

# Ohio Early Warning Intervention and Monitoring System

## *Implementation Guide*

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# Early Warning Intervention and Monitoring System Implementation Guide

Optimized for use with Ohio schools

## Overview

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

### The Ohio Early Warning Systems

Graphic under development

One aim of this guide is to support schools and districts' efforts to systematically identify students who show signs of struggling in school, an early indicator of risk. Another is to match these students with appropriate interventions and monitor their progress during those interventions. This guide describes how the implementation process draws on data-driven decision-making research.<sup>2</sup>

There are seven steps to implementing the Early Warning Intervention and Monitoring System:

- Step 1: Establish roles and responsibilities.
- Step 2: Use an early warning data tool.

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<sup>1</sup> Faria et al. (2017).

<sup>2</sup> See, for example, Bernhardt (2004) and Love (2000).

- Step 3: Review early warning data.
- Step 4: Interpret early warning data.
- Step 5: Assign and provide interventions.
- Step 6: Monitor students and interventions.
- Step 7: Evaluate and refine the Early Warning Intervention and Monitoring System process.

### **The Importance of Supporting Students in Middle and High School**

The high school dropout problem has been called a national crisis. According to the National Center for Education Statistics, only 82 percent of public high school students in 2013-2014 graduated with diplomas on time (Kena et al., 2016). The problem is especially severe among students of color, English learners, disadvantaged students and students with disabilities (Greene & Winters, 2005; Rooney et al., 2006; Stillwell, 2010). In 2017, Ohio ranked 54th among 56 states and territories in the measure of students with disabilities held to the same graduation requirements as peers. The majority of students with disabilities are excused from graduation requirements by their individualized education program (IEP) teams. Only 21.2 percent of students with disabilities were held to the same graduation requirements as their peers without disabilities. Additionally, at least 20 percent of Ohio's students with disabilities have dropped out of high school each year for three consecutive years. This represents almost 4,500 Ohio students.

Signs of dropout can be observed long before graduation. Researchers have identified key, middle-grades indicators that can reliably and accurately identify youth who are most at risk for academic failure (Allensworth & Easton, 2007). For example, Balfanz (2009) found that Philadelphia sixth-graders who failed mathematics or English language arts, who attended school less than 80 percent of the time or received unsatisfactory behavior grades in a core course had only a 10-20 percent chance of graduating on time.

#### **Why does dropout prevention support matter for middle grade students?**

Dropping out of school is a process that can start long before a student enters high school. Research suggests students exhibit clear signs during the middle grades that enable educators to identify which students are at greatest risk of dropping out (Balfanz, 2009).

Fewer than one out of four students with at least one of these risk indicators graduated from high school within five years.

An early warning system addresses this crisis by using readily available data to systematically identify students who are at risk. Schools and districts then can match these students with appropriate interventions to help set them on track for graduation (Heppen & Therriault, 2008; Jerald, 2006; Kennelly & Monrad, 2007; Neild, Balfanz, & Herzog, 2007; Pinkus, 2008). The Early Warning Intervention and Monitoring System is a comprehensive process based on research about the academic and behavioral predictors of dropping out, and it allows schools to optimize their use of an early warning tool (Allensworth & Easton, 2005, 2007; Dynarski et al., 2008).

A rigorous impact study published in 2017 found the Early Warning Intervention and Monitoring System is a promising, evidence-based strategy for getting students back on track for graduation. In the study, 73 schools randomly were assigned to use or not use the Early Warning Intervention and Monitoring System during the 2014-2015 school year. After one year of implementation, the system reduced the percentages of students with chronic absences and course failures in the schools that were using it. The system did not have a significant effect on the percentages of students with low grade point averages, low credit accumulation, or one or more suspensions (Faria et al., 2017).

Based on the studies in Chicago (Allensworth and Easton, 2007) and Philadelphia (Balfanz, 2009), a set of attendance and academic indicators and thresholds have become generally accepted—at least as a good starting point—for establishing a basic early warning system. Table 1 shows an overview of these indicators.

