

High School Early Warning Intervention Monitoring System Implementation Guide

For use with the National High School Center's Early Warning System High School Tool

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For use with the National High School Center's Early Warning System (EWS) High School Tool

Overview

This *High School Early Warning Intervention Monitoring System (EWIMS) Implementation Guide* is a supporting document for schools and districts that are implementing an early warning system or, specifically, the National High School Center's Early Warning System (EWS) High School Tool, a free downloadable tool based in Microsoft Excel.¹ Developed by the National High School Center at the American Institutes for Research (AIR), the guide and tool support the establishment and implementation of an early warning intervention monitoring system (EWIMS) that identifies and monitors high school students who are at risk of dropping out of high school.

The National High School Center's Early Warning System Tool: High School

Using the EWS High School Tool as part of an early warning system in high school is one method that can be used to collect information indicating which students are displaying signs of disengagement and risk that predict an increased likelihood of dropping out of high school.

The EWIMS process emphasizes using the National High School Center's EWS High School Tool (available with the accompanying *EWS High School Tool Technical Manual* at http://www.betterhighschools.org/EWS_tool.asp), but it also may be used as a guide for an alternative research-based early warning system tool.

The aim of the guide and the tool is to support school and district 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. The guide describes an EWIMS implementation process that draws on the research on data-driven decision making.² This EWIMS process has seven steps:

- Step 1. Establish roles and responsibilities.
- Step 2. Use the EWS High School Tool.
- Step 3. Review the EWS data.
- Step 4. Interpret the EWS data.
- Step 5. Assign and provide interventions.
- Step 6. Monitor students and interventions.
- Step 7. Evaluate and refine the EWIMS process.

¹ For access to the National High School Center's EWS High School Tool, go to http://www.betterhighschools.org/EWS_tool.asp.

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

THE IMPORTANCE OF SUPPORTING STUDENTS IN HIGH SCHOOL

The high school dropout problem has been called a national crisis. According to the National Center for Education Statistics (Stillwell, 2010), only 74.9 percent of public high school students graduate with a diploma. 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).

The intent of EWIMS in high school is to identify students early and provide them with support so that they can get back on track and graduate from high school. Informed by research about the academic and behavioral predictors of dropping out (Allensworth & Easton, 2005, 2007), such early warning systems are a promising approach to effective dropout prevention (Dynarski et al., 2008). An early warning system uses readily available data to systematically identify students who are at risk; 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).

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

Table 1. High School EWS Indicators and Thresholds³

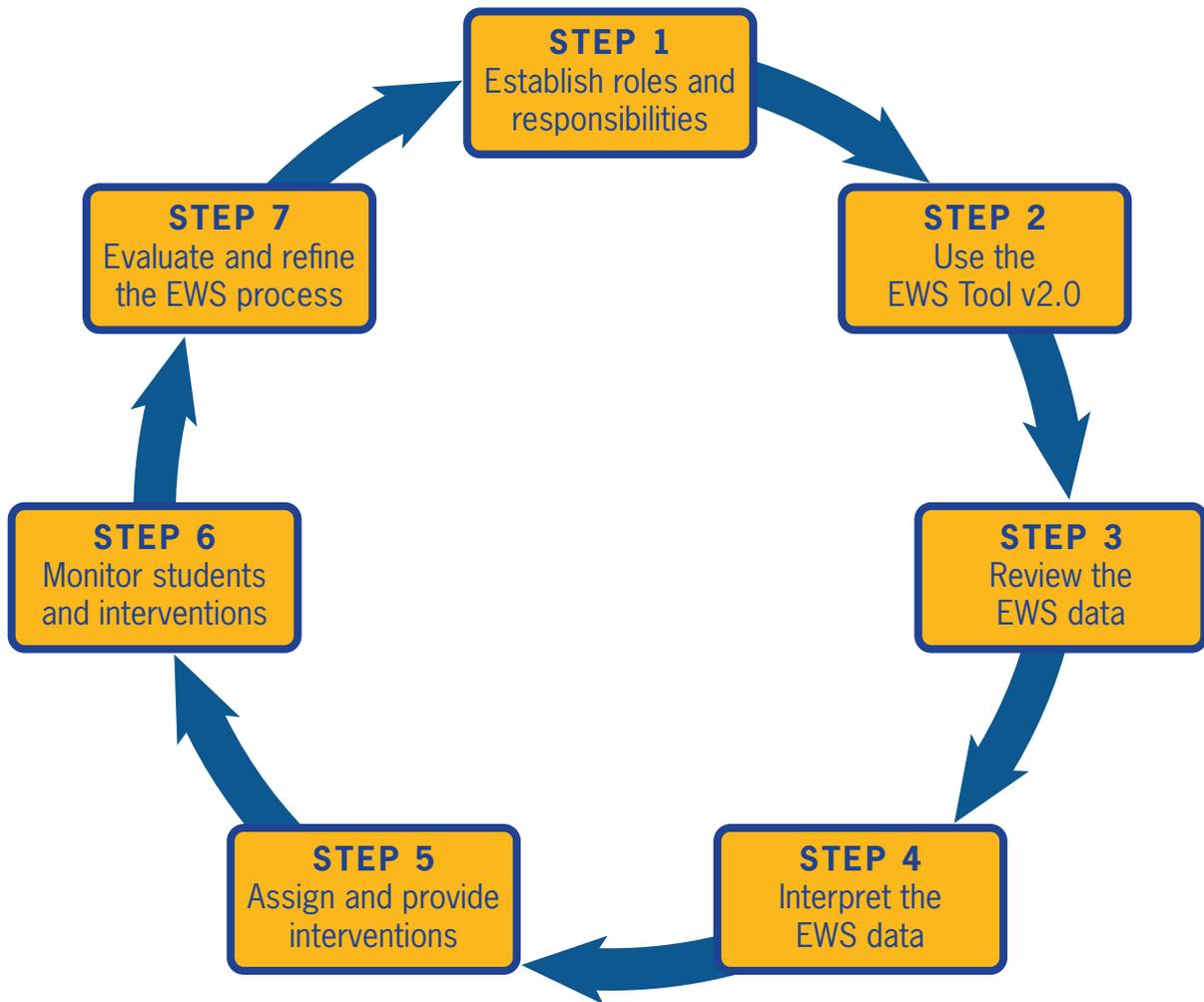
Indicator	Threshold*
Attendance	Student missed 10% or more of instructional time (absences)
Course Performance	Failure in one or more courses Earned 2.0 or lower GPA (on a 4-point scale)
Behavior	Locally validated thresholds (e.g., referrals, in- or out-of-school suspension, behavior grades)

³ Please see the National High School Center Early Warning System High School Tool Technical Manual for a more thorough discussion of thresholds.

