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Early Warning Intervention and Monitoring System (EWIMS) Implementation Guide

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Early Warning Intervention Monitoring System (EWIMS)Implementation Guide

Overview

This Early Warning Intervention Monitoring System (EWIMS) Implementation Guide is a supporting document for schools and districts in Michigan that are implementing an early warning system (EWS). The EWIMS is an evidence-based process for identifying and monitoring students who are at risk of dropping out of school.¹ Initially developed by the National High School Center at the American Institutes for Research (AIR), the College and Career Readiness and Success Center, the Michigan Department of Education (MDE), and the Great Lakes Comprehensive Center (GLCC) have customized this guide for Michigan. With the guide, schools and districts can establish and implement the EWIMS process in their schools to help students.

In 2022, the Michigan Department of Education (MDE) and the MiMTSS Technical Assistance Center developed this enhanced description of EWIMS. The Early Warning Intervention and Monitoring System (EWIMS) is an evidence-based, data-driven decision-making process that can be leveraged as part of a district's secondary Multi-tiered System of Supports framework. Within the process, schools use a continuum of tiered supports for students (Tier 1, Tier 2, Tier 3), each with demonstrated evidence of effectiveness. At Tier 1, schools implement evidence-based practices to support attendance, positive social, emotional, and behavioral well-being, and high course performance for all learners. EWIMS also helps educators systematically identify students who are showing signs that they are at risk of dropping out of school. EWIMS examines the underlying causes of risk, matches student needs to interventions, and monitors student progress and the success of the interventions. Fundamentally EWIMS is an ongoing cycle of examining data and making decisions about supports and interventions to help students get back on track for graduation.

The aim of this guide is to support school and district Tier 2 and 3 efforts to systematically identify students who are showing signs of struggling in school (an early indicator of risk), match these students with appropriate interventions, and monitor their progress during those interventions. This guide describes an EWIMS implementation process that draws on the research on data-driven decision-making.² The EWIMS process has seven steps:

- Step 1: Establish roles and responsibilities.
- Step 2: Use an early warning data tool.
- Step 3: Review early warning data.
- Step 4: Interpret early warning data.
- Step 5: Assign and provide interventions.
- Step 6: Monitor students and interventions.
- Step 7: Evaluate and refine the EWIMS process.

¹ Faria et al. (2017).

²See, for example, Bernhardt (2004) and Love (2000).

THE IMPORTANCE OF SUPPORTING STUDENTS IN MIDDLE & HIGH SCHOOL

The high school dropout problem has been called a national crisis. According to the National Center for Education Statistics (NCES), only 82% of public high school students in 2013–2014 graduated with a diploma on time (Kena et al., 2016). The problem is particularly severe among students of color, English language learners (ELLs), disadvantaged students, and students with disabilities (Greene & Winters, 2005; Rooney et al., 2006; Stillwell, 2010). For example, the graduation gap between White and Black students in 2013–2014 ranged from 1–27 percentage points to across the nation (Kena et al., 2016).

Signs of dropout can be observed long before graduation, however. Researchers have identified key indicators in the middle grades that can reliably and accurately identify youth who are most at risk for academic failure. For example, Balfanz (2009) found that sixth graders in Philadelphia who failed mathematics or English language arts, attended school less than 80% of the time, or received unsatisfactory behavior grades in a core course had only a 10–20% chance of graduating on time.

An EWS addresses this ongoing crisis by using readily available data to systematically identify students who are at risk. These identified students then can be matched with appropriate interventions to help them get on track for graduation (Heppen & Therriault, 2008; Jerald, 2006; Kennelly & Monrad, 2007; Neild, Balfanz, & Herzog, 2007; Pinkus, 2008). EWIMS provides a comprehensive process based on research about the academic and behavioral predictors of dropping out to enable schools to optimize their use of an EWS tool (Allensworth & Easton, 2005, 2007; Dynarski et al., 2008).

A rigorous impact study published in 2017 found that EWIMS is a promising, evidence-based strategy for getting students back on track for graduation. In the study, 73 schools were randomly assigned to use EWIMS or not use EWIMS during the 2014–15 school year. After 1 year of implementation, EWIMS reduced the percentages of students with chronic absences and course failures in the experimental schools. EWIMS did not have a significant effect on the percentages of students with low grade point average (GPA), one or more suspensions, or low credit accumulation (Faria et al., 2017).

Researchers have identified key indicators in high school that can reliably and accurately identify youth who are most at risk for academic failure (Allensworth & Easton, 2007). Table 1 provides an overview of these indicators.

Table 1. Early Warning Indicators and Thresholds*

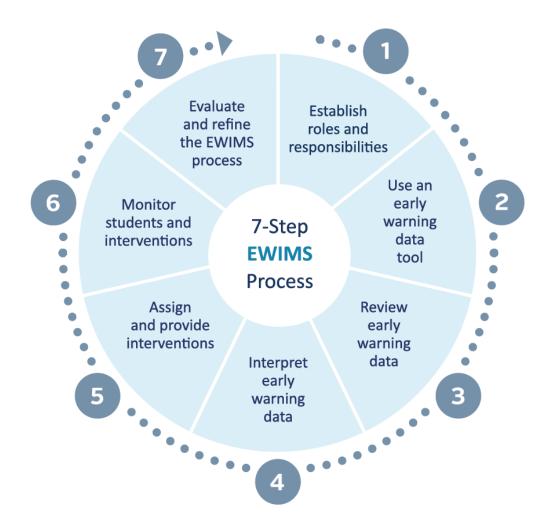
Indicator	Caution Threshold	Flag Threshold
Attendance	Student misses between 5% and 9% of instructional time	Student misses 10% or more of instructional time
Behavior	Two or more discipline referrals	One or more in or out-of-school suspensions
HS Course Performance	Grade Point Average (GPA) below 2.0 Any course in the "D" range	Cumulative GPA below 2.0 Failure in any course
MS Course Performance	ELA or Math course in the "D" range	Failure in ELA or Math course

SEVEN-STEP EWIMS IMPLEMENTATION PROCESS

The seven steps in this guide are described as distinct processes, but each step is part of an entire system or cycle. Figure 1 illustrates the cycle. This process guides users in making informed decisions on the basis of these indicators and other relevant information.

Figure 1. Early Warning Intervention Monitoring System: Implementation Process





TIMEFRAME

The EWIMS implementation process is aligned with the academic calendar and is implemented during the course of the school year. Specific steps are taken during defined periods, many recurring or continuous, so that the process of reviewing early warning data and identifying appropriate support strategies and interventions is timely and responsive to individual student needs. In the longer term, the process allows ongoing evaluation and revision across academic years to ensure that the EWIMS achieves maximum efficiency and efficacy in the local context. Table 2 provides an example of an EWIMS implementation process during a single school year.

Table 2. Example Schedule for Implementing an Early Warning Intervention Monitoring System

Schedule	Process (Correlated to Steps in This Guide)
Before the start of the school year	Form/designate an EWIMS team (Step 1). Provide professional development to EWIMS team members about the implementation process (Steps 1 and 2). Convene the EWIMS team (Step 1). Set up the early warning data tool (Step 2). Import student information and, if available, incoming risk indicator data into the tool (Step 2). Review and interpret student needs on the basis of data from the previous year (Steps 3 and 4).
At the beginning of the school year	Identify interventions for incoming students on the basis of the identified needs (Step 5). Reconvene the EWIMS team (Step 1). Verify student information, especially enrollment status, and update student roster to reflect new enrollees, transfers in and out, and other classifications (Step 2). Review previous year data, including any additional information that is helpful for interpreting student needs (Steps 3 and 4). Identify and implement student interventions or supports on the basis of incoming risk indicator information if available (Step 5).
After the first 20 or 30 days of the school year	Update the student roster to reflect new enrollees, transfers in and out, and other classifications (Step 2). Import students' absences (Step 2). Review and interpret student- and school-level reports (Steps 3 and 4). Identify and implement student interventions (Step 5). Monitor students' initial responses to interventions in which they are participating (Step 6). Revise students' intervention assignments, as needed (Steps 5 and 6).

Schedule	Process (Correlated to Steps in This Guide)
After each grading period	Update the student roster to reflect new enrollees, transfers in and out, and other classifications (Step 2).
	Import students' absences, course failures, and behavior information (Step 2).
	Review and interpret student- and school-level reports (Steps 3 and 4).
	Identify and implement student interventions (Step 5).
	Monitor students' responses to interventions in which they are participating (Step 6).
	Revise students' intervention assignments, as needed (Steps 5 and 6).
At the end of the school year	Update the student roster to reflect new enrollees, transfers in and out, and other classifications (Step 2).
	Import or enter students' absences, course failures, and behavior information (Step 2).
	Review and interpret student- and school-level data (Steps 3 and 4).
	Monitor students' responses to existing interventions in which they are participating (Step 6).
	Revise students' intervention assignments for summer and for the next academic year (Steps 5 and 6).
	Evaluate the EWIMS process, using student- and school-level reports, and revise as necessary (Step 7).