**Table 1. Early Warning Indicators and Thresholds**

Indicator	Threshold
Attendance	<p><b>High School:</b> Student missed 10 percent or more of instructional time (absences).</p> <p><b>Middle School:</b> Student missed 20 percent or more of instructional time (absences).</p>

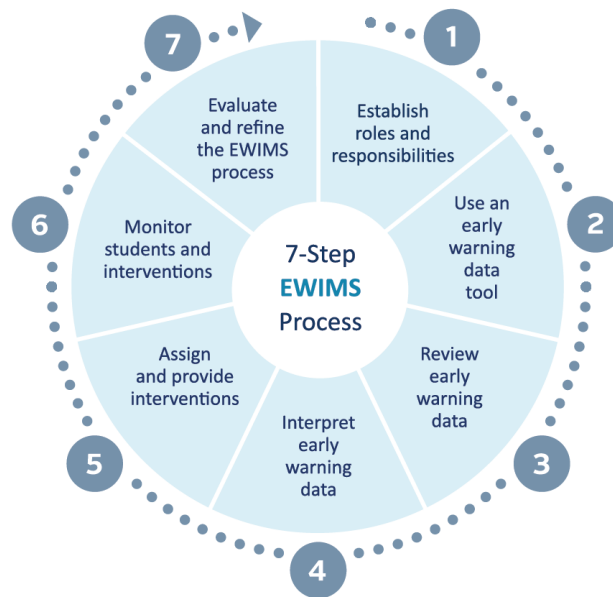
**Behavior**                      **High AND Middle School:** Locally validated thresholds, for example, referrals, in-school or out-of-school suspensions and behavior grades.

**Course Performance**                      **High School:** Failure in one or more courses OR a 2.0 or lower GPA on a 4-point scale.  
**Middle School:** Failure in a mathematics or English language arts course.

## Seven-Step Early Warning Intervention and Monitoring System Implementation Process

The guide describes each of the seven steps as distinct processes, yet each step is part of an entire system or cycle. Figure 1 illustrates that cycle. This process guides users toward making informed decisions based on the indicators and other relevant information.

**Figure 1. Early Warning Intervention and Monitoring System: Implementation Process**



## Implementing the Early Warning Intervention and Monitoring System with the Ohio Improvement Process

The Early Warning Intervention and Monitoring System implementation process is a data-based continuous improvement process that is closely aligned with work a district already may be doing under the Ohio Improvement Process. The language may be a little different, the team of people responsible may be a little different and the focus may be more tightly defined than that of the Ohio Improvement Process. But overall, the Early Warning Intervention and Monitoring System is a way to further develop and refine the work of the Ohio Improvement Process and for district and school leaders to ensure each Ohio student receives the services he or she needs to succeed in high school. A crosswalk between the Ohio Improvement Process and Early Warning Intervention and Monitoring System is included in Appendix A and shows the parallel between the latter and the former.

## Timeframe

The Early Warning Intervention and Monitoring System implementation process is aligned with the academic calendar, and schools and districts institute it during the school year. Specific steps occur during defined periods. Many of these are recurring or continuous, so the process of reviewing early warning data and identifying appropriate support strategies and interventions is timely and responsive to individual student needs. The process allows ongoing evaluation and revision across academic years to ensure the Early Warning Intervention and Monitoring System achieves maximum efficiency and effectiveness locally. Table 2 shows an example of an Early Warning Intervention and Monitoring System implementation process taking place during a single school year.

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

Schedule	Process (Correlated to Steps in This Guide)
Before the start of the school year	<ul style="list-style-type: none"> <li>Form or designate an EWIMS team (Step 1).</li> <li>Provide professional development on the implementation process to EWIMS team members (Steps 1 and 2).</li> <li>Bring together the EWIMS team (Step 1).</li> <li>Set up the early warning data tool (Step 2).</li> <li>Import student information and, if available, incoming risk indicator data into the tool (Step 2).</li> <li>Review and interpret student needs based on data from the previous year (Steps 3 and 4).</li> <li>Identify interventions for incoming students based on the identified needs (Step 5).</li> </ul>
At the beginning of the school year	<ul style="list-style-type: none"> <li>Reconvene the EWIMS team (Step 1).</li> <li>Verify student information, especially enrollment status, and update the student roster to reflect new enrollees, students who transferred in and out, and other classifications (Step 2).</li> <li>Review the previous year's data, including any additional information that helps the team interpret student needs (Steps 3 and 4).</li> <li>Identify and implement student interventions or supports based on incoming risk indicator information if available (Step 5).</li> </ul>