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. In addition to identifying students, 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 high school 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 for Students in High School

Schedule	Process (Correlated to Steps in This Guide)
Before the start of the school year	<ul style="list-style-type: none"> Form/designate an EWIMS team (Step 1). Provide professional development to EWIMS team members about the EWS implementation process (Steps 1 and 2). Convene the EWIMS team (Step 1). Set up the EWS High School Tool or other research-based EWS tool (Step 2). Import or enter student information and, if available, incoming risk indicator data into the EWS High School Tool (Step 2). Review and interpret student needs on the basis of data from the previous year (Steps 3 and 4). Identify interventions for incoming students on the basis of the identified needs (Step 5).
At the beginning of the school year	<ul style="list-style-type: none"> 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 incoming risk indicators or previous year data, including any additional information to interpret 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	<ul style="list-style-type: none"> 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	<p>Update the student roster to reflect new enrollees, transfers in and out, and other classifications (Step 2).</p> <p>Import or enter students' absences, course failures, and behavior information (Step 2).</p> <p>Review and interpret student- and school-level reports (Steps 3 and 4).</p> <p>Identify and implement student interventions (Step 5).</p> <p>Monitor students' responses to interventions in which they are participating (Step 6).</p> <p>Revise students' intervention assignments, as needed (Steps 5 and 6).</p>
At the end of the school year	<p>Update the student roster to reflect new enrollees, transfers in and out, and other classifications (Step 2).</p> <p>Import or enter students' absences, course failures, and behavior information (Step 2).</p> <p>Review and interpret student- and school-level data (Steps 3 and 4).</p> <p>Monitor students' responses to existing interventions in which they are participating (Step 6).</p> <p>Revise students' intervention assignments for summer and for the next academic year (Steps 5 and 6).</p> <p>Evaluate the EWIMS process, using student- and school-level reports, and revise as necessary (Step 7).</p>

ORGANIZATION OF THIS GUIDE

The guide contains a separate section for each of the seven EWIMS steps. Because of its emphasis on individual student identification and monitoring, the guide primarily focuses on supporting EWIMS efforts at the *school level* and, specifically, in *high schools*. However, for each step of the process, the critical role of the district in supporting school-level EWIMS work is also discussed.⁴

HOW TO USE THE GUIDE

In each section, the guide briefly describes the step, identifies the anticipated outcomes, provides guiding questions to support implementation, and explains the role of the district. 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 for groups of students. The long-term guiding questions focus on systemic and far-reaching issues and strategies to improve school and district outcomes. Thus, it is anticipated that new users of the tool will focus on the short-term questions and, over time, will be ready to delve into long-term questions.

⁴ For a summary of the district's role in the implementation of EWIMS, see Appendix A.

STEP 1—Establish Roles and Responsibilities



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 or district 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. The team also must have members with a diverse set of skills, including technical skills to use the EWS High School Tool and knowledge of students who are receiving special services. In addition, the team should have the authority to make decisions about students. Further, the EWIMS team must receive professional development about the process and the use of the EWS High School Tool and must be given adequate time to implement the EWIMS process. Whether EWIMS is the responsibility of a new team or incorporated into the responsibilities of an existing school team, it is vital that the EWS 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 or assistant principal
- Representative from feeder middle schools from which students transitioned
- Counselor
- Content area teacher
- Special education teacher

- ELL instructor
- School-level technology specialist
- District technology/student information specialist
- District 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 EWIMS 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 from the tool, 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, agenda 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—a minimum of three times per 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 early warning system.

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 in the EWS High School Tool 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 focus of EWIMS team meetings is to review and discuss the information available in the EWS High School Tool, particularly about individual students who have been identified as off-track for promotion and graduation. The EWIMS team should consider assigning interventions for each identified student and then continue using the data from the EWS tool to closely monitor progress and ensure that the assigned interventions are adequately supporting each student. This process will allow for midcourse corrections if a particular student does not seem to improve after being assigned to an intervention.

DISTRICT ROLE IN STEP 1

District representation and participation in EWIMS teams is essential. Ideally, a district representative should participate on each school-based EWIMS team. 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 role of the district is to identify systemwide concerns and to develop and recommend districtwide changes that address those concerns. District administrators also play a key role in communicating the importance of the EWIMS within and across schools, through professional development and by monitoring school-level efforts. Districts should consider the following roles:

- *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.
- *Provide EWIMS team members with professional development on implementing EWIMS and using EWS data* to enhance the work of the school EWIMS team and decrease the variation in the quality of the EWIMS team's work across schools.
- *Monitor school efforts to implement EWIMS throughout the school year, at multiple grade levels (middle and high school grades), and during 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.

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 challenges, resources, and strategies for supporting students, as well as systemic, organizational, and policy changes that may be needed. The school-level representatives can help the district team develop new districtwide strategies for at-risk students (e.g., new behavioral management approaches or training for teachers and students, an increase in professional development in adolescent literacy).

GUIDING QUESTIONS FOR STEP 1

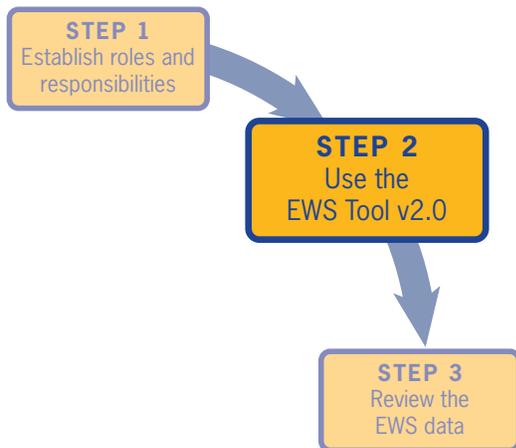
Short-Term Questions

1. What school and district 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 EWS High School Tool?
4. Does the EWIMS team have sufficient authority to make decisions about students on the basis of EWS 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)?

Long-Term Questions

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 the EWS High School Tool



WHAT YOU NEED FOR STEP 2

- Access to student data and the EWS High School Tool for the entire EWIMS team
- Timeline for data import and entry
- Trained data import and entry designee
- EWS High School Tool and *Technical Manual*

DESCRIPTION OF STEP 2

This section describes the management of EWS data in a high school EWS tool. A robust early warning system 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 systems or may access the EWS High School Tool (available at http://www.betterhighschools.org/EWS_tool.asp).