ORGANIZATION OF THIS GUIDE

The guide contains a separate section for each of the seven EWIMS steps. Because of its emphasis on student identification and monitoring, the guide primarily focuses on supporting EWIMS efforts at the *school level*. However, districts must ensure strong Tier One attendance, behavior, and course performance interventions are in place. This guide identifies five critical roles that may be filled by district or intermediate school district (ISD) personnel. These roles are the Advocate, Data Expert, Monitor, Coach/Support, and Authority. For each step of the process, actions that the people filling these roles should complete are discussed.³

HOW TO USE THIS GUIDE

In each section, the guide briefly describes the EWIMS step, identifies the anticipated outcomes, provides guiding questions to support implementation, and provides actions for the five district or ISD roles. The guiding questions focus on short-term and long-term strategies. The short-term guiding questions are intended for EWIMS team members as they examine student data for individuals and groups of students. The long-term guiding questions focus on systemic and farreaching issues and strategies to improve school, district, and ISD outcomes. Thus, it is anticipated that new users of the process will focus on the short-term questions and, over time, will be ready to delve into long-term questions.

³ For a summary of the district's role in the implementation of EWIMS, see Appendix A.

STEP 1—Establish Roles and Responsibilities

WHAT YOU NEED FOR STEP 1

- Time to dedicate to EWIMS
- Professional development or training
- Tool 1: EWIMS Action Planning Tool (Appendix B)



DESCRIPTION OF STEP 1

This step focuses on identifying team members to concentrate on EWIMS implementation as well as establishing roles and responsibilities of team members and other key individuals who support the EWIMS team. Although a school, district, or ISD may choose to establish a new team, it is not necessary to create an entirely new EWIMS team for the process to work. An existing team (such as a school improvement team, a response-to-intervention team, or a student support team) can take on the responsibility of implementing EWIMS.

The team must have a broad representation of staff within the school (e.g., principals, teachers, specialists) and, ideally, the district or ISD. The team also must have members with a diverse set of skills, including technical skills to use an early warning data tool and knowledge of students who are receiving special services. In addition, the team should have the authority to make decisions about students. Finally, the EWIMS team must receive professional development about the process and the use of an early warning data tool and must be given adequate time to implement the EWIMS process. Whether the EWIMS process is the responsibility of a new team or incorporated into the responsibilities of an existing school team, it is vital that the EWIMS work be a major priority of the designated team.

ANTICIPATED OUTCOMES OF STEP 1

- 1. Establishment of an EWIMS team composed of staff who have a diverse knowledge of students in the school, who understand their roles, and who are trained in the use of the tool and the EWIMS process
- 2. Establishment of meeting routines and common agendas
- 3. Identification of one or more individuals responsible for routinely importing or entering data into the tool

Forming and Maintaining an Active EWIMS Team

The EWIMS team should consist of personnel who have the authority to make decisions about staff and students and who know a diverse assortment of students. Following are some examples of staff who might be included on an EWIMS team:

- School principal, assistant principal, or someone else with decision-making authority
- Representative from the feeder schools from which students transitioned

- Counselor
- Content area teacher
- Special education teacher
- ELL instructor
- School-level technology specialist
- District or ISD technology/student information specialist
- District or ISD office representative

Roles and Responsibilities of the EWIMS Team

As part of its implementation of the seven-step EWIMS process, the EWIMS team should do the following to ensure the functioning of the team and effective communication throughout the school:

- Conduct EWIMS team meetings that are well organized and documented. An agenda for each meeting should be prepared at the end of the prior meeting. Some agenda items should be consistent from meeting to meeting, such as a review of the data, actions taken for individuals or groups of students, or a review of the previous meeting's action items and communication with staff and leadership (see Table 2 for an example of action items). Notes should be taken at each meeting and should include action items assigned to specific individuals. Last, agendas and meeting notes should be kept on file to provide a record of the team's work.
- Communicate with individuals and groups outside the EWIMS team. Information about flagged students, intervention effectiveness, and team-identified needs should be routinely reported to school and district leadership. Teachers should receive regular updates about students in their classes who are displaying indicators of risk as well as about how to support these students. Students and their parents should be kept informed of their risk status and about the plans to ensure that the students are able to get back on track for their grade level, for promotion, and for graduation. (Although the EWIMS team may not be directly responsible for meetings with individual students and their parents, the team should be in a position to prompt such meetings and to routinely share information about student progress and the early warning symptoms of risk. Of critical note, the team should share the knowledge of students' risk with sensitivity, ensuring that identification is used to prompt action and support, not to give labels that carry stigmas.)
- Solicit feedback from stakeholders. Feedback from administrators, teachers, staff, students, and parents can help the team uncover underlying causes of why students display indicators of risk. This information may help the EWIMS team match students to appropriate interventions and supports.
- Monitor progress. EWIMS team members should monitor progress as they strive to improve educational
 outcomes for students during a single school year and during the course of multiple school years. The team
 should be responsible for presenting progress reports to key stakeholders—including principals, staff, district
 leadership, local boards of education, and parents.

EWIMS Team Meetings

The EWIMS team should meet regularly throughout the year. At least one meeting should be held (a) before the start of school, (b) after the first 20 or 30 days of school, and (c) shortly after the end of each grading period. The team can use Tool 1: EWIMS Action-Planning Tool (Appendix B) to plan and implement the EWIMS process.

EWIMS TEAM GOALS

Setting realistic and measurable team goals and objectives is an important part of the EWIMS process. The goals should outline what the team hopes to accomplish, benchmarks to assess progress toward those goals, and regular monitoring of the goals throughout the year. These goals will help focus the team on the roles and responsibilities of the members and their place within the larger EWIMS process.

In all EWIMS team meetings, reviewing and discussing the information available will be essential. The meeting(s) convened prior to the start of the new school year should focus on identifying incoming students with risk indicators and discussing applicable intervention strategies. During the school year, the EWIMS team should have more frequent meetings, which will allow the team to discuss issues as they arise and to monitor students' progress. At the end of the school year, the EWIMS team should meet to discuss ways to improve support for at-risk students and to improve the operation of the EWIMS team.

THE FIVE DISTRICT OR ISD ROLES IN STEP 1

District representation and participation in EWIMS teams is essential. Ideally, a district representative should participate on each school based EWIMS team. In addition, ISDs should collaborate with their districts to provide aid as necessary and engage in the EWIMS process. The number and composition of EWIMS teams in a district may depend on the size of the district. Large districts with many schools may have one school-based team at each school and another district-level team with both school and district representation. Smaller districts may have one school-based team in each school, with both school and district representation. The level of ISD involvement will vary as well depending on the size of schools and districts and on their mutual relationship.

The overarching role of the district is to identify system-wide trends and concerns and to develop and recommend district-wide changes that address those concerns and leverage the positive trends. District administrators also play a key role in communicating the importance of the EWIMS within and across schools, by actively participating, listening to school concerns, and providing stable support, such as professional development and other resources.

In large districts, a district EWIMS team (in addition to the school-level teams) should include at least one key representative from each school-level team. A district team may meet less frequently than the school-based teams (e.g., two to four times a year) to discuss persistent programmatic challenges, resources, and trends, as well as systemic, organizational, and policy changes that may be needed to support EWIMS implementation. The school-level representatives can help the district team develop new district-wide strategies for students who are off track (e.g., new behavioral management approaches or training for teachers and students, an increase in professional development in adolescent literacy). One example of the different types of conversation occurring at the district/ISD and school levels is on the topic of interventions. At the district level, those involved with EWIMS might discuss whether to add a new intervention to the catalog for all schools to use. At the school level, the EWIMS team would discuss whether a new intervention should be assigned to specific students.

Each of the following five roles may be fulfilled by one person or many; likewise, the same people may fill multiple roles, depending on the organization of each district and the level of ISD involvement. For this guide, an "essential role" refers to functions or closely related tasks, rather than titles or people. Anyone at the district or ISD level can perform any of the roles. The names assigned to these roles are for clarity only.

The five essential roles are the following:

- The Authority has the power to make decisions on policies and practices to support EWIMS.
- The **Advocate** champions EWIMS by answering questions about reasons and logistics, suggesting policy changes to facilitate EWIMS, and ensuring participation in school-level EWIMS meetings.
- The Coach/Support provides initial training and ongoing professional development and connects schools with resources based on their needs.
- The Data Expert provides access to data and technical support.
- The Monitor tracks implementation and identifies district-wide concerns.