Schedule	Process (Correlated to Steps in This Guide)
After the first 20 or 30 days of the school year	<p>Update the student roster to reflect new enrollees, students who transferred in and out, and other classifications (Step 2).</p> <p>Import student-absence data (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' initial responses to interventions (Step 6).</p> <p>Revise students' intervention assignments, as needed (Steps 5 and 6).</p>
After each grading period	<p>Update the student roster to reflect new enrollees, students who transferred in and out, and other classifications (Step 2).</p> <p>Import student absence data, 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 (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, students who transferred in and out, and other classifications (Step 2).</p> <p>Import or enter student absence data, 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 (Step 6).</p> <p>Revise students' intervention assignments for summer and 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 the Guide

This guide contains a separate section for each of the seven steps in the Early Warning Intervention and Monitoring System. Because of its emphasis on student identification and monitoring, the guide primarily focuses on supporting early warning intervention efforts at the **school level**. However, this guide also identifies critical roles district or State System of Support personnel may fill.

## How to Use this Guide

Each section of this guide briefly describes an Early Warning Intervention and Monitoring System step, identifies anticipated outcomes, asks guiding questions to support implementation and suggests actions for those in the district or Statewide System of Support roles. The guiding questions focus on short-term and long-term strategies. The short-term questions are for team members to ask themselves as they examine student data, both for individuals and groups of students. The long-term questions focus on systemic, far-reaching issues and strategies to improve school and district outcomes. The guide anticipates new users of the process will focus on the short-term questions and, over time, will be ready to delve into long-term questions.

## STEP 1—Establish Roles and Responsibilities

### What you need for Step 1

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



### Description of Step 1

The first step in the Early Warning Intervention and Monitoring System process is designating school and district staff to make up the team. Current teams in place through the Ohio Improvement Process or subcommittees of those teams can be assigned Early Warning Intervention and Monitoring System responsibilities if they have capacity to do so. This guide refers to the newly formed group as the “EWIMS team.”

### Anticipated Outcomes of Step 1

1. A distinct EWIMS team that includes staff who have diverse knowledge of students in the school, understand their roles and are trained to use the tool and EWIMS process.
2. Established meeting routines and common agendas.
3. One or more individuals assigned responsible for routinely importing or entering data into the tool.

### *Forming and Maintaining an Active EWIMS Team*

The Early Warning Implementation and Monitoring System team must represent a broad array of staff, such as principals, teachers and specialists. Ideally, it should connect each level of [the collaborative implementation teams system](#): district leadership team (DLT), building leadership teams (BLT), and teacher-based teams (TBT). District participation on Early Warning Intervention and Monitoring System teams is essential. Ideally, a district representative should be part of each school-based team. The Early Warning Intervention and Monitoring System team should include personnel who have the authority to make decisions about staff and students and who know a diverse assortment of students. Team members should represent a diverse set of knowledge and skills, including:

- Technical skills needed to use the early warning data tool;
- Knowledge about students who are receiving special services;
- Understanding of the Ohio Improvement Process;
- Knowledge about positive behavioral interventions and supports or other multi-tiered support systems; and
- Knowledge of evidence-based interventions.

The number and composition of teams will vary and may depend on the size of the district. Large districts with many schools may have one school-based team at each school and a 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.

In large districts, a district Early Warning Intervention and Monitoring System team should include at least one representative from each building-level team. The building leadership team meets at least monthly to talk about implementation strategies or difficulties and monitor the progress building personnel are making on system implementation. A district Early Warning Intervention and Monitoring team may meet less frequently than the building-level teams, for example, two to four times a year, to discuss persistent program challenges, resources and trends, as well as systemic, organizational and policy changes that may be needed to support system implementation. Building-level representatives can help the district team develop districtwide strategies for students who are off track, such as new behavioral management approaches, training for teachers and students or an increase in adolescent-literacy professional development. One example of a conversation that should be occurring at the district and building levels is on the topic of interventions. At the district level, those involved with Early Warning Intervention and Monitoring System may discuss whether to add a new intervention for all schools. At the building level, the Early Warning Intervention and Monitoring System team would discuss whether to assign a new intervention to specific students.

The Early Warning Intervention and Monitoring System team must undergo professional development on the process and using the early warning data tool.

The team also must be allotted enough time to implement the Early Warning Intervention and Monitoring System process. Whether that process is the responsibility of a new team or incorporated into the duties of an existing team, such as a district leadership team, building leadership team or teacher-based team, the Early Warning Intervention and Monitoring System work must be the team's priority.

#### **DISTRICT SIZE CONSIDERATIONS**

**Large and medium-sized districts** with many schools may have one school-based team at each school and another district-level team that has both school and district representation.