The following information is tailored to the EWS High School Tool; the guidance is applicable, however, to the use of other EWS 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 the EWS High School Tool and EWS reports by all team members
2. Designated district or school technology specialist or specialists 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

Tool Setup

The EWS High School Tool allows users to identify and monitor at-risk students throughout the school year, using research-based indicators to flag at-risk students. The EWS High School Tool has 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.⁵
- Identify at-risk students on the basis of locally defined behavior indicators (e.g., suspensions, behavior grades, state assessment results).
- Import and export student-level data.
- Group students with user-defined groupings (e.g., teams, pods, academies).
- Produce reports, including student-level and school-level data summaries.
- Assign and monitor student interventions over time.
- Modify default risk-indicator thresholds after they are locally validated. (See Step 7 for more information on validating locally defined risk indicator thresholds.)

The EWS High School Tool requires users to complete two key tasks. First, they must ensure that the data are up to date. Second, they should back up information produced by the tool (e.g., lists of flagged students, summary reports) and regularly provide that data to the EWIMS team so that the team can make informed decisions about students. To accomplish these tasks, each EWIMS team needs to have (1) access to the EWS High School Tool or the generated reports; (2) one or more trained staff members who can import or enter information into the EWS High School Tool and who are knowledgeable about its screens and features; (3) a timeline for ensuring that data are imported or entered 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 High School Tool uses 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, and 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). Table 3 provides a summary of the risk indicators in the EWS High School Tool and when these indicators become available.

⁵ Please see Step 7 for a more thorough discussion of locally validated indicators.

Table 3. Summary of Risk Indicators, Timeframes, and Risk-Indicator Thresholds in the National High School Center’s EWS High School Tool

Indicator*	Timing of Available Outputs	High School Risk-Indicator Threshold
Incoming indicator [†]	Before school begins	Locally validated [‡] indicators of risk or indicators of risk from a prior year’s EWS High School or Middle Grades Tool
Attendance	After 20 or 30 days; at the end of each grading period (e.g., semester); at the end of the year (annual)	Missed 10 percent or more of instructional time
Course failures	At the end of each grading period (e.g., semester); at the end of the year (annual)	Failed one or more semester courses (any subject)
Behavior [†]	Each grading period (e.g., semester); end of year (annual)	Locally validated (e.g., referrals, in- or out-of-school suspension, behavior grades)
CCSR end-of-year (on-track) indicator	End of year (annual)	Failed two or more semester core courses, or accumulated fewer credits than the number required for promotion to the next grade
Exit indicator [§]	End of year	Locally validated or any risk flag in the final grading period of the full academic school year

* Please see the *National High School Center Early Warning System High School Tool Technical Manual* for a more thorough discussion of indicators.

[†] These indicators are not required. If the user has not locally validated the threshold for the risk indicator, the EWS High School Tool will operate without this information.

[‡] Please see Step 7 for a more thorough discussion of locally validated indicators.

[§] Please see the *National High School Center Early Warning System High School Tool Technical Manual* for a more thorough discussion of exit indicators.

The EWS High School Tool is designed to allow users to identify at-risk students on the basis of an incoming risk indicator, as well as risk indicators that can be monitored throughout the year. An incoming risk indicator is locally defined and can be validated through review of multiple years of data. The tool primarily is designed, however, to monitor students during the time they are in high school and will still operate if an incoming risk indicator is not available. The high school indicators use information about attendance (absence rates) and course performance to flag students who are at risk: after the first 20 or 30 days of school, after each grading period, and at the end of the year.

To improve the ease with which data are imported into the Data Inputs section of the EWS High School Tool, the National High School Center created source file collators to consolidate student data into a source file that can be easily imported into the EWS High School Tool. These collators, available for high school student information and high school student performance data, are particularly helpful for schools or districts that maintain various pieces of student data in more than one student information system or that are unable to generate a single report with all the student information fields in the order required for the EWS High School Tool source file specifications. Each free, downloadable, Microsoft Excel-based file includes a source file collator and instructions for use and is available at http://www.betterhighschools.org/EWS_tool.asp.

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 on the basis of the previously described risk indicators (see Table 3). 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 of 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.

DISTRICT ROLE IN STEP 2

The district can do the following to support the use of the EWS High School Tool:

- *Provide professional development* in using the EWS High School Tool (either directly or through a third party) to team members.
- *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 High School Tool data variables* to streamline the efforts of the school EWIMS team (e.g., developing a script that enables the data to be exported easily from the student information system to the EWS High School Tool). This streamlining will allow team members to focus on supporting students rather than on managing data or double-entering information.
- *Provide guidance about indicators of risk and then set thresholds* at which students are flagged.
- *Provide information to EWIMS teams about the incoming indicators of risk* (especially if students are coming from other schools within the district).

GUIDING QUESTIONS FOR STEP 2

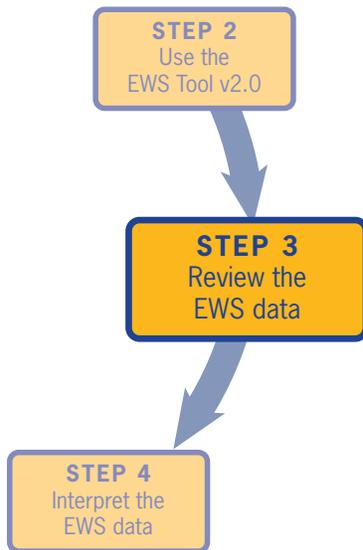
Short-Term Questions

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

Long-Term Questions

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 of the tool 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 the EWS Data



WHAT YOU NEED FOR STEP 3

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

DESCRIPTION OF STEP 3

This section describes how EWS 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, although the focus here is on information and reports that are in the EWS High School Tool.

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 that allow 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 High School Tool yields 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 EWS data, team members begin

by examining which individual students are (and are not) flagged for attendance and course performance indicators of risk.⁶ If the EWIMS team is using the EWS High School Tool, flagged student information may be found by running various school-level and student-level reports from the Reports Control menu within the tool. On the basis of 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 (e.g., attendance, course performance, or both). The EWIMS team also may want to sort students by demographic characteristics in order to begin looking at group patterns to see whether there are any larger group needs that should be addressed.

Reports available in the EWS High School Tool (through the Reports Control panel) provide multiple ways of examining student-level and school-level information. By using these reports, the team can examine individual, group, and whole-school patterns and consider the allocation of student support and dropout-prevention resources. These reports 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.⁷

Figures 2 and 3 are examples of student-level and school-level reports from the EWS High School Tool.

Figure 2 shows a sample report of students who are flagged by risk indicator after the first grading period of school. On the basis of this report, the EWIMS team might discuss the individual students who are flagged for attendance, course performance, or both.

Figure 2. Student-Level Report: Flagged Student Report (First Grading Period) From the EWS High School Tool

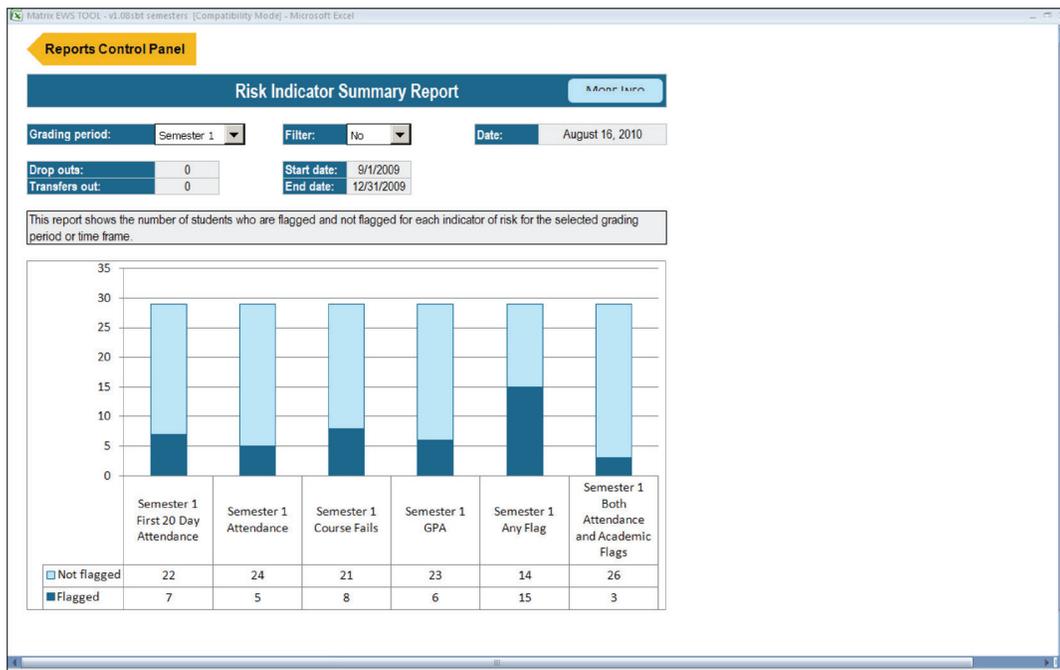
Student ID	First Name	Last Name	Pre-HS indicator	Semester 1 First 20 Day Attendance	Semester 1 Attendance	Semester 1 Course Fails	Semester 1 GPA
100	Chad	Barna	Yes	Yes	No	No	No
101	Joseph	Nelson	No	No	Yes	No	No
102	Lauren	Kelly	No	No	No	Yes	Yes
103	Greta	Adams	No	Yes	Yes	Yes	Yes
104	Mimi	Cao	Yes	Yes	No	No	Yes
105	Jennifer	Dunn	Yes	Yes	No	No	No
106	Kimberly	Eaton	Yes	No	Yes	No	No
107	Sharon	Fanning	Yes	No	No	Yes	Yes
108	Ginger	Gattis	Yes	Yes	No	No	No
115	Nicole	Nash	No	No	No	Yes	No
116	Heidi	Olson	Yes	Yes	Yes	No	No
119	Jessica	Stevens	No	No	No	Yes	Yes
123	Curtis	Wells	Yes	Yes	Yes	Yes	Yes
126	Eva	Zimmer	Yes	No	No	Yes	No
128	Sarup	Scala	No	No	No	Yes	No

⁶ Note that if the team is reviewing student-level EWS data after the first 20 to 30 days of school, prior to when course performance data are entered, only attendance information will be available for review.

⁷ Instructions for generating reports in the EWS High School Tool are provided in the EWS High School Tool Technical Manual and within the EWS High School Tool, both of which are available at http://www.betterhighschools.org/EWS_tool.asp.

Figure 3 shows a school-level report that provides a summary of information about all students after the first quarter of school. The summary allows the team to develop an overall sense of the numbers of students displaying each type of risk indicator. The summative school report 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 report 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 look at whether there are patterns related to classes, teachers, content areas, or other aspects that may be contributing to the flagging of specific students.

Figure 3. School-Level Report: Flagged Student Report (First Quarter) From the EWS High School Tool



It is important to acknowledge that in some schools, a long list of students may be flagged for either attendance or course performance. In these schools, the EWIMS team must decide how best to allocate time to discuss each student or whether to adjust the thresholds of each risk indicator.

DISTRICT ROLE IN STEP 3

Information from the EWS High School Tool has immediate implications for staff and students in the school; at the district level, however, there is an opportunity to examine these data for a whole school or the whole district. For example, in the first grading period, are students who are flagged as at risk coming from a particular middle-grades school or set of middle-grades schools? The information from the EWS High School Tool can illuminate trends in students' indicators of risk for further exploration; in addition, this information may influence how resources are allocated or how policies and strategies are implemented in order to focus on issues that are particular to students within the district. The district also can help the EWIMS team review longitudinal data to clarify whether there are trends across grades or among groups of flagged students.

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 or grades?
 - 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?⁸
 - 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?

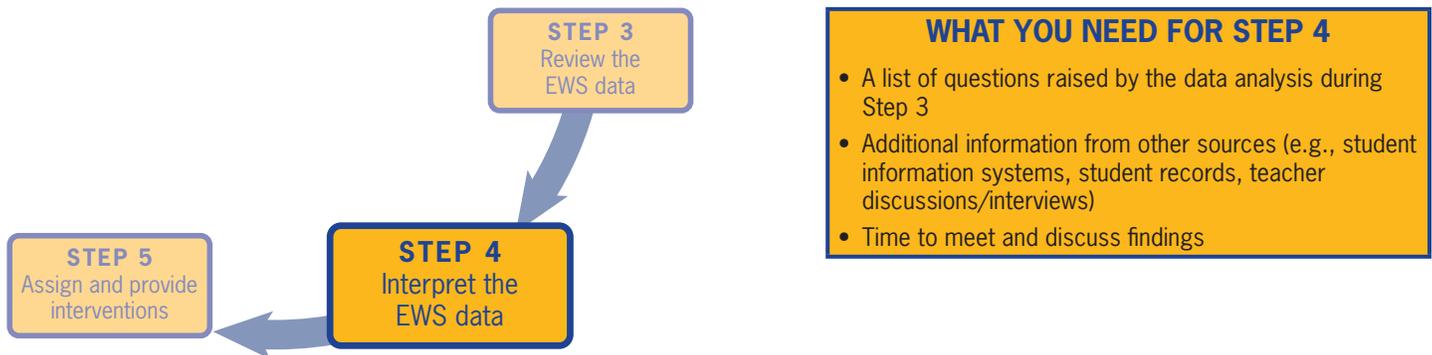
Long-Term Questions

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?⁹

⁸ The 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.

⁹ If 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 the EWS Data



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 related to student disengagement and academic failure. Step 4 also builds on the review of EWS 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 High School 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 High School Tool allows users easily to 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 of students' risk indicators.

DISTRICT ROLE IN STEP 4

Interpreting the EWS data requires access to student information beyond that data housed in the EWS High School Tool. District administrators can support these efforts by developing policies that give EWIMS team members or their designees access to information so that they are able to make informed decisions about student needs. This access may require availability of students' records prior to the current grade, including middle-grades school, attendance, behavioral information, and other data that can help EWIMS teams better understand their flagged students.

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. What are the patterns and underlying reasons for absence among students who are flagged for attendance?
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. In which classes or types of classes are flagged students enrolled (e.g., remedial reading or remedial mathematics courses)? Are there any patterns or underlying reasons for students who are flagged for academics?
8. What other information do you need to understand the patterns or common underlying reasons (e.g., special education status, ELL status, prior achievement) of students with course failures and those who are flagged for the CCSR end-of-year indicator?

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 patterns and underlying reasons for groups of students who are being flagged for behavior?
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 overage 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)?

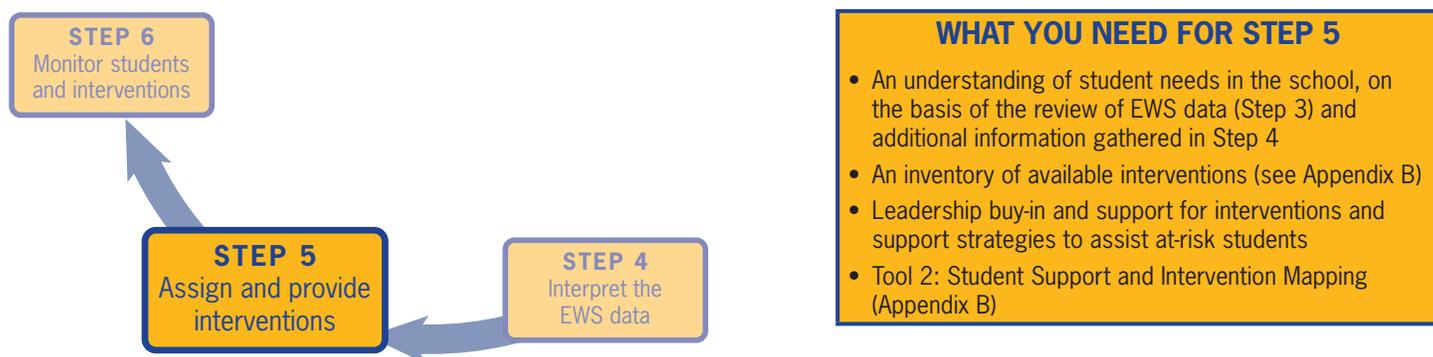
At the School Level

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)?

Long-Term Questions

1. Are there additional stakeholders (e.g., community members, law enforcement representatives, court representatives, human services representatives, business representatives, local policymakers, 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



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 systemically 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 flagged students and (2) the available academic and behavioral support and intervention programs in the school, district, and community.

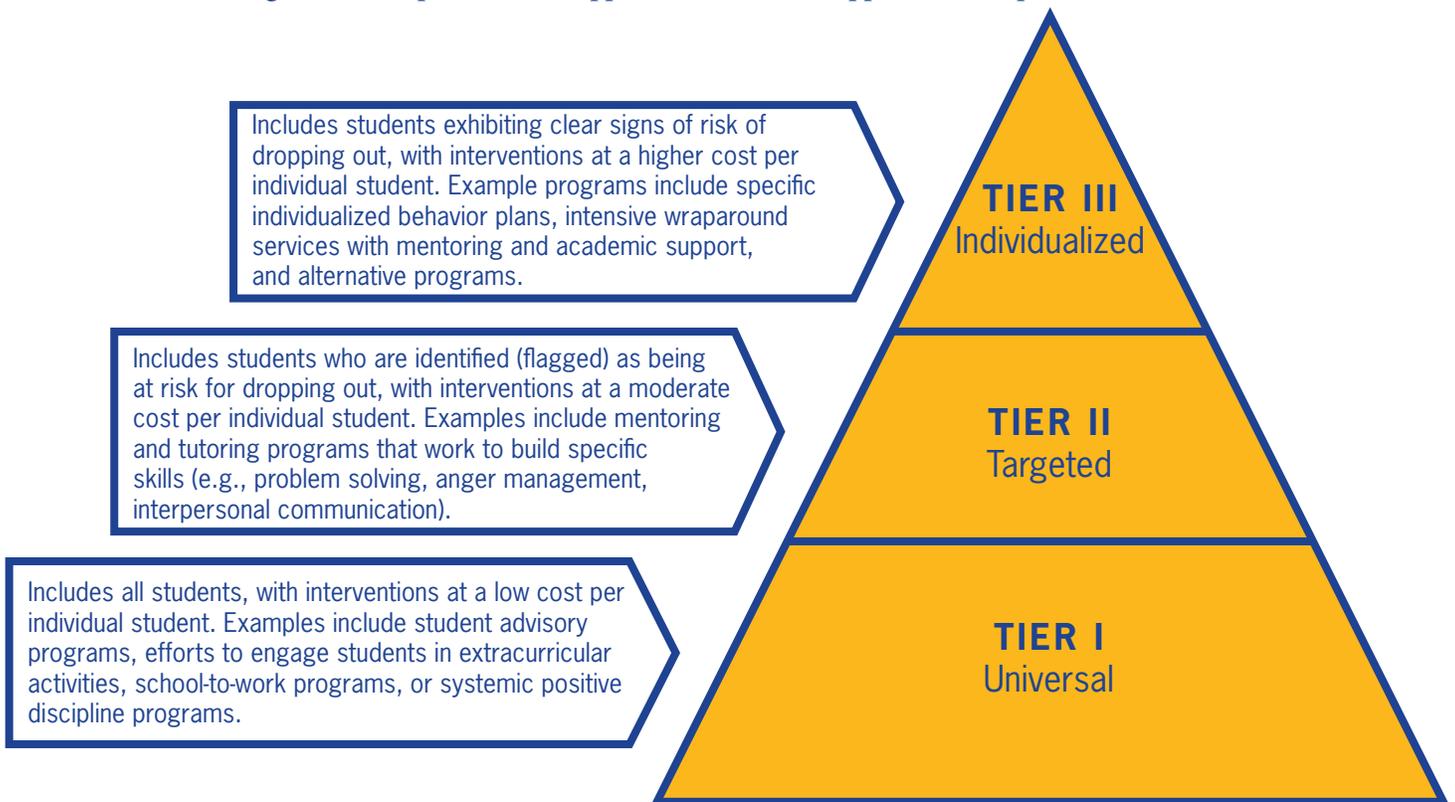
ANTICIPATED OUTCOMES FOR STEP 5

1. Compiled inventory of supports and interventions available to students in the school
2. Assignment of flagged students to supports and interventions on the basis of student needs identified in Steps 3 and 4 (documented for each individual student in the EWS High School Tool)
3. Identification of gaps in the available supports and interventions
4. Recommendations for schoolwide 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 on the basis of the intensity of the interventions. Generally, the models have a two- or three-tiered intervention system, in which Tier I interventions are applied to all students in the school, Tier II interventions are moderately intensive and applied to small groups of students with common needs (sometimes individual students), and Tier III interventions are the most intensive and are provided to individual students with the highest level of need. Figure 4 is a depiction of a three-tiered model; such a model can be used for academic and behavioral interventions.

Figure 4. Example of Tiered Approach to Student Support and Dropout Prevention



Note: Adapted from the New Hampshire Department of Education's APEX II (Achievement in Dropout Prevention and Excellence) model and the Minnesota Department of Education's three-tiered model (see National High School Center, 2008).

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
- Establishing a protocol that enables students to move through the tiers seamlessly and efficiently, as needs are identified and change

The EWS High School Tool is designed to allow the EWIMS team to monitor and adjust students' assignments to supports and interventions within the tool, as well as monitor their movements through tiers. In general, the EWS High School 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, on the basis of 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 available to students in the school, district, and community 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, on the basis of the team's work in Steps 3 and 4, to match students with appropriate supports and interventions. The EWS High School Tool facilitates this process. The tool provides space to house information about the available interventions (from the inventory). Within the tool, users can document the specific programs to which individual students have been assigned (by date). After students are assigned to one or more intervention, 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, the team members are ultimately 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.

DISTRICT ROLE IN STEP 5

The perspective of the district allows longer term solutions and strategies beyond the school level. The district can do the following to support EWIMS teams in identifying appropriate interventions:

- *Identify common needs of students* in multiple schools.
- *Pinpoint districtwide solutions for common needs* of schools.
- *Provide solutions* for gaps in available interventions and supports.
- *Allocate resources* to identified needs of individual schools.
- *Support interventions to improve student readiness* for high school (e.g., elementary and middle-grade interventions, summer bridge programs).

Districts also have a role to play in facilitating the use of promising support and intervention programs. Through work with and as a part of EWIMS teams, district personnel can play key roles in identifying promising student supports and interventions, as well as in sharing effective support and intervention practices among schools.

GUIDING QUESTIONS FOR STEP 5

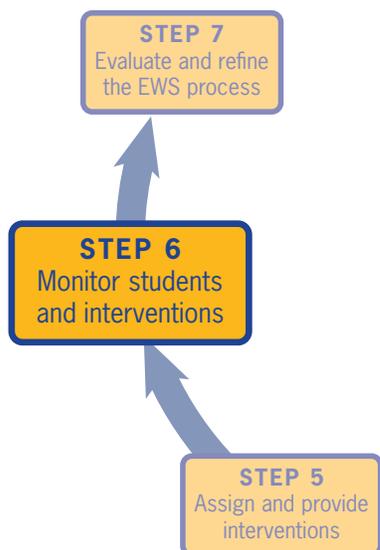
Short-Term Questions

1. What interventions are currently implemented in the school and district? How successful do they seem to be for 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 on the basis of 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?

Long-Term Questions

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 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 EWS data
3. Knowledge about the general effectiveness of interventions, based on data from monitoring students participating in each program
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 EWS 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 were flagged again and for which indicators. For example, students flagged for attendance problems who were assigned to a program with attendance monitoring should be examined 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 might not be effective; the frequency of the intervention might not be enough; the students might 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 High School Tool allows 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.

DISTRICT ROLE IN STEP 6

The monitoring of individual students occurs at the school level, but the district can play a key role in enhancing the availability of appropriate student interventions by leveraging resources to secure progress-monitoring measures to use throughout the district and by monitoring trends among students within a given year and over time. For example, a district can monitor specific supports and interventions in which students participate and identify the scenarios in which the supports seem to work to get students back on track. The district also may examine whether a specific support or intervention works well for certain students. In cases where an intervention or support does not seem to be working, the district can examine whether it is a fidelity-of-implementation issue or whether it needs to be dropped from the array of student supports and interventions.

By collecting information on supports and interventions implemented in the schools, the district is in a unique position to help schools and, specifically, EWIMS teams to provide information on how available supports and interventions meet particular student needs and on their effectiveness. Districts also have the ability to examine these intervention and student data over time and observe the related outcomes (e.g., getting at-risk students back on track or not). Further, districts can allocate resources on the basis of student and school needs.

GUIDING QUESTIONS FOR STEP 6

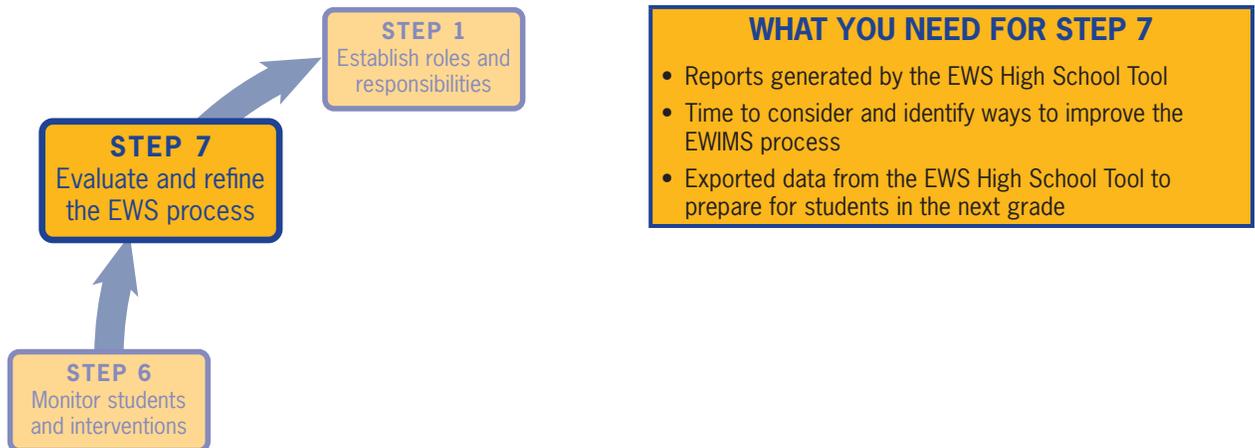
Short-Term Questions

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 a 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 or students?
 - Does more information about the needs of the student or students 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?

Long-Term Questions

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 students with particular types of risk indicators or other underlying causes?
 - What interventions seem to work for which students?
 - What 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



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 High School 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 EWS 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 EWS Indicators

The EWIMS team may want to explore locally validating the EWS risk indicators to determine the extent to which they are accurately predicting students who are off track for graduation from high school. To conduct this analysis, a member of the EWIMS team or a designee with experience in data analysis would need access to at least three years of data to explore grade retention outcome and to four years of data to explore the high school graduation outcome 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 2011 and 2012). The analysis would enable team members to examine the outcomes for students who did and did not display the EWS risk indicators earlier in high school.

Ideally, the indicators in the system should predict a high percentage of eventual graduates and dropouts. That is, if the EWS 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,” or predict the outcome accurately. If, however, most students who would have been flagged earlier in high school ended up graduating, the system may be overidentifying students at risk. If many students who eventually dropped out would not have been flagged using these indicators, the system may be underidentifying students at risk.

Using multiple years of data to examine these percentages is critical for testing the predictive power of the EWS indicators and thresholds in the local context. If the examination of the EWS indicators shows that the system is not very predictive in the local context, modification of the indicators or the thresholds and benchmarks might be warranted. For example, in some districts, flagging students who miss 20 percent of instructional time may be a more accurate indicator of risk than using the EWS High School Tool’s default 10 percent.¹⁰

DISTRICT ROLE IN STEP 7

District administrators may be more able to effectively resolve particular issues or challenges than staff at the school level. For example, a district may decide to take responsibility for ensuring that the school-level EWS High School Tool is populated with student data in a timely manner. A district team member also may be able to assist districtwide in planning for professional development opportunities to increase the effectiveness of implementation efforts of staff and teachers who need more training on the EWIMS process.

An additional role of the district is to lead or facilitate the validation analysis, described in the box “Locally Validating the EWS Indicators,” to ensure that the EWS data are as accurate and predictive as possible for the local context. Because the district houses student-level information across schools over multiple years, it is well positioned to put together a database that can clearly answer questions about the degree to which each indicator is predictive of on-track or off-track outcomes (promotion to the next grade and high school graduation).

¹⁰ See Heppen and Therriault (2008) and Jerald (2006) for additional resources and information on validating EWS indicators. If the indicators are not considered predictive enough, further technical assistance should be sought to use local data to refine the indicators and the thresholds for risk identification.

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? For instance:
 - 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 preparation period)?
4. What were the biggest challenges the team faced (e.g., importing data into the tool, finding the time to meet as a team)? 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 the EWS High School 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 the EWS Data

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

STEP 4—Interpret the EWS Data

9. What additional data were important for identifying underlying causes?
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 High School Tool?
12. Did you learn any new strategies that supported the interpretation of the EWS 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 EWS 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?

Long-Term Questions

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 EWS 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?¹¹
 - 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 EWS 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)?

¹¹ These retrospective percentages determine the hit rate of the EWS 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 National High School Center resources.

- *Early Warning System (EWS) High School Tool*
http://www.betterhighschools.org/EWS_tool.asp
Developed by the National High School Center at AIR, the EWS High School Tool is a free, downloadable Microsoft Excel-based tool designed to allow users to identify and monitor students who show early warning signs that they are at risk for dropping out of high school. This tool assists users in monitoring the progress of students during the course of the school year (as early as the first 20 or 30 days of school and after every grading period). It relies on readily available student-level data (attendance, course failures, grade point average, and credit accumulation) that may be imported or entered into the Excel-based tool. As these data are entered, the tool automatically calculates indicators that are predictive of whether students are on track to graduate from high school.
- *Early Warning System High School Tool Source File Collators*
http://www.betterhighschools.org/EWS_tool.asp
Developed by the National High School Center at AIR, the source file collators are an ideal way to consolidate student data into a source file that can be easily imported into the EWS High School Tool. A High School Student Information Collator and a High School Student Performance Data Collator are available. These collators are particularly helpful for schools or districts that maintain various pieces of student data in different student information systems or that are unable to generate a single report with all the student information in the specific order required by the source files. Each free, downloadable Microsoft Excel-based file includes instructions for use.
- *Developing Early Warning Systems to Identify Potential High School Dropouts (Issue Brief)*
http://www.betterhighschools.org/pubs/ews_guide.asp
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.betterhighschools.com/docs/NHSC_ApproachesToDropoutPrevention.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 higher performing high schools, and presents effective programs that are currently being implemented to address the dropout problem.

- *Early Warning System (EWS) Middle Grades Tool*

http://www.betterhighschools.org/EWS_middle.asp

Developed by the National High School Center at AIR, the EWS Middle Grades Tool is a free, downloadable Microsoft Excel-based tool designed to allow users to identify and monitor students who show early warning signs of being at risk for not being at grade level, failing promotion to the next level, or future dropping out of high school. This tool assists users in monitoring the progress of students during the course of the school year (as early as the first 20 or 30 days of school and after every grading period). It relies on readily available student-level data (attendance and course performance) that may be imported or entered into the Excel-based tool. As these data are entered, the tool automatically calculates indicators that are predictive of whether students will graduate from high school or drop out.

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Appendix A. The District's Role in the Implementation of EWIMS

Although this publication is explicitly designed to guide EWIMS implementation at the school level, experience working with states, districts, and schools suggests that the role of the district in EWIMS implementation is critical. The following summary indicates the district's role in EWIMS implementation, as organized by EWIMS steps.

STEP 1: ESTABLISH ROLES AND RESPONSIBILITIES

District representation and participation in EWIMS teams is essential. Ideally, a district representative should participate on each school-based EWIMS team. The number and composition of EWIMS teams in a district, however, 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 role of the district is to identify systemwide concerns and develop and recommend districtwide changes that address these concerns. District administrators also play a key role in communicating the importance of EWIMS within and across schools, through professional development and by monitoring school-level efforts. Districts should consider the following roles:

- *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.
- *Provide to EWIMS team members professional development on implementing EWIMS and using EWS data* to enhance the work of the school EWIMS team and decrease the variation in the quality of the EWIMS team's work across schools.
- *Monitor school efforts to implement EWIMS throughout the school year, at multiple grade levels (middle and high school grades), and during 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.

In large districts, it may be practical to have a district EWIMS team in addition to the school-level teams. A district team 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 challenges, resources, and strategies for supporting students—as well as systemic, organizational, and policy changes that may be needed. The school-level representatives can help the district team develop new districtwide strategies for at-risk students (e.g., new behavioral management approaches or training for teachers and students, further professional development in adolescent literacy).

STEP 2: USE THE EWS MIDDLE GRADES TOOL

The district can do the following to support the use of the EWS Middle Grades Tool:

- Provide professional development in using the EWS Middle Grades Tool (either directly or through a third party) to team members.
- 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 Middle Grades Tool data variables to streamline the efforts of the school EWIMS team (e.g., developing a script that enables the data to be exported easily from the student information system to the EWS Middle Grades Tool). This step will allow team members to focus on supporting students rather than on managing data or double-entering information.

- Provide guidance about indicators of risk and the set thresholds at which students are flagged.
- Provide information to EWIMS teams about the incoming indicators of risk (especially if students are coming from other schools within the district).

STEP 3: ANALYZE THE EWS DATA

Information from the EWS Middle Grades Tool has immediate implications for staff and students in the school; at the district level, however, there is an opportunity to examine these data for a whole school or the whole district. For example, are students who are flagged as being at risk in the first grading period coming from a particular elementary school or set of elementary schools? The information from the EWS Middle Grades Tool can illuminate trends in students' indicators of risk for further exploration. This information also may influence how resources are allocated or policies and strategies are implemented to focus on issues that are particular to students within the district. The district also can help the EWIMS team review longitudinal data to clarify whether there are trends across grades or among groups of students who are flagged in the middle grades.

STEP 4: INTERPRET THE EWS DATA

Interpreting the EWS data requires access to student information beyond those data housed in the EWS Middle Grades Tool. District administrators can support these efforts by developing policies that give EWIMS team members or their designees access to information so that they are able to make informed decisions about student needs. This access may require the availability of students' records prior to the current grade, including elementary school grades, attendance, behavioral information, and other data that can help EWIMS teams better understand their flagged students.

STEP 5: ASSIGN STUDENTS TO INTERVENTIONS

The perspective of the district allows longer term solutions and strategies beyond the school level. The district can do the following to support EWIMS teams in identifying appropriate interventions:

- Identify common needs of students in multiple schools.
- Pinpoint districtwide solutions for common needs of schools.
- Provide solutions for gaps in available interventions and supports.
- Allocate resources to identified needs of specific schools.
- Support interventions to improve student readiness for the middle grades and high school (e.g., elementary and middle-grade interventions).

Districts also have a role to play in facilitating the use of promising support and intervention programs. Through work with and as a part of EWIMS teams, district personnel can play key roles in identifying promising student supports and interventions and in sharing effective support and intervention practices across schools.

STEP 6: MONITOR STUDENTS IN INTERVENTIONS

The monitoring of individual students occurs at the school level, but the district can play a key role in enhancing the availability of appropriate student interventions by leveraging resources to secure progress-monitoring measures to use throughout the district and by monitoring trends among students within a given year and over time. For example, a district can monitor specific supports and interventions in which students participate and identify the scenarios in which the supports and interventions seem to work to get students back on track. The district also may examine whether a specific support or intervention works well for certain students (e.g., students who are failing English language arts or ELL students at risk). In cases where an intervention or support does not seem to be working, the district can examine whether it is a fidelity-of-implementation issue or whether it needs to be dropped from the array of student supports and interventions. By collecting information on supports and interventions implemented in the schools, the district is in a unique position to help schools and, specifically, EWIMS teams provide information on how available supports and interventions meet particular student needs, as well as on the effectiveness of interventions. Districts also have the ability to examine these intervention and student data over time and observe the related outcomes (e.g., getting at-risk students back on track or not). Further, districts can allocate resources on the basis of student and school needs.

STEP 7: EVALUATE AND REFINE THE EWIMS PROCESS

District administrators may be more able to effectively resolve particular issues or challenges than staff at the school level. For example, a district may decide to take responsibility for ensuring that the school-level EWS Middle Grades Tool is populated with student data in a timely manner. A district team member also may be able to assist districtwide planning for professional development opportunities to increase the effectiveness of implementation efforts for staff and teachers who need more training on the EWIMS process. An additional role of the district is to lead or facilitate the validation analysis (described in Step 7, page 29) to ensure that the EWS data are as accurate and predictive as possible for the local context. Because the district houses student-level information across schools over multiple years, it is well positioned to put together a database that can clearly answer questions about the degree to which each indicator is predictive of the on-track or off-track outcome (promotion to the next grade or high school graduation).

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

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.

SCHOOL/DISTRICT: _____ DATE: _____

Step	What do you have in place?	What do you need?	What are your next steps? <i>(assign individuals to be responsible for these actions)</i>
1. Establish Roles and Responsibilities			
2. Use the EWS Early Warning System Tool			
3. Review the EWS Data			
4. Interpret the EWS Data			
5. Assign and Provide Interventions			
6. Monitor Students and Interventions			
7. Evaluate and Refine the EWS Process			

TOOL 2: STUDENT SUPPORT AND INTERVENTION MAPPING

Directions: In Column 1, list the existing dropout-prevention interventions and strategies in your school or district. In Columns 2 and 3, use the codes to indicate which description best captures the intervention. In Columns 4–17, mark an X in the column(s) that the intervention addresses.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
School/District: _____ Date: _____	Tier (I = Universal, II = Targeted, III = Individualized)	A = Attendance, B = Behavioral, AC = Academic	Focus on achievement in core courses.	Implement tiered approach.	Focus on schoolwide behavior.	Develop content recovery courses.	Use tutoring as an academic support.	Use attendance and behavior monitors.	Use advisories and team teaching.	Provide counseling and mentoring.	Personalize learning (e.g., small learning communities).	Create partnerships between high schools and feeder middle schools.	Implement ninth-grade transition program.	Support students with disabilities outside of school.	Create career and college awareness program.	Engage families.
Ninth-Grade Transition Initiative	I	A/B/AC	X										X			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
School/District: _____ Date: _____	Tier (I = Universal, II = Targeted, III = Individualized)	A = Attendance, B = Behavioral, AC = Academic	Focus on achievement in core courses.	Implement tiered approach.	Focus on schoolwide behavior.	Develop content recovery courses.	Use tutoring as an academic support.	Use attendance and behavior monitors.	Use advisories and team teaching.	Provide counseling and mentoring.	Personalize learning (e.g., small learning communities).	Create partnerships between high schools and feeder middle schools.	Implement ninth-grade transition program.	Support students with disabilities outside of school.	Create career and college awareness program.	Engage families.	

ABOUT THIS GUIDE AND THE NATIONAL HIGH SCHOOL CENTER

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