Step 1

Authority

- Sign necessary data agreements, including those between the school/district, and document sharing agreements between school, district, and ISD.
- Approve policy changes and professional learning opportunities to facilitate the implementation of EWIMS.
- Adjust budgeting and allocate resources equitably to ensure schools have the resource capacity to implement EWIMS.

Advocate

- Establish communication with schools and ensure that a district or ISD member is assigned to attend EWIMS meetings at each school.
- Answer questions about the importance of EWIMS and the logistics of implementation within the district.
- Engage in school-level meetings or routinely communicate with EWIMS teams to increase attention to the EWIMS efforts and signify the importance of the EWIMS work.

Coach/Support

• Provide EWIMS team members with professional development on implementing EWIMS and using early warning data to enhance the work of the school EWIMS team and decrease the variation in the quality of the EWIMS teams' work across schools.

Data Expert

- Provide appropriate levels of access to the data system for each stakeholder.
- Negotiate with schools to establish the level of data support the district or ISD will provide (e.g., monitor access, upload/download data, populate data in the system, trend data, regular data reports).

Monitor

 Monitor school efforts to implement EWIMS throughout the school year, at multiple grade levels (middle and high school grades).

- Track longitudinal data over the course of multiple school years to ensure that schools are improving outcomes
 for students and to identify promising practices and areas of need in the district.
- Identify structural changes needed at the district level to facilitate implementation.
- Communicate within the district about the progress of the EWIMS process.

GUIDING QUESTIONS FOR STEP 1

Short-Term Questions

- 1. What school, district, and ISD stakeholders should be represented on the EWIMS team (e.g., district administrators, counselors, teachers, support staff, technology specialists)?
- 2. If considering team members who are external to the school, how should these individuals be involved in the team? For example, should these members come to every meeting? Is it appropriate for team members who are external to the school to monitor student-level data? What is the commitment you expect from them?
- 3. Who will be responsible for importing information into the early warning data tool?
- 4. Does the EWIMS team have sufficient authority to make decisions about students based on early warning data?
- 5. How frequently should the EWIMS team meet?
- 6. What type of professional development is needed to train and support the school-level and district-level team(s)?
- 7. What additional resources are needed to support the team (e.g., access to student records, professional development)?

- 1. Who will continue to be part of the EWIMS team the following year?
- 2. What are the key goals of the team? How are they measured?
- 3. What are the most significant challenges facing the team?
- 4. What are the important lessons learned? How will these lessons inform future work?
- 5. What, if any, additional resources are needed?
- 6. What types of professional development for team members should be planned to continue to build the capacity of the EWIMS team and other key and support staff?

STEP 2—Use an Early Warning Data Tool

WHAT YOU NEED FOR STEP 2

- Access to student data for the entire EWIMS team
- Timeline for data import and entry
- Trained data import and entry designee



DESCRIPTION OF STEP 2

This section describes the management of early warning data in an early warning data tool. A robust EWS uses readily available student data and validated indicators of risk to identify high school students who are at risk of not graduating from high school so that they can be matched with appropriate supports and interventions. Districts or schools may develop their own early warning data tool.

This guidance can apply to various early warning data tools. Step 2 is divided into inputs needed to identify at-risk students and the outputs provided by the tool.

ANTICIPATED OUTCOMES OF STEP 2

- 1. Understanding of the basic features of early warning data reports by all team members
- 2. Designated district or school technology specialist(s) who are responsible for loading the tool with student data in a regular and timely manner
- 3. Fully populated tool with up-to-date information that is based on regular import or entry according to the established schedule

Early Warning Tool Setup

An Early Warning System (EWS) Tool allows users to identify and monitor students in need of additional support throughout the school year, using research-based indicators to flag at-risk students. An ideal EWS Tool will have many functions to facilitate data-driven decision-making to help students. These functions allow users to do the following:

- Customize the tool settings to reflect the local context (e.g., number of grading periods, race and disability categories, and other classifications).
- Integrate locally validated incoming indicators of risk to identify students who may need support as they
 transition into and through high school.⁴

⁴Please see Step 7 for a more thorough discussion of locally validated indicators.

- Identify at-risk students based on locally defined behavior indicators (e.g., suspensions, behavior grades, state assessment results).
- Import and export student-level data via the cockpit application.
- Produce dashboards, including student-level, school-level, and district-level data summaries.
- Assign and monitor student interventions over time.
- Modify default risk-indicator thresholds after they are locally validated.⁵
- Create watch lists to monitor students who meet customized indicator thresholds.

To accomplish these tasks, each EWIMS team needs to have (1) access to an EWS Tool that will generate reports; (2) one or more trained team members who can import or enter information into the EWS Tool and who are knowledgeable about its screens and features; (3) a timeline for ensuring that data are imported or entered, updated, and reviewed regularly; and (4) a plan ensuring adherence to appropriate confidentiality requirements when developing reports and sharing information (including internal and external stakeholder groups).

This process will ensure that the data in the tool are current and that the EWIMS team is able to access the necessary student-level and school-level reports. For example, if the EWIMS team is meeting after the first month of school, the most current attendance data should be entered into the tool and a report should be generated and shared with EWIMS team members. This report will identify students flagged for missing too many days during the first month of school (the risk indicator information that will be available after the first month of school).

Data Inputs

The EWS Tool should use information about student attendance, course failures, and behavior (referrals, suspensions, behavior grades) to identify, or "flag," students who are at risk for not being at grade level, not being promoted to the next grade, or not graduating from high school. Identification is based on indicators that are locally validated or that are grounded in research about the predictors of dropout and graduation (Balfanz, 2009)

Outputs and Reports

After these data inputs (source files) are imported into the tool, the tool output provides a list of students who are at risk based on the previously described risk indicators. Similarly, at the end of the year, the tool uses information from the final grading period to determine an exit indicator of risk. For example, if a student is flagged for any indicator of risk (e.g., missed 10% or more of instructional time), the student will be flagged as at risk for not being on grade level. In turn, the exit indicator becomes the "incoming indicator" of risk for the subsequent grade level. The exit indicator allows schools to plan support for at-risk students before the start of the next school year.

THE FIVE DISTRICT OR ISD ROLES IN STEP 2

The actions the five essential roles should take to support Step 2 of the EWIMS process are listed below.

Authority

• Secure student privacy and address any concerns schools may have.

Advocate

• Provide information to EWIMS teams about the incoming indicators of risk (especially if students are coming from other schools within the district).

Coach/Support

• Provide professional development in using the EWS Tool (either directly or through a third party) to team members.

Data Expert

- Provide technical assistance by regularly backing up the tool and disseminating reports to the school-based team.
- Align the district data systems and variables with the EWS Tool data variables to streamline the efforts of the school EWIMS team.
- Provide guidance about indicators of risk, and then set thresholds at which students are flagged.

Monitor

- Obtain schedules from the data expert and schools related to data uploads and report development and align those dates into a single schedule.
- Develop a calendar for monitoring school implementation progress. This calendar should include dates for EWIMS team meetings after grading period data have been uploaded into the tool and for checking the measures of effective practice.
- Establish the measures of effective practice for monitoring successful implementation.

GUIDING QUESTIONS FOR STEP 2

Short-Term Questions

1. Who will be responsible for the data import or entry into the EWS Tool?

- 2. What databases house the student data needed for tool functionality? How will the EWIMS team get access to those databases?
- 3. Who will develop reports for the EWIMS team?
- 4. How frequently will early warning data be monitored?
- 5. Who will provide reports to other stakeholders?
- 6. With whom will data from the tool be shared? How will student confidentiality be protected, as required by district policies?

- 1. Which types of reports from the tool are most useful for informing school and district policy decisions?
- 2. How can the data entry and import process be streamlined or connected to existing data systems?
- 3. How can data from multiple years be used to validate local risk indicators, evaluate the impact of existing interventions, and identify persistent school-level or district-level challenges?

STEP 3—Review Early Warning Data

WHAT YOU NEED FOR STEP 3

- An EWS Tool, loaded with student information and performance data
- Student-level and school-level reports generated through the EWS Tool
- Convening of EWIMS team, aligned with the uploading of new student data



DESCRIPTION OF STEP 3

This section describes how early warning data are reviewed to identify students who are at risk and how to understand patterns in student engagement and academic performance within the school. This step is critical when using any type of early warning data.

Step 3 should be revisited any time new data are available to examine both the short- and the long-term impacts of the interventions and programs being utilized within the school.

ANTICIPATED OUTCOMES OF STEP 3

- 1. Identification of individual students who show signs of risk for dropping out of high school
- 2. Understanding of patterns across groups of students and over time, which allows the EWIMS team to begin to consider the allocation of student support or dropout-prevention resources to flagged students
- 3. *In preparation for Step 4*: Identification of the type of additional information that will be needed to better understand possible underlying reasons specific students were flagged for particular indicators
- 4. *In preparation for Step 4*: Assignment of responsibilities for gathering the additional information and data on specific students and student characteristics

Reviewing Data

The EWS Tool should yield a great deal of information. Step 3 helps users break down this information into manageable pieces that can be sorted, organized, and prioritized so that the EWIMS team can take action. Arranging the data in manageable ways allows team members to identify the students who show symptoms of risk (i.e., are flagged) and to develop questions to further investigate the underlying causes for students' symptoms of risk (see Step 4). To review early warning data, team members begin by examining which individual students are (and are not) flagged for attendance, behavior, and course performance indicators of risk. It is important to understand that early warning indicators differ from student demographics and designations (e.g., special education, late enrollment). Student demographics and designations are not predictive of student success or graduation, and they are not early warning indicators.

Based on this initial review of the data, the team strategizes ways to prioritize student needs. The EWIMS team then can organize and sort at-risk students into groups on the basis of the indicators for which they are flagged (i.e., attendance, behavior, course performance, or any combination). The EWIMS team also may want to sort students by demographic characteristics to begin looking at group patterns to see whether there are any larger group needs that should be addressed.

Ideally, EWS dashboard screens should provide:

- multiple ways of examining student-level and school-level information. By using these screens, the team should
 be able to examine individual, group, and whole-school patterns and consider the allocation of student support
 and dropout-prevention resources, and allow the team to review summary information about the number and
 percentage of students in the school who are flagged in general and who are flagged for particular indicators.
- a summary that allows the team to develop an overall sense of the numbers of students displaying each type of risk indicator. The summative school dashboard information may be useful to the EWIMS team during the time that its members explore answers to the long-term guiding questions about patterns of student engagement in school after the first grading period. Because the summative school dashboard masks the identity of individual students, this type of report may be useful for sharing information with the entire school staff or school board. In addition, these data may be useful in beginning to examine issues or patterns related to groups of students to assess whether there are patterns related to classes, teachers, content areas, or other aspects that may be contributing to the flagging of specific students.

It is important to acknowledge that in some schools, a long list of students may be flagged for either attendance, behavior, or course performance. In these schools, the EWIMS team must first explore Tier 1.

- Are there research and evidence-based Tier 1 strategies in place?
- Are the Tier 1 strategies implemented school-wide?
- Are the Tier 1 strategies implemented with fidelity?

Based on data reviews, some EWIMS teams my choose to initially identify a specific group of students to focus on to begin to implement the EWIMS process, such as ninth-grade attendance, or students with disabilities discipline.

THE FIVE DISTRICT OR ISD ROLES IN STEP 3

The actions the five essential roles should take to support Step 3 of the EWIMS process are listed below.

Authority

- Determine resource allocation and policy changes based on data trends.
- Ensure schools have the necessary infrastructure to review data (e.g., internet access in meeting rooms).

Coach/Support

• Work with school leadership to review longitudinal and early warning data and look for trends across grades or flagged students.

Data Expert

• Ensure schools have timely access to reports that show trends across grades and flagged students from semester to semester and year to year.

Monitor

Examine whole-school or whole-district data trends.

GUIDING QUESTIONS FOR STEP 3

Short-Term Questions

- 1. Which students are flagged as being at risk? For which indicators are they flagged?
- 2. What are the most prevalent indicators among the students who are identified as being at risk?
- 3. Are there patterns among the students who are flagged for any particular indicator(s) of risk?
 - Were students who are currently flagged in high school also flagged for the incoming risk indicator on the basis of information from the prior grade(s)?
 - Are students who are flagged for attendance indicators also flagged for course performance? Do some students show risk because of absences only? Do other students show risk because of poor course performance only?⁶
 - Do students who are flagged for risk early in the school year continue to be flagged later in the year? Are they flagged for the same reasons or for different reasons?
 - What are the demographic characteristics (e.g., disability, disadvantaged status, ELL status) of students who are flagged and not flagged?

- 1. Do students who were flagged in a previous school year (incoming indicator of risk) continue to be flagged in the current school year? If the answer is "yes," are they flagged for the same reasons or for different reasons?
- 2. Do students who are flagged for risk early in the school year continue to be flagged later in the year? Are they flagged for the same reasons or for different reasons?
- 3. Do the number and percentage of students who are flagged for any indicator and for each different indicator change from year to year?
- 4. For students who are flagged, what percentage showed one or more risk indicators in prior grades? What percentage did not?⁷

⁶The attendance and course performance indicators tend to co-occur (Allensworth & Easton, 2007); it may be useful, however, to confirm whether this situation is the case in the local context. An attendance problem may be apparent before poor course performance and, if detected early, this problem could be addressed before course failures occur.

⁷If the students were enrolled in the school during the previous year, this information may be easily obtained by the school. If the student was enrolled in another school, however (e.g., middle school), the district may need to provide data to facilitate answering this question.

STEP 4—Interpret Early Warning Data

WHAT YOU NEED FOR STEP 4

- A list of questions raised by the data analysis during Step 3
- Additional information from other sources
 (e.g., student information systems, student records, teacher discussions/interviews)
- Time to meet and discuss findings



DESCRIPTION OF STEP 4

This section describes how to examine in greater depth the factors that may contribute to the at-risk status of a student who is flagged. It is important to acknowledge that the indicators of risk are merely signs of deeper and more complex problems. Step 4 also builds on the review of early warning data conducted in Step 3 by encouraging the team to look more closely at the characteristics of flagged students. To complete this deeper analysis, teams must examine additional data that are not included in the EWS Tool but that are available in other information data systems or from individuals who interact with these students. The team should gather data from a variety of sources, with a focus on gathering information that can help inform decisions about appropriate supports and interventions (Step 5).

As previously mentioned, these additional sources may include information from classroom teachers or other adults in the school who interact with flagged students. In addition, the team may consider conducting one-on-one meetings with individual students, their families, or both. These meetings can shed light on the reasons that students are displaying indicators of risk; the meetings also may offer opportunities to engage students and the adults who interact with them in providing additional supports. The EWS Tool should allow users to easily produce detailed student reports that are designed expressly for this purpose.

ANTICIPATED OUTCOMES FOR STEP 4

- 1. Better understanding of reasons that individual students, and groups of students, are flagged as being at risk
- 2. Identification of individual and common needs among groups of students

Interpreting Data

After gathering additional information, the team should discuss individuals or groups of students and use factual evidence to identify underlying causes for the student or students being flagged as being at risk. On the basis of these investigations, the team should be able to identify some common and individual needs among students, prepare to identify and implement appropriate intervention strategies (Step 5), and monitor students' responses to these interventions (Step 6). The meeting to discuss underlying causes and student needs will take more time than a typical EWIMS meeting. It is critical to designate an appropriate amount of time to discuss the findings from exploring underlying causes for a student being at risk.

THE FIVE DISTRICT OR ISD ROLES IN STEP 4

The actions the five essential roles should take to support Step 4 of the EWIMS process are listed below.

Authority

• Develop policies and sharing agreements for sharing data among schools (e.g., sharing eighth-grade data with high schools).

Advocate

• Ensure district representation at the school EWIMS meetings.

Coach/Support

- Provide guidance for discussing student data with parents and families.
- Encourage the EWIMS teams to dig deep to identify underlying risk factors.

Data Expert

• Provide access to data beyond that captured in the tool (e.g., student records from prior grades, data from all schools a student has attended, test scores, reading levels, teacher comments).

GUIDING QUESTIONS FOR STEP 4

Short-Term Questions

At the Student Level

Attendance

- 1. Is there a day or certain time of day when the student is absent? Are certain classes missed?
- 2. Has the student had any behavioral referrals resulting in suspension, which may affect attendance?
- 3. Are there other indicators of risk? (Cross-check with attendance flag and other information, such as teacher reports and achievement test scores.)
- 4. Is there a discernible pattern to student absences? What are the underlying reasons for students' poor attendance records?
- 5. What other information do you need to understand the characteristics of students with attendance problems (e.g., special education status, ELL status, prior achievement)?

Academics

- 6. For a student who is flagged for failing courses, what classes did the student fail? What might be the underlying causes (e.g., low literacy skills, an unidentified or untreated learning disability) for the low performance?
- 7. Are there any discernible patterns in the students' academic performance? What are the underlying reasons for these students being flagged for academics?
- 8. What other information do you need to understand common patterns or possible underlying reasons for poor performance (e.g., special education status, ELL status, prior achievement) among students with course failures?

Behavior (If Applicable)

- 9. What behavior(s) contributed to the behavior flag? How is the behavior problem(s) being addressed? For instance, is the student in any sort of behavior intervention? Does he or she have any special needs that must be taken into consideration?
- 10. Are there behavioral patterns or common underlying reasons for behavior problems among students flagged for this indicator?
- 11. What other information do you need to understand the characteristics of students who are being flagged for behavior (e.g., special education status, ELL status, students over-age for their grades)?

Any Flag

- 12. Is the student engaged in school? (To determine this, cross-check with attendance flag, incoming indicator flag, behavior flag, and other information, such as teacher and counselor reports.)
- 13. What does the team believe are the underlying causes for poor attendance or academic failure among the flagged students?
- 14. What are the most prominent needs at the school and district levels that emerge from the analysis of the data? How will you prioritize these needs?
- 15. Can more information be gathered from students about the reasons they are exhibiting behaviors that cause them to be at risk (e.g., students do not find classes engaging, students have responsibilities at home causing them to be absent)?

At the School Level

- 16. How might school attendance policies be affecting students who are flagged (e.g., consequences for a high number of absences)?
- 17. Looking across multiple grades, are students failing particular courses, being flagged at particular grade levels, or both? What changes could be made to improve outcomes for students in these course(s) or grade(s)?
- 18. How might the grading policy at the school affect students who are flagged?
- 19. On the basis of your analyses, is there anyone who is not currently on the EWIMS team who needs to be included (e.g., previous teachers, parents, guidance counselors, curriculum and instruction personnel)?

- 1. Are there additional stakeholders (e.g., community members, law enforcement representatives, court representatives, human services representatives, business representatives, local policy makers, parents, teachers, students, guidance counselors, central office staff) who should be included in the long-term discussions about the way to address systematically the prevalence of risk factors displayed by students in the school? How will these stakeholders be engaged? How will buy-in be promoted?
- 2. What can the team do to ensure that it can easily obtain additional data that are important for identifying underlying causes? What further information is necessary to get a better picture? What types of information are difficult to obtain? How can that information be made more accessible?
- 3. For students who do drop out, what were the reasons or underlying causes? What resources would the district need to locate and survey or interview some of these students?

STEP 5—Assign and Provide Interventions

WHAT YOU NEED FOR STEP 5

- An understanding of student needs in the school based on a review of the early warning data (Step 3) and additional information gathered in Step 4
- An inventory of available interventions
- Leadership buy-in and support for interventions and support strategies to assist at-risk students
- Tool 2: Student Support and Intervention Mapping (Appendix B)



DESCRIPTION OF STEP 5

This section provides information on making decisions about the allocation of available resources and strategies to support students identified as being at risk of dropping out of high school. This section also provides guidance on ways to systematically provide support to identified students, using a tiered approach. During Step 5, the EWIMS team matches individual students to specific interventions after having gathered information about (1) potential root causes for individual students being flagged and (2) the available academic and behavioral support and intervention programs in the school, district, and community.

ANTICIPATED OUTCOMES FOR STEP 5

- 1. Compiled inventory of supports and interventions available to students in the school
- 2. Assignment of flagged students to supports and interventions based on student needs identified in Steps 3 and 4 (documented for each individual student in the EWS Tool)
- 3. Identification of gaps in the available supports and interventions
- 4. Recommendations for school-wide support strategies aimed at addressing the most common student needs identified in Steps 3 and 4

Assigning and Providing Interventions

In many schools and districts, student support resources and interventions are available but not systematically applied, and their use is not well coordinated. To introduce a more systematic approach, schools and districts increasingly are organizing specific strategies or programs into tiers based on the intensity of the interventions. Generally, the models have a two- or three-tiered intervention system, in which Tier I interventions are low intensity and are applied to all students in the school, Tier II interventions are moderately intensive and are applied to small groups of students with common needs (sometimes individual students), and Tier III interventions are the most intensive and are applied to individual students with the highest level of need. Figure 5 is a depiction of a three-tiered model; such a model can be used for academic and behavioral interventions.

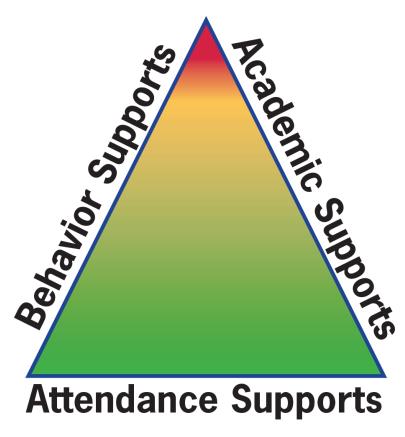


Figure 5. Example of Tiered Approach to Student Support and Dropout Prevention

Note: Adapted from Michigan's Integrated Behavior and Learning Support Initiative's (MIBLSI) Integrated Model of Support.

When adopting or adapting such a model to help keep students on track for high school graduation, a district or school may consider the following:

- Explicitly communicating the purpose of the tiered model for keeping students on track to achieve buy-in at multiple levels, including stakeholders from state and local education agencies, families, and students;
- Clearly defining the tiers within the model so that they are easily understood by all stakeholders, including administrators, educators, families, school support staff, and students; and
- Establishing a protocol that enables students to move through the tiers seamlessly and efficiently, as needs are
 identified and change.

The EWS Tool should be designed to allow the EWIMS team to monitor and adjust students' assignments to supports and interventions within the tool, as well as to monitor their movements through tiers. In general, the EWS Tool assumes that in schools using a tiered approach, all students have access to Tier I interventions. Flagged students are eligible for Tier II or Tier III interventions, or both, based on the EWIMS team assessment. These features will help schools and districts coordinate services and closely track the participation of individual students in supports and interventions and their response to those supports.

To match students to supports and interventions, the team will need to understand the supports and interventions that are available and the need(s) each support and intervention addresses. Creating an inventory of existing supports and interventions within the school, district, and community that are available to students will provide the team with a resource on which to base decisions about matching students with specific supports and interventions. Because the EWIMS process helps identify students early, student needs may be met by other, less intensive, types of supports. **Tool 2: Student Support and Intervention Mapping** (in Appendix B) guides the development of an inventory of interventions.

After the inventory is developed, the team must review information about the needs of students, based on the work done in Steps 3 and 4, to match students with appropriate supports and interventions. The best EWS Tools will facilitate this process through its Intervention Catalog functionality. The tool provides space to house information about the available interventions along with a search capability to mine meta-data. Within the tool, users can search for interventions using any of the defined criteria and assign appropriate interventions to students. After students are assigned to one or more interventions, the team can monitor students' progress and adjust the program of support as needed (see Step 6).

In addition, during the matching process, the team may identify gaps in the available supports and interventions for groups of students or for individual students. Identifying the gaps may provide an opportunity to discuss these needs with school and district leaders to obtain new supports.

Although the process relies heavily on data collected during Steps 3 and 4 to inform action, ultimately the team members are charged with using their professional judgment to recommend specific student supports and interventions. To ensure that each placement is appropriate and effective, the team continually monitors individual student response to interventions (Step 6) and, when needed, revises student placement after revisiting Steps 3 and 4.

THE FIVE DISTRICT OR ISD ROLES IN STEP 5

The actions the five essential roles should take to support Step 5 of the EWIMS process are listed below.

Authority

- Pinpoint district-wide solutions for common intervention needs of schools.
- Allocate resources based on school needs.
- Select and fund interventions to improve students' high school readiness.

Advocate

• Identify common needs of students in multiple schools.

Coach/Support

- Provide solutions for gaps in available interventions and supports.
- Identify promising student supports and evidence-based interventions, including community resources.
- Share effective student interventions across schools.

Data Expert

Update the school intervention catalogue.

GUIDING QUESTIONS FOR STEP 5

Short-Term Questions

- 1. What interventions are currently implemented in the school and district? How successful do they seem to be at keeping students in school or getting them on track for graduation? What type of ongoing assistance is provided to implement supports and interventions with fidelity?
- 2. What structures (e.g., flexible scheduling) currently exist to support students who are at risk?
- 3. What trends in the data identify the immediate need for particular types of interventions (e.g., attendance monitors, professional development for teachers on instructional strategies, ninth-grade transition supports, opportunities for extended learning beyond the school day)?
- 4. If a tiered model is not already in place, is it possible to provide supports that are tiered by intensity based on student need? What additional approaches can be used to coordinate services and prioritize the allocation of resources?
- 5. Do the characteristics (e.g., disability, economically disadvantaged status, ELL status) of the students identified as being at risk inform intervention decisions? Are there other ways to inform intervention decisions?