**Small districts** may have one school-based team in each school containing both school and district representation.

#### ***Roles and Responsibilities of the EWIMS Team***

As part of implementing the seven-step process, the Early Warning Intervention and Monitoring System team works within the district's existing Ohio Improvement Process structure, to the extent the team finds it useful. At the beginning, the district should assign an administrator from the district leadership team to lead the Early Warning Intervention and Monitoring System team. This administrator should have the authority to make district-level decisions. The Early Warning Intervention and Monitoring System team membership also reflects [the roles and responsibilities of leaders](#) outlined in the Ohio Improvement Process: shared leadership, communication and engagement, purposeful decision-making and resource management.

The overall role of the district in the Early Warning Intervention and Monitoring System process is to identify systemwide concerns and recommend and develop districtwide changes that address those concerns. District administrators also play key roles in communicating the importance of the system in and across schools by overseeing professional development and monitoring school-level efforts. The district-level leader of the Early Warning Intervention and Monitoring System ensures the district leadership team discusses persistent challenges, resources and strategies for supporting students, as well as systemic, organizational and policy changes that may be necessary to effectively implement the Early Warning Intervention and Monitoring System at the school level.

Each middle and high school building leadership team also should select an Early Warning Intervention and Monitoring System team lead with authority to make building-level decisions. This individual will:

- Serve as the direct contact to the Early Warning Intervention and Monitoring System team lead.
- Attend Early Warning Intervention and Monitoring System team meetings at each data review period.
- Facilitate building-level Early Warning Intervention and Monitoring System team meetings with teacher-based team representatives at each data review period and more frequently as appropriate.
- Ensure the Early Warning Intervention and Monitoring System process is fully implemented in the buildings and effectively integrated into the work of the building leadership teams and teacher-based teams.
- Help the Early Warning Intervention and Monitoring System team develop districtwide strategies for at-risk students, such as new behavioral management approaches and training for teachers and students, as well as more professional development on adolescent literacy for teachers.

The Statewide System of Support will work with districts and schools to monitor implementation of the system and troubleshoot areas of difficulty, offering expert support to district and school leaders who are implementing both the Early Warning Intervention and Monitoring System and Ohio Improvement Process. The Statewide System of Support will work to tailor solutions to district, school and classroom needs. The number and composition of Early Warning Intervention and Monitoring System teams will vary and may depend on the size of the district. The level of Statewide System of Support involvement will vary as well, depending on the sizes of schools and districts and their relationships.

### *EWIMS Team Meetings*

The Early Warning Intervention and Monitoring System team should meet regularly throughout the year and a minimum of three times. The team should hold at least one meeting: (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 Intervention and Monitoring System process.

In all Early Warning Intervention and Monitoring System team meetings, it will be essential to review and discuss the information available in the selected early warning system tool. Any meetings held before the new school year starts should focus on identifying incoming students who have risk indicators and discussing applicable intervention strategies. During the school year, the Early Warning Intervention and Monitoring System team should have more frequent meetings, which will allow the team to discuss issues as they arise and monitor students' progress. At the end of the school year, the team should meet to discuss ways to improve support for at-risk students and operation of the team.

## Guiding Questions for Step 1

### *Short-Term Questions*

1. What school and district stakeholders should be represented on the EWIMS team, for example, district administrators, counselors, teachers, support staff or technology specialists? Can an existing team carry out the EWIMS process?
2. If the district or school is considering appointing team members from outside the school, how should they be involved? For example, should these members come to every meeting? Is it appropriate for team members from outside the school to monitor student-level data? What commitment do you expect from them?
3. Who will be responsible for importing information into the early warning system data tool?
4. Does the EWIMS team have authority to make decisions about students based on early warning data?
5. How frequently should the EWIMS team meet? How long should meetings be? What are the team roles and meeting norms?
6. What type of professional development is needed to train and support the school-level and district-level teams?
7. What additional resources are needed to support the team, for example, access to student records or professional development? What constraints may affect team meetings?

### *Long-Term Questions*

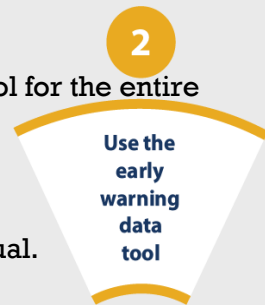
1. Who will continue on the EWIMS team the following year?
2. What are the team's key goals? How are they measured?
3. What are the most significant challenges facing the team?

4. What important lessons were learned? How will these lessons inform future work?
5. What, if any, additional resources are necessary?
6. What types of professional development should the district plan for team members to continue building the expertise of the Early Warning Intervention and Monitoring System team and other key and support staff?

## STEP 2—Use an Early Warning Data Tool

### What You Need for Step 2

- Access to student data and the selected early warning system tool for the entire EWIMS team.
- Timeline for data import and entry.
- Trained designee for data import and entry.
- Selected early warning system tool and matching technical manual.



### Description of Step 2

This section describes the management of early warning data when using an early warning data tool. A strong early warning system uses readily available student data and validated risk indicators to identify high school students who are at risk of not graduating from high school. Districts or schools may develop their own early warning data tools or use tools developed by vendors.

Step 2 is organized by what a school or district needs to identify at-risk students and the “outputs,” or resources and investment, the tool provides.

**Step 2 aligns to the [Identify Critical Needs](#) step in the Ohio Improvement Process.**

### Anticipated Outcomes of Step 2

1. All team members understand the basic features of the selected early warning system tool and early warning data reports.
2. District or school technology specialists are designated to be responsible for loading the tool with student data in a regular, timely manner.
3. The tool is fully populated with up-to-date information that is based on regular importing or entry, according to the established schedule.

### Tool Setup

The early warning system tool allows users to identify and monitor at-risk students throughout the school year, using research-based indicators that flag them. A selected early warning system tool has many functions that promote data-driven decision-making that helps students. These functions allow users to:

- Customize the tool settings to reflect the local context, such as, number of grading periods, race and disability categories, and other classifications.

- Integrate locally validated incoming risk indicators to identify students who may need support as they transition into and through high school.<sup>3</sup>
- Identify at-risk students based on locally defined behavior indicators, such as suspensions, behavior grades and state assessment results.
- Import and export student-level data.
- Produce dashboards, including student-level, school-level and district-level data summaries.
- Assign and monitor student interventions over time.
- Modify default risk-indicator thresholds after validating them locally.<sup>4</sup>
- Create watch lists to monitor students who meet customized indicator thresholds.

To use an early warning system tool successfully, teams must complete two key tasks. First, they must ensure the data are up to date. Second, they must regularly provide data to the Early Warning Intervention and Monitoring System team or ensure team members have access to the data so they can make informed decisions. To accomplish these tasks, each Early Warning Intervention and Monitoring System team needs (1) access to the selected early warning system tool or the generated reports; (2) one or more staff members who are trained on the early warning tool screens and features, including entering information; (3) a timeline for ensuring that data are imported or entered, updated and reviewed regularly; and (4) a plan ensuring internal and external stakeholder groups adhere to confidentiality requirements when developing reports and sharing information. This process will ensure data in the tool are current and the Early Warning Intervention and Monitoring System team can access the necessary student-level and school-level reports.

### *Data Inputs*

The early warning system tool uses information about student attendance, course failures and locally determined behavior, such as referrals, suspensions and behavior grades, to identify or “flag,” students at risk of not performing at grade

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<sup>3</sup> Please see Step 7 for a more thorough discussion of locally validated indicators.

<sup>4</sup> Please see Step 7 for more information on validating locally defined risk indicator thresholds.

level, not being promoted to the next grade or not graduating from high school. Identification is based on indicators that are locally validated or grounded in research about the predictors of dropping out and graduation (Balfanz, 2009). Table 3 is a summary of the typical risk indicators and when these indicators become available.

**Table 3. Summary of Recommended Risk Indicators, Timeframes and Risk-Indicator Thresholds in the Early Warning System Tool**

Indicator*	Timing of Available Outputs	High School Risk-Indicator Threshold
Incoming indicator	Before school begins	Locally validated <sup>‡</sup> risk indicators or risk indicators from a prior year's early warning system high school or middle grades tool
Attendance	After 20 or 30 days; at the end of each grading period, such as a semester; at the end of the year (annual)	<b>High School:</b> Missed 10 percent or more of instructional time <b>Middle School:</b> Missed 20 percent or more of instructional time
Course failures	At the end of each grading period; at the end of the year (annual)	<b>High School:</b> Failed one or more semester courses in any subject <b>Middle School:</b> Failed an English language arts or mathematics course
Behavior <sup>†</sup>	Each grading period; end of year (annual)	Locally validated, such as referrals, in- or out-of-school suspensions or 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 <sup>‡</sup> or any risk flag in the final grading period of the full academic school year

\* Please see the [District guide for creating indicators for early warning systems](#) from REL West for a more thorough discussion of indicators.

<sup>‡</sup>Please see Step 7 for a more thorough discussion of locally validated indicators.

An early warning system tool allows users to identify at-risk students based on risk indicators they can monitor throughout the year. Schools can monitor the

indicators at any time but ideally at key timeframes such as the first 20 or 30 days of school and the ends of marking periods, semesters and the school year. Reference the early warning system tool's user guide for details about indicators, how and when students are identified as at-risk and available reports.

### The District's Role in Step 2

To support use of the early warning system high school tool, districts can:

- **Arrange for team members to receive professional development** on the tool, either directly or through a third party.
- **Provide technical assistance** by regularly backing up data on the tool and disseminating reports to the school-based teams.
- **Align the district data systems and variables with the early warning system high school tool data variables** to streamline the Early Warning Intervention and Monitoring System team's efforts. An example is developing a script that allows the data to be sent easily from the student information system to the tool. This will allow team members to focus on supporting students rather than on managing data or double-entering information.
- **Offer guidance on risk indicators, then set thresholds** for flagging students.
- **Give Early Warning Intervention and Monitoring System teams information about incoming indicators of risk**, especially if students are coming from other schools in the district.

### Guiding Questions for Step 2

#### *Short-Term Questions*

1. Who will be responsible for data import or entry into the early warning system tool?
2. What databases house the student data needed for the tool to function? How will the Early Warning Intervention and Monitoring System team get access to them?
3. Who will develop and distribute reports for the Early Warning Intervention and Monitoring System team?
4. How frequently will early warning data be updated and monitored?
5. Who will provide reports to other stakeholders?
6. With whom will the school share data from the tool? How will it protect student confidentiality, as required by district policies?
7. To use the tool, what kinds of supports are needed and from whom?

### *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 district streamline the data entry and import processes or connect it to existing data systems?
3. How can data from multiple years be used to validate local risk indicators, evaluate the impact of existing interventions, and identify persistent school-level or district-level challenges?

## STEP 3—Review Early Warning Data

### What You Need for Step 3

- Early warning system tool loaded with student information and performance data.
- Student-level and school-level reports generated through the tool.
- Early Warning Intervention and Monitoring System team meeting aligned with the uploading of new student data.



### Description of Step 3

This section describes how schools review early warning data to identify students who are at risk and how to understand student engagement and academic performance patterns in the school. Revisit Step 3 any time new data are available to examine the short- and the long-term impacts of the interventions and programs being offered in the school. **Step 3 aligns to the [Identify Critical Needs](#) step in the Ohio Improvement Process.**

### 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, allows the Early Warning Intervention and Monitoring System team to consider the allocation of student support or dropout prevention resources to flagged students
3. ***In preparation for Step 4:*** Identification of the additional information needed to better understand possible underlying reasons that 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 early warning system tool can yield a great deal of information. Step 3 helps users break this information into manageable pieces they can sort, organize and prioritize so the Early Warning Intervention and Monitoring System 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 develop questions to further investigate the underlying causes for students' risk symptoms (see Step 4). To review early warning data, team members first examine which individual students are and are not flagged for attendance, behavior and course performance risk indicators. It is important to understand early warning indicators differ from student demographics and designations, such as special education and late enrollment. Student demographics and designations do not predict student success or graduation, and they are not early warning indicators.

Based on this initial review of the data, the team determines how to prioritize student needs. The Early Warning Intervention and Monitoring System team then can organize and sort at-risk students into groups based on the indicators for which they are flagged, for example, attendance, behavior, course performance or any combination. The Early Warning Intervention and Monitoring System team also may choose to sort students by demographic characteristics to begin examining group patterns and see whether there are larger group needs the team should address.

## The District's Role in Step 3

The district can examine early warning data for a whole school or the whole district. For example, in the first grading period, the team should determine whether students flagged as at-risk come from a particular middle-grades school or set of middle-grades schools. The early warning system tool information generated in Step 2 can illuminate trends in students' risk indicators for further exploration. This information also may influence how the district allocates resources or implements policies and strategies to focus on issues specific to its students. The district also can help the Early Warning Intervention and Monitoring System 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 certain indicators of risk?
  - Were students who are currently flagged in high school also flagged for the incoming risk indicator based on information from the prior 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?<sup>5</sup>
  - 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 different reasons?
  - What are the demographic characteristics of students who are flagged and not flagged, for example, disability, disadvantaged or English learner status?

#### *Long-Term Questions*

1. Do students flagged in a previous school year (and have incoming indicators of risk) continue to be flagged in the current school year? If the answer is "yes," are they flagged for the same reasons or different reasons?

<sup>5</sup> 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.

2. Do students flagged for risk early in the school year continue to be flagged later in the year? Are they flagged for the same reasons or different reasons?
3. Do the number and percentage of students who are flagged for any indicator and each different indicator change from year to year?
4. What percentage of students who are flagged showed one or more risk indicators in prior grades? What percentage did not?<sup>6</sup>

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<sup>6</sup> 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 (for example, middle school), the district may need to provide data to facilitate answering this question.

## STEP 4—Interpret Early Warning Data

### What You Need for Step 4

- A list of questions raised through the data analysis during Step 3.
- Additional information from other sources, for example, student information systems, student records or teacher discussions or interviews.
- Time to meet and discuss findings.



### Description of Step 4

This section describes how to examine in greater depth the factors that may contribute to a flagged student's at-risk status. Risk indicators are merely signs of deeper and more complex problems. Step 4 also builds on the review of early warning data conducted in Step 3 by encouraging the team to look more closely at the characteristics of flagged students. To complete this deeper analysis, teams must examine additional data that may not be in the early warning system tool but are available in other data systems or from adults in the school who interact with these students. The team should gather data from a variety of sources, focusing on information that can help the team decide on 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 having one-on-one meetings with individual students, their families or both. These meetings can shed light on the reasons students are displaying risk indicators. The meetings also may offer opportunities to get students and the adults who interact with them to accept additional supports. The early warning system tool allows users to produce detailed student reports designed solely for this purpose.

**Step 4 aligns to the [Identify Critical Needs](#) step in the Ohio Improvement Process.**

### Anticipated Outcomes for Step 4

1. Better understanding of reasons 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 why one or more students are flagged as being at risk. Based on these investigations, the team should be able to identify common and individual needs among the students, prepare to identify and implement appropriate interventions (Step 5), and monitor students' responses to them (Step 6). The meeting to discuss underlying causes and student needs will take more time than a typical Early Warning Intervention and Monitoring System meeting. It is critical to set aside enough time to discuss the findings, starting with exploring underlying causes for a student being at risk.

### **The District's Role in Step 4**

Interpreting early warning system data requires access to student information beyond that housed in the early warning system tool. District administrators can support these efforts by developing policies that give team members or their designees access to information that lets them make informed decisions about student needs. This access may require making students' records available prior to the current grade, including middle-grades school attendance, behavioral information and other data that can help teams better understand students the system flags.

### **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? Does the student miss only certain classes?
2. Has the student had behavioral referrals resulting in suspension, which may affect attendance?

3. Are there other indicators of risk? To find these, crosscheck the attendance flag with other information, such as teacher reports and achievement test scores.
4. Is there a discernible pattern to student absences? What are the underlying reasons for students' poor attendance records?

***What other information do you need to understand the characteristics of students with attendance problems? Examples may be special education status, English learner status or prior academic achievement.***

1. For a student who is flagged for failing courses, what classes did the student fail? What might be the underlying causes for the low performance, for example, low literacy skills or an unidentified or untreated learning disability?
2. Are there any discernible patterns in the students' academic performance? What are the underlying reasons for these students being flagged for academics?
3. What other information do you need to understand common patterns or possible underlying reasons for poor performance among students with course failures? Examples could be special education status, English learner status or prior achievement.

***Behavior (If Applicable)***

1. What behaviors contributed to the behavior flag? How are the behavior problems 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?
2. Are there behavioral patterns or common underlying reasons for behavior problems among students flagged for this indicator?
3. What other information do you need to understand the characteristics of students who are being flagged for behavior, such as special education status, English learner status or students being overage for their grades?

***Any Flag***

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

***At the School Level***

1. How might school attendance policies be affecting students who are flagged? An example may be consequences for having a high number of absences.
2. Looking across multiple grades, are students failing certain courses, being flagged at particular grade levels or both? What changes could be made to improve outcomes for students in these courses or grades?

How might the grading policy at the school affect students who are flagged?

3. Based on the analyses, is there anyone who is not currently on the team who should be included, for example, previous teachers, parents, guidance counselