuously examine, reflect on, and improve instructional practice.

There is more information about this in the Center's Integrity Rubric.

Slide 16: The core curriculum is the course of study deemed critical (and usually mandatory) for all students of a school or school system. Core curricula are often instituted at the elementary and secondary school levels by local school boards, departments of education, or other administrative agencies charged with overseeing education.

Slide 17: Teachers use student assessment data and knowledge of student readiness, learning preferences, language, and culture to offer students in the same class different teaching and learning strategies that address their needs.

Slide 18: Differentiation can involve mixed instructional groupings, team teaching, peer tutoring, learning centers, and accommodations to ensure that all students have access to the instructional program. Differentiated instruction is NOT the same as providing more intensive interventions to students with learning disabilities. That's an important thing to keep in mind.

Slide 19: The setting for primary prevention is the general education classroom or a similar setting. Various grouping strategies, such as whole class and cooperative learning groups, are used.

Slide 20: Ongoing data collection drives instructional decisions in primary prevention. This includes:

- *Universal screening,* which is used to determine students' current level of performance

- *Continuous progress monitoring* to confirm risk status and monitor progress of at-risk students

- *Outcome measures or summative assessments* for accountability purposes.

Slide 21: As we have discussed in the screening and progress monitoring modules, the data that are collected can help to inform decisions within the primary prevention level. Screening data can help to identify students in need of additional assessment or instruction, and can evaluate the effectiveness of the core curriculum. Progress monitoring data can be used to confirm or disconfirm students identified through screening as at risk.

Slide 22: All students in primary prevention are screened using validated screening tools. Screening data can show you which students are falling behind their peers or below determined benchmarks, and who needs additional assessment or instruction. Students scoring below a cut score are suspected at risk for reading or mathematics difficulties.

The image at the left (*if looking at the screen*) shows a box plot that compares an individual student to their peer group. The class or grade is represented in the box plot. This level of analysis would be appropriate for identifying students in need of supplemental support. In this example, you can see that the student is performing well below their peer group.

The image on the right provides an example of data output using criterion scores (or criterion-referenced data) to identify students. In this example, based on their scores, students are categorized as established, emerging, or deficient.

Slide 23: Using data from primary prevention, districts and schools can also analyze performance by sub-groups and can make decisions about the efficacy of primary prevention for most students. In this graph, the red line (or target line) represents the target scores (or expected scores) of students. Depending on the location, this may be the established benchmarks, cut scores, or national performance norms.

This data can help to answer questions such as:

- How is the general population performing in comparison to the target scores (red line)?

- How are students in Title I performing when compared with students in the general education setting?

- Are students with disabilities performing at similar rates to students without disabilities?

Slide 24: Progress monitoring data are used in primary prevention to confirm or disconfirm risk status. Suspected at-risk students are monitored for 6 to 10 weeks during primary prevention, using a validated progress monitoring tool. Students with adequate slopes, such as this one, continue to receive only primary prevention.

Slide 25: This is an example of progress monitoring data confirming risk status. This student would receive additional instruction and supports in secondary prevention, in addition to the core curriculum.

Slide 26: We will now move on to discuss the secondary prevention level.

Slide 27: The secondary prevention represents evidence-based intervention(s) of moderate intensity that address the learning or behavioral challenges of most at-risk students. These are for students who have been identified through screening as at risk for poor learning outcomes. The instruction is targeted, supplemental instruction delivered to small groups. Again, this occurs in either the general education classroom or another regular education location within the school.

The assessments that are associated with this level of support are progress monitoring and diagnostic.

Slide 28: Secondary prevention focuses on students who have been identified through the screening process as at risk for poor learning outcomes. This is typically between 15 percent and 20 percent of the entire population. A school or district's target identification rate may mean that not all students who meet the selection criteria for secondary prevention receive this level of support. Schools and districts may consider two tiers within secondary prevention if the performance levels or needs of students receiving secondary instruction vary greatly.

More information about target identifications rates can be located in our screening module.

Slide 29: In an effective secondary system, the following are true:

- All secondary-level interventions are evidence based.

- Secondary level prevention is well aligned with core instruction, and it incorporates foundational skills that support core instruction.

- Procedures are in place to monitor the fidelity of implementation of secondary level interventions, and secondary level implementation is generally implemented with fidelity according to developer guidelines.

- Well-trained staff lead secondary level interventions, and group sizes are optimal for the age and the needs of students.

- Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data that reflect the slope of improvement or the final status at the end of secondary level prevention. Decision making criteria are implemented accurately.

Secondary-level interventions supplement core instruction. More information on this can be found on the Center's Integrity Rubric.

Slide 30: Secondary prevention typically occurs in the general, or regular, education classroom, or in another regular education location within a school. As secondary instruction is provided in addition to the core curriculum, students should not be pulled from general education instruction. Secondary prevention relies entirely on adult-led small-group instruction, rather than whole-class instruction, and it involves instruction where the group size is optimal for the age and needs of the students.

Slide 31: Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data that reflect the slope of improvement or the final status at the end of the intervention period, and these decision-making rules are applied accurately and consistently.

Slide 32: Progress monitoring data and diagnostic assessments are important when developing a data-driven secondary system. These tools can be used to monitor student responses to secondary instruction and to evaluate the efficacy of the secondary system, and progress monitoring and diagnostic assessments should be conducted at least monthly. Diagnostic assessments are used within a secondary prevention system to match student needs to interventions. Let's look at how these data inform decisions at the secondary level.

Slide 33: In the progress monitoring module, we learned that progress monitoring tools and data can help to set goals using end-of-year benchmarks or weekly growth rates.

Slide 34: As we have discussed, the data collected within the secondary level of prevention can help to determine the response to secondary interventions, either through the four-point rule or trend line analysis. Progress monitoring data can also be used to compare the efficacy of secondary interventions.

Slide 35: The four-point rule states that the decision is made on the last four data points. The four-point rule can be used if three weeks of instruction have occurred and at least six points have been collected. The following decisions can be made after examining the four most recent data points:

- If all four are above the goal line, you may choose to increase the goal or to discontinue providing secondary level interventions. It is recommended that progress monitoring continue in primary prevention to ensure that the student continues to make adequate progress without supplemental support.

- If all four are below the goal line, you need to make an instructional change.

- If the four data points are both above and below the goal line, you need to keep collecting data until the trend-line rule or four-point rule can be applied.

Slide 36: The second approach is trend line analysis. As you can see by these data, the trend line is steeper than the goal line. In other words, the student is showing increasing scores and is making progress. Depending on how the goal was set, you may choose to increase the goal or to discontinue the secondary level interventions. It is recommended that progress monitoring continue in the primary prevention to ensure that the student continues to make adequate progress without supplemental support.

Slide 37: Schools and districts can use the average progress monitoring data to determine an intervention's average expected growth rates, and to determine which interventions lead to greater gains. Clearly delineated interventions must be used for an extended period of time to collect this information.

Slide 38: Secondary prevention is expected to benefit the large majority of students who do not respond to effective primary prevention. A small percentage of students, however, will demonstrate inadequate responses, providing evidence that they require more intense, individualized instruction.

Data should also indicate that interventions and data-based decision rules were implemented with fidelity.

Slide 39: Let's move on to discuss the tertiary prevention level.

Slide 40: Tertiary prevention, or the third level of the RTI prevention framework, is the most intensive of the three levels and is individualized to target each student's area(s) of need. At the tertiary level, the teacher begins with a more intensive version of the intervention program used in secondary prevention. The teacher does not presume that this will meet the student's needs and so conducts frequent progress monitoring with each student. When the progress monitoring data indicate that the student's rate of progress is unlikely to achieve the established learning goal, the teacher engages in a problem-solving process. That is, the teacher modifies the components of the intervention program and continues to employ frequent progress monitoring to evaluate which modified components enhance the rate of student learning. By continually monitoring and modifying each student's program as needed, the teacher is able to design an effective, individualized instructional program.

Slide 41: The focus of tertiary prevention is on students who have not responded to primary or secondary level prevention. This would typically be 3 percent to 5 percent of the entire population.

Slide 42: The following are true in an effective tertiary level of prevention:

- Tertiary level interventions are evidence-based standard protocols, or are based on validated methods for individualizing instruction.

- Interventions are more intensive than secondary interventions. In other words, a standard protocol intervention may be adjusted and individualized based on ongoing progress monitoring data.

- Procedures are in place to monitor the fidelity of implementation of tertiary level interventions, and the preponderance of evidence supports fidelity.

- Tertiary level interventions are led by well-trained staff, and the group size is optimal for the age and the needs of students.

- Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data that reflect the slope of improvement or the final status at the end of tertiary level prevention. Decision making criteria are implemented accurately.

- Decisions regarding student participation in both primary and tertiary levels of prevention are made on a case-by-case basis, according to student need. Interventions address the general education curriculum in an appropriate manner for students.

Again, there is more information about this in the Center's Integrity Rubric.

Slide 43: The location of tertiary instruction is the regular education setting or another appropriate setting within the school. Decisions regarding student participation in both primary and tertiary levels of prevention are made on a case-by-case basis, and tertiary preventions address the general education curriculum in an appropriate manner for students. Group sizes are optimal for the ages and needs of the students.

Slide 44: Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data that reflect the slope of improvement or the final status at the end of the intervention period. These decision-making rules are applied accurately.

Slide 45: Within the tertiary level of prevention, weekly progress monitoring is recommended because of the number of data points that are needed to make a decision. The minimum level of progress reporting within the tertiary level is once every two weeks. For students in tertiary instruction, established learning trajectories are developed, and progress monitoring data are compared to the learning trajectory to determine the degree to which a student is making adequate progress. Continuous diagnostic assessments are used to match instruction to needs and to inform individualized instructional planning.

Slide 46: In the progress monitoring module, and in the secondary prevention section of this module, we discussed two approaches to goal setting that are also appropriate for tertiary prevention.

The first option is the end-of-year benchmark. The second option is using national or local norms of improvement.

A third option that can be used when local and national norms are not useful or appropriate is intra-individual framework. To use this option, identify the weekly rate of improvement for the target student under baseline conditions, using at least 8 CBM data points. Multiply this slope by 1.5 (we want students to not only maintain that growth but to also increase it by at least half). Take this product and multiply it by the number of weeks until the end of the year. Add this product to the student's baseline score. This sum is the end-of-year goal.

The progress monitoring training module has a great deal of information on using this method for establishing goals and goal setting.

Slide 47: As we discussed in the progress monitoring training, the data collected within the tertiary level of prevention can help to determine response to tertiary interventions through the four-point rule, trend line analysis, or trend line analysis with slope. Progress monitoring data can also be used to compare the efficacy of tertiary interventions.

Slide 48: As with secondary prevention, decisions about response to instruction at the tertiary level should be made using established, written decision-making criteria. Remember, we can use the four point rule if three weeks of instruction have occurred AND at least six data points have been collected. The following decisions can be made by looking at the four most recent data points:

- If all 4 points are above the goal line, we increase the goal or discontinue the more intensive instruction.

- If all 4 data points are below the goal line, we make an instructional change.

- If the 4 data points are both above and below the goal line, we continue to collect data until the trend-line rule or Four-point rule can be applied.

Think about what decisions we can make about this student's response, based on the data that's on the slide in front of you. Because the last four points are below the goal line for this student, we would consider making an instructional change.

Slide 49: We can also apply trend line analysis to determine a student's response to tertiary intervention. What is this student's response? Looking at the data and the graph that's on this slide, you will see that because this student's trend line is below the goal line, again, we would consider making instructional change.

Slide 50: Based on this student's performance in the previous intervention, the team decided to change its intervention. On this graph, the slope of the student's trend line after the change in

instruction is steeper than the slope of the goal line. As a result, we might consider raising the goal or discontinuing the more intensive instruction.

Slide 51: Just as with secondary prevention progress monitoring data, schools and districts can use the average progress monitoring data by intervention to determine the average expected growth rates, and to identify which interventions lead to greater gains in tertiary supports.

Slide 52: Tertiary prevention is expected to benefit the large majority of students who do not respond to effective secondary and primary prevention. The majority of students who are in tertiary prevention should demonstrate adequate progress with the additional intensive supports. If the majority of students are not benefiting from tertiary prevention, it is difficult to determine if this is due to student-related issues or program-related issues. In effective multi-level models, more students should be moving to less intensive levels of instruction than to more intensive levels. As evidenced by progress monitoring data, students who do not benefit from the interventions provided under tertiary prevention may represent a student with a disability. These data could provide useful information as part of a comprehensive evaluation when a disability is suspected.

Slide 53: For all levels of prevention (primary, secondary, and tertiary), data should guide your decisions about changing the level of support needed for students to be successful. Changing the intensity includes increasing or decreasing the level and the intensity of the support given to a student. In cases where students are responding to interventions, teams may consider decreasing the intensity. In cases where students are not responding or making adequate progress, the team may consider increasing the intensity.

There are five main approaches to changing the intensity of an intervention:

1. The first is to change or supplement the intervention itself. In cases where the current intervention is believed to be ineffective for a student, the team may consider selecting a different intervention, although this may not always be necessary. If student data indicate a student is making some (but not necessarily adequate) progress, the team may decide to change the intensity of support by manipulating one or more factors of the intervention, or adding additional instructional strategies to supplement the existing intervention.

2. Another way to address intensity is to increase or decrease the duration of the intervention, or how long a student receives the intervention for each time.

3. The intensity may also be changed by increasing or decreasing the number of times a student participates in the intervention (or the frequency of the intervention). For

example, the delivery of the intervention may increase from three to five times per week, or the number of times a student receives the intervention per day may be increased.

4. In some cases, the intensity may be modified by changing the interventionist. For example, some schools use paraeducators to deliver supplemental interventions. The intensity of the intervention may be changed by using a content specialist instead, such as a reading coach, to deliver the intervention.

5. Another way to modify the intensity is to increase or decrease the number of students participating in the intervention. For example, the team may consider reducing the group size from five to two to provide students with more direct instruction and more opportunities to respond.

Slide 54: Thank you for taking the time to listen to "What Is a Multi-level Prevention System?" To find more resources on this topic or to view other webinars in the implementer series, please visit our website at www.rti4success.org (and remember that in that URL it is the number *4*). You can also find more information from the RTI Action Network and IDEA Partnership websites.