- 1. Which supports and interventions appear to be the most successful at helping flagged students get back on track for graduation? How do you know that those approaches are most successful?
- 2. How will you identify promising supports and interventions to address unmet student needs (e.g., attend conferences, purchase interventions, ask or visit other schools and districts, form study teams, review literature, seek help from regional or state agencies)?
- 3. Do trends in the data consistently identify the need for similar types of supports and interventions? How will school and district staff be included as part of the EWIMS efforts? How will this information be communicated to them? How will they be involved in decision making, implementation, and monitoring?
- 4. What school policies need to be in place to improve the implementation of support and intervention strategies?
- 5. What resources (e.g., time, materials, personnel, funding) are necessary to support interventions? What resources are available to support the identified students? If the available resources are not sufficient, how will you obtain additional resources (e.g., cost sharing across programs, grants, other funding sources)? How will the resources be distributed among groups and individual students on the basis of their needs?
- 6. What, if any, organizational or structural changes are needed in the school or district to support students?
- 7. How will you communicate the results of this work to critical stakeholders (e.g., parents and students, teachers, administrators, communities, educators outside your district, the state department of education)?
- 8. How will students and parents be included as part of the EWIMS efforts? How will information be communicated to them?
- 9. How will the successes of the program and individual students be celebrated?

STEP 6—Monitor Students and Interventions

WHAT YOU NEED FOR STEP 6

- A list of students in interventions
- Time to discuss student progress in interventions
- Tool 2: Student Support and Intervention Mapping (Appendix B)



DESCRIPTION OF STEP 6

This section includes information about monitoring flagged students and improving both individual student supports and the system of interventions available. It also provides guidance on how to monitor students in interventions by examining whether they begin to get back on track (no longer display indicators of risk). In this step, the EWIMS team uses the progress-monitoring information to evaluate the impact of interventions on individual students and on groups of students with common needs.

ANTICIPATED OUTCOMES FOR STEP 6

- 1. Knowledge about individual student progress and specific responses to assigned interventions, which allows the EWIMS team to make decisions about continuing, reassigning, or terminating interventions for flagged students
- 2. Identification of gaps in the available supports and interventions for students, recommendations for new intervention strategies, and prioritization of new interventions that are based on early warning data
- 3. Knowledge about the general effectiveness of interventions, based on data from monitoring students participating in each one
- 4. Information-sharing with appropriate stakeholders about student needs; the impact of existing interventions; and the need for additional interventions, if applicable

Monitoring Student Progress and Interventions

- Monitor students who are participating in interventions. This monitoring should be done as part of the EWIMS team's routine review of early warning data (Step 3) and should be incorporated as a regular item on the team's agenda. Specifically, students who were previously flagged and assigned to one or more interventions should be monitored closely to see whether they are flagged again and for which indicators. For example, students flagged for attendance problems who were assigned to a program with attendance monitoring should be followed to see whether their attendance rates improved.
- *Identify student needs that are not being met.* Students who are receiving supports may continue to show signs that they are at risk of being off track for grade level, for promotion to the next grade, or for graduation from high

school. It is possible that their needs are not being addressed by the interventions for a number of reasons: the intervention may not be effective, the frequency of the intervention may not be sufficient, the students may have additional needs that have emerged and that are not addressed by the assigned intervention. Regular monitoring allows such issues to be identified quickly.

- Identify new interventions to meet student needs. The EWIMS team may need to identify new interventions that are not currently available to meet the needs of students identified as being at risk. First, the team must identify the level of need. Then, the team must conduct a search and develop a list of potential interventions and strategies that may serve the need, pairing the list with the associated costs (e.g., resources, funding, staff time) of implementing the intervention or strategy. After the team shares the level of need and potential solutions with leadership and staff, appropriate intervention(s) can be implemented. New interventions can be added to Tool 2: Student Support and Intervention Mapping (Appendix B).
- Examine the effectiveness of the interventions. In addition to enabling users to track the progress of individual students, the EWS Tool should allow users to examine intervention programs for whether participating students are able to get back on track. Over time, this process will improve the team's understanding of which interventions are best at addressing specific student needs and enable the team to strengthen the process of matching students to interventions.
- *Communicate with families.* As noted in Step 3, both students and their families should be informed about students' risk status. Families should be informed when students appear to make improvements, and they also should be informed when there is lack of improvement or further decline.

THE FIVE DISTRICT OR ISD ROLES IN STEP 6

The actions the five essential roles should take to support Step 6 of the EWIMS process are listed below.

Authority

Review resource allocations and make adjustments based on school and student needs.

Advocate

 Create a press release or newsletter to share district progress and other good news related to EWIMS with parents and families.

Coach/Support

Help identify unmet student needs and leverage appropriate resources to meet them.

Data Expert

Remove ineffective interventions from the school intervention catalog.

Monitor

- Monitor trends among students, within a given year and over time.
- Examine the efficacy of supports or interventions for different groups of students.
- Determine whether interventions that are not effective in changing outcomes are truly ineffective or if they are being implemented with low fidelity.
- Review the measures of effective practice for monitoring successful implementation established in Step 2.

GUIDING QUESTIONS FOR STEP 6

Short-Term Questions

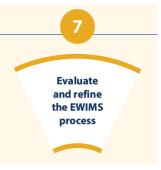
- 1. Are students who are participating in interventions showing improvement? What evidence is being used (e.g., indicators of risk, other)? Do these students need to continue participating in the intervention to maintain the improvement in outcomes?
- 2. Are students who are participating in interventions continuing to display indicators of risk? If the students are indicating risk, then consider the following:
 - Is the intervention inadequately supporting an individual student or group of students?
 - Are there problems with how the intervention is being implemented?
 - Is the intervention failing to address the particular needs of the student(s)?
 - Does more information about the needs of the student(s) need to be gathered (Step 4) to identify a better fit between interventions and the student's or students' needs (Step 5)?
- 3. As interventions are implemented, do new student needs arise? Has the number of students flagged for each indicator changed since new strategies have been put in place? How can interventions be modified or replaced?
- 4. Are resources sufficient to implement supports and interventions? If not, how might additional resources be identified for the short term?

- 1. During the course of several years, do trends in the data consistently identify the need for similar types of interventions? Do school or district policies and strategies exist that may address these needs?
- 2. What interventions seem to get students back on track consistently?
- 3. During the course of several years, how effective are the existing interventions for improving outcomes for students who are assigned to them? Are some interventions better for addressing the needs of students with particular types of risk indicators or other underlying issues?
 - Which interventions seem to work for which students?
 - Which interventions do not seem to work for students? How might these interventions be improved? Should these interventions be eliminated?
- 4. How will you communicate the results of this work to critical stakeholders (e.g., parents and students, teachers, administrators, community, educators outside your district, the state department of education)?
- 5. What schoolwide policies need to be in place to improve the implementation of student support and intervention strategies?
- 6. Are resources sufficient to implement supports and interventions now that you have an efficient process for identifying needs? If not, how might additional resources be identified for the long term?
- 7. Do you think there are organizational or structural changes needed in the school or district to support students? If so, what change(s) do you recommend?

STEP 7—Evaluate and Refine the EWIMS Process

WHAT YOU NEED FOR STEP 7

- Reports generated by the EWS Tool
- Time to consider and identify ways to improve the EWIMS process
- Exported data from the EWS Tool to prepare for students in the next grade



DESCRIPTION OF STEP 7

Step 7 indicates that the EWIMS team should reflect on the EWIMS implementation process annually (at a minimum). The team should discuss what has worked, what should be modified, and what should be replaced or eliminated. Each decision should be supported by data and evidence and should be documented. Finally, the current EWIMS team and other school and district leadership should identify new EWIMS team members and ensure that they are trained to use the EWS Tool and that they understand the implementation process.

ANTICIPATED OUTCOMES FOR STEP 7

- 1. Shared understanding of the EWIMS process implementation strengths and challenges
- 2. Clear recommendations for improving the EWIMS process
- 3. Established EWIMS team for the following school year, composed of members with a clear understanding of the process and of their roles
- 4. Validated indicators that substantiate the early warning data in the school and district

Evaluating and Refining the EWIMS Process

When evaluating the EWIMS process, all aspects of EWIMS implementation should be considered. The conversation should be guided by exploring what is working, what is not working, and how the work of the EWIMS team could be improved. For example, the team might analyze the risk indicators and risk thresholds or might explore improvements in how efficiently the team is able to access reports.

Locally Validating the Early Warning Indicators

While research has validated early warning indicators for high school dropouts and other key educational milestones in many locations, districts or states may want to ensure that the indicators reflect the local context through a validation process. To conduct this analysis, a member of the EWIMS team or a designee with experience in data analysis would access at least three years of data to explore grade retention outcomes and four years of data to examine the high school graduation outcomes for at least two classes of students who have graduated from or dropped out of high school (e.g., Grades 9–12 student data for the graduating class of 2013 and 2014). An analysis of this nature enables examination of the outcomes for students who did and did not display the indicators earlier in high school.

Ideally, the indicator thresholds predict a high percentage of eventual graduates and dropouts. That is, if the indicators would have flagged most of the students who dropped out and would not have flagged most of the students who graduated, the indicators would have a high "hit rate"; that is, they predicted the outcome accurately. If, however, most students who would have been flagged earlier in high school ended up graduating, the thresholds may be overidentifying students at risk. If many students who eventually dropped out would not have been flagged using these indicators, the thresholds are under identifying students at risk.

Districts and schools relying on these indicators might notice that the cut points for the national indicators are not as predictive in their community as they are across the country. If this is the case, it is advisable to examine the predictive power of the indicators and thresholds at the local level. Doing this requires access to and use of multiple years of data.

If your district is interested in local validation, a guide from Regional Educational Laboratory West (Li, Scala, Gerdeman, & Blumenthal, 2016) could be a useful support in the process. The resource provides a step-by-step guide that school districts can take to identify and select their own early warning indicators. Included in the guide is a set of templates to document decisions and organize the analysis to identify and select appropriate early warning indicators for your school or district.

THE FIVE DISTRICT OR ISD ROLES IN STEP 7

The actions the five essential roles should take to support Step 7 of the EWIMS process are listed below.

Authority

- Reflect on the year's tasks and identify ways to improve.
- Develop policy changes to mitigate challenges reported by schools.

Advocate

- Review and reflect on the year's tasks, and identify way to improve (e.g., increase or decrease the number of school liaisons).
- Identify underrepresented stakeholder groups and brainstorm ways to increase their involvement.

Coach/Support

- Assist district-wide planning for professional development opportunities based on staff needs.
- Brainstorm ways to improve school-level understanding of the EWIMS process.

Data Expert

- Lead the validation analysis, described in the box "Locally Validating the Early Warning Indicators," to ensure that the early warning data are as accurate and predictive of on- and off-track outcomes as possible for the local context.
- Brainstorm ways to improve tool functionality (e.g., change risk indicator thresholds, develop easier-to-read reports).
- Create reports to reveal annual patterns of students moving off and on the list of flagged students.

Monitor

• Examine the patterns of flagged students to identify whether schools are getting students back on track (while ontrack students become off track) or if the same students remain off track throughout the year.

GUIDING QUESTIONS FOR STEP 7

The guiding questions for Step 7 encourage EWIMS teams to reflect on each of the six previous steps.

Short-Term Questions

STEP 1—Establish Roles and Responsibilities

- 1. Who will continue to be on the EWIMS team? (Note: Some individuals should overlap from year to year to ensure continuity over time.) Who will leave?
- 2. Which other stakeholder groups need to be represented on the EWIMS team?
- 3. What recommendations do you have for establishing a new team? Questions to guide these recommendations could include the following:
 - How frequently should the EWIMS team meet?
 - How much time in meetings and out of meetings do individual members need to participate in EWIMS-related activities?
 - What resources could support the team (e.g., providing EWIMS team members an additional planning period)?
- 4. What were the biggest challenges the team faced? What were the biggest successes?
- 5. What advice do you have for future EWIMS teams in light of the successes and challenges EWIMS team members experienced and addressed?
- 6. What made the team's job easier (and what made it harder than necessary)? What changes could make the team's job even easier?

STEP 2—Use an Early Warning Data Tool

7. How would you improve use of the tool (e.g., change the risk-indicator thresholds and the processes for keeping the tool up to date)?

STEP 3—Review Early Warning Data

8. How would you improve the tool's reports and their use?

STEP 4—Interpret Early Warning Data

- 9. What additional data were important for identifying underlying causes for students being at risk?
- 10. What advice would you give to someone who is new to analyzing the data?

- 11. Were there any unintended (negative or positive) consequences for students or staff because of the type of information that came from the EWS Tool?
- 12. Did you learn any new strategies that supported the interpretation of the early warning data?

STEP 5—Assign and Provide Interventions

- 13. What existing strategies ensured that students got back on track or were headed in that direction?
- 14. Did your analysis of the early warning data and your interpretation techniques allow you to match students to appropriate interventions?

STEP 6—Monitor Students and Interventions

- 15. How did existing supports and interventions for students who were flagged as being at risk help students get back on track or headed in that direction? Were there strategies that were better suited for groups of students (on the basis of their needs)?
- 16. Which strategies are still needed to support students as they get back on track for graduation?

- 1. What policies, organizational systems, or approaches at the school and district levels facilitated more effective supports and interventions?
- 2. By looking at multiple years of data for the same class(es) or cohort(s) of students over time, how does the school or district validate the early warning indicators of risk?
 - How many or what percentage of students who were not flagged wound up not graduating with their cohort or dropping out?
 - How many or what percentage of students who were flagged graduated on time?⁸
 - Do the percentages show any trends within the district or in an individual school? If trends are apparent, do the trends continue over time?
- 3. Do the early warning data reveal systemic problems in the district or school (e.g., risk factors that are prevalent from year to year, schools with persistent problems, groups of students who are consistently identified)?

⁸These retrospective percentages determine the hit rate of the early warning indicators.

Conclusion

The seven-step high school EWIMS implementation process provides an organizing framework for schools and districts to use in implementing an early warning system. These steps can guide users in examining indicator data for high school students who are at risk of being retained or of dropping out of high school, matching them to appropriate supports and interventions, and monitoring their progress. Each step specifies the roles for personnel at both the school level and the district level to create and maintain organized and coordinated approaches to getting students back on track for graduation. Guiding questions for each step allow users to focus on a range of short- and long-term needs, help users examine the needs of specific students, and help EWIMS teams identify underlying systemic school and district issues that can be improved to keep students on track for promotion and graduation. Using the framework serves individuals in schools and districts by guiding the development of a comprehensive and systematic dropout-prevention process that can help keep students in school; support efforts to identify the most promising interventions specific to schools and districts; and, ultimately, raise graduation rates around the country.

For additional information about early warning systems and dropout prevention, please see the following resources:

- Developing Early Warning Systems to Identify Potential High School Dropouts (Issue Brief)
 http://files.eric.ed.gov/fulltext/ED521558.pdf
 This resource discusses the factors that help predict whether individual students will eventually drop out of high school before graduating. It includes step-by-step instructions for building an early warning system.
- Approaches to Dropout Prevention: Heeding Early Warning Signs With Appropriate Interventions http://www.air.org/sites/default/files/downloads/report/NHSC_ApproachestoDropoutPrevention_0.pdf This report outlines steps that schools can take to identify at-risk students and provide the necessary support systems and relevant interventions to assist students in obtaining high school diplomas. Further, the report discusses the use of early warning data systems to target interventions for groups and individual students, offers a variety of best-practice approaches undertaken by high-performing high schools, and presents effective programs that are currently being implemented to address the dropout problem.
- Getting Student On Track for Graduation: Impacts of the Early Warning Intervention and Monitoring System https://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2017272.pdf

 This report provides an evidence base for EWIMS. From the official description: "This report provides rigorous, initial evidence that even with limited implementation during the first year of adoption, use of a comprehensive early warning system such as EWIMS can reduce the percentage of students who are chronically absent or who fail one or more courses. These short-term results are promising because chronic absence and course failures in grades 9 and 10 are two key indicators that students are off track for graduation."

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Appendix A. The District and ISD Role in the Implementation of EWIMS

District representation and participation in EWIMS teams is essential. Ideally, a district representative should participate on each school based EWIMS team. In addition, Intermediate School Districts (ISDs) should collaborate with their districts to provide aid as necessary and engage in the EWIMS process. The number and composition of EWIMS teams in a district may depend on the size of the district. Large districts with many schools may have one school-based team at each school and another district-level team with both school and district representation. Smaller districts may have one school-based team in each school, with both school and district representation. The level of ISD involvement will vary as well depending on size of schools and districts and on their mutual relationship.

The overarching role of the district is to identify system-wide trends and concerns, develop and recommend district-wide changes that address those concerns, leverage the positive results. District administrators also play a key role in communicating the importance of the EWIMS within and across schools by actively participating; listening to school concerns; and providing stable support, such as professional development and other resources.

In large districts, a district EWIMS team (in addition to the school-level teams) should include at least one key representative from each school-level team. A district team may meet less frequently than the school-based teams (e.g., two to four times a year) to discuss persistent programmatic challenges, resources, and trends, as well as systemic, organizational, and policy changes that may be needed to support EWIMS implementation. The school-level representatives can help the district team develop new district-wide strategies for students who are off track (e.g., new behavioral management approaches or training for teachers and students, an increase in professional development in adolescent literacy). One example of the different types of conversation occurring at the district/ISD and school levels is on the topic of interventions. At the district level, those involved with EWIMS may discuss whether or not to add a new intervention to the catalog for all schools to use. At the school level, the EWIMS team would discuss whether or not a new intervention should be assigned to specific students.

Each of the following five roles may be fulfilled by one person or many; likewise, the same people may fill multiple roles, depending on the organization of each district and the level of ISD involvement. For this guide, an "essential role" refers to functions or closely related tasks, rather than titles or people. Anyone at the district or ISD level can perform any of the roles. The names assigned to these roles are for clarity only.

The five essential roles are the following:

- The Authority has the power to make decisions on policies and practices to support EWIMS.
- The Advocate champions EWIMS by answering questions about reasons and logistics, suggesting policy changes to facilitate EWIMS, and ensuring participation in school-level EWIMS meetings.
- The Coach/Support provides initial training and ongoing professional development and connects schools with resources based on their needs.
- The Data Expert provides access to data and technical support.
- The Monitor tracks implementation and identifies district-wide concerns.

Within the seven EWIMS steps, each of these roles has a set of actions to perform.

STEP 1: ESTABLISH ROLES AND RESPONSIBILITIES

Authority

- Sign necessary data agreements, including those between the school/district, and document sharing agreements between school, district, and ISD.
- Approve policy changes and professional learning opportunities to facilitate the implementation of EWIMS.
- Adjust budgeting and allocate resources equitably to ensure schools have the resource capacity to implement EWIMS.

Advocate

- Establish communication with schools and ensure that a district or ISD member is assigned to attend EWIMS meetings at each school.
- Answer questions about the importance of EWIMS and the logistics of implementation within the district.
- Engage in school-level meetings or routinely communicate with EWIMS teams to increase attention to the EWIMS efforts and signify the importance of the EWIMS work.

Coach/Support

Provide EWIMS team members with professional development on implementing EWIMS and using early
warning data to enhance the work of the school EWIMS team and decrease the variation in the quality of the
EWIMS teams' work across schools.

Data Expert

- Provide appropriate levels of access to the data system for each stakeholder.
- Negotiate with schools to establish the level of data support the district or ISD will provide (e.g., monitor access, upload/download data, populate data in the system, trend data, regular data reports).

Monitor

- Monitor school efforts to implement EWIMS throughout the school year, at multiple grade levels (middle and high school grades).
- Track longitudinal data over the course of multiple school years to ensure that schools are improving outcomes for students and to identify promising practices and areas of need in the district as a whole.
- Identify structural changes needed at the district level to facilitate implementation.
- Communicate within the district about the progress of the EWIMS process.

STEP 2: USE AN EARLY WARNING DATA TOOL

Authority

• Secure student privacy and address any concerns schools may have.

Advocate

 Provide information to EWIMS teams about the incoming indicators of risk (especially if students are coming from other schools within the district).

Coach/Support

 Provide professional development in using the EWS Tool (either directly or through a third party) to team members.

Data Expert

- Provide technical assistance by regularly backing up the tool and disseminating reports to the school-based team.
- Provide guidance about indicators of risk, and then set thresholds at which students are flagged.

Monitor

- Obtain schedules from the data expert and schools related to data uploads and report development and align those dates into a single schedule.
- Develop a calendar for monitoring school implementation progress. This calendar should include dates for EWIMS team meetings after grading period data have been uploaded into the tool and for checking the measures of effective practice.
- Establish the measures of effective practice for monitoring successful implementation.

STEP 3: ANALYZE EARLY WARNING DATA

Authority

- Determine resource allocation and policy changes based on data trends.
- Ensure schools have the necessary infrastructure to review data (e.g., internet access in meeting rooms).

Coach/Support

Work with school leadership to review longitudinal data and look for trends across grades or flagged students.

Data Expert

• Ensure schools have timely access to reports that show trends across grades and flagged students from semester to semester and year to year.

Monitor

• Examine whole-school or whole-district data trends.

STEP 4: INTERPRET EARLY WARNING DATA

Authority

 Develop policies and sharing agreements for sharing data among schools (e.g., sharing eighth-grade data with high schools).

Advocate

• Ensure district representation at the school EWIMS meetings.

Coach/Support

Provide guidance for discussing student data with parents and families.

Encourage the EWIMS teams to dig deep to identify underlying risk factors.

Data Expert

• Provide access to data beyond that captured in the tool (e.g., student records from prior grades, data from all schools a student has attended, test scores, reading levels, teacher comments).

STEP 5: ASSIGN STUDENTS TO INTERVENTIONS

Authority

- Pinpoint district-wide solutions for common intervention needs of schools.
- Allocate resources based on school needs.
- Select and fund interventions to improve students' high school readiness.

Advocate

• Identify common needs of students in multiple schools.

Coach/Support

- Provide solutions for gaps in available interventions and supports.
- Identify promising student supports and evidence-based interventions, including community resources.
- Share effective student interventions across schools.

Data Expert

Update the school intervention catalog.

STEP 6: MONITOR STUDENTS IN INTERVENTIONS

Authority

Review resource allocations and make adjustments based on school and student needs.

Advocate

 Create a press release or newsletter to share district progress and other good news related to EWIMS with parents and families.

Coach/Support

Help identify unmet student needs and leverage appropriate resources to meet them.

Data Expert

Remove ineffective interventions from the school intervention catalog.

Monitor

- Monitor trends among students, within a given year and over time.
- Examine the efficacy of supports or interventions for different groups of students.

- Determine whether interventions that are not effective in changing outcomes are truly ineffective or if they are being implemented with low fidelity.
- Review the measures of effective practice for monitoring successful implementation established in Step 2.

STEP 7: EVALUATE AND REFINE THE EWIMS PROCESS

Authority

- Reflect on the year's tasks and identify ways to improve.
- Develop policy changes to mitigate challenges reported by schools.

Advocate

- Review and reflect on the year's tasks, and identify way to improve (e.g., increase or decrease the number of school liaisons).
- Identify underrepresented stakeholder groups, and brainstorm ways to increase their involvement.

Coach/Support

- Assist district-wide planning for professional development opportunities based on staff needs.
- Brainstorm ways to improve school-level understanding of the EWIMS process.

Data Expert

- Lead the validation analysis, described in the box "Locally Validating the Early Warning Indicators," to ensure that the early warning data are as accurate and predictive of on- and off-track outcomes as possible for the local context.
- Brainstorm ways to improve tool functionality (e.g., change risk indicator thresholds, develop easier-to-read reports).
- Create reports to reveal annual patterns of students moving off and on the list of flagged students.

Monitor

• Examine the patterns of flagged students to identify whether schools are getting students back on track (while ontrack students become off-track) or if the same students remain off-track throughout the year.

Appendix B. Supporting Documents

TOOL 1: EWIMS ACTION PLANNING TOOL (USED IN STEP 1)

TOOL 2: STUDENT SUPPORT AND INTERVENTION MAPPING (USED IN STEP 5 AND STEP 6)

TOOL 1: EWIMS ACTION PLANNING TOOL

6. Monitor students and interventions

7. Evaluate and refine the EWIMS

Directions: The school or district early warning intervention monitoring system (EWIMS) team can use this tool to begin planning and implementing an early warning system to identify middle school students who may be at risk of dropping out of high school later.

DATE: _____

SCHOOL/DISTRICT:

Step	What do you have in place?	What do you need?	What are your next steps? (Assign individuals to be responsible for these actions)
1. Establish roles and responsibilities			
2. Use an early warning data tool			
3. Review early warning data			
4. Interpret early warning data			
5. Assign and provide interventions			

TOOL 2: STUDENT SUPPORT AND INTERVENTION MAPPING (USED IN STEP 5 AND STEP 6)

Directions: Complete the matrices below to catalog interventions and supports. Include the availability (e.g., the number of students who can be served during a period of time, resource limits) and details (e.g., the focus of the intervention, the evidence base).

Attendance Interventions and Supports

	Intervention or Support	Availability	Details
	e.g., automatic calls	100% of students	Robocalls sent daily at 10 am to all absent students and their families
TIER			
HER			
	e.g., peer wake-up calls	100 students per 2 weeks	Student council members (10) are assigned to 10 students each to text each morning for 2 weeks
TIER			
II			
	e.g., parent conference	As needed	Dean will set up parent attendance conference
TIER			
III			

Behavior Interventions and Supports

	Intervention or Support	Availability	Details
	e.g., school-wide expectations from PBIS	100% of students	Students can earn PBIS points and qualify for weekly raffles and monthly assemblies
TIE	D		
1112	N		
	e.g., lunch groups	40 students per 6-week session	Each school social worker (2) runs 2 groups of 10 students for 6-week sessions
TIE	D		
	N		
Ш			
	e.g., referral to in-school or out-of-school counseling	In-school: 20; out-of-school: unlimited	See school counselor
TIE	R		

Course Performance Interventions and Supports

	Intervention or Support	Availability	Details
	e.g., study hall with math teacher	30 students	Available from 3:30 to 4:30 pm in Room 307
TIEF			
HE			
-			
	e.g., tutoring	5 aides available	1:1 tutoring in math and ELA with aides
TIER			
Ш			
	e.g., individualized online math program	100 licenses	Math teachers can refer students to dean
TIER			
III			

ABOUT THIS GUIDE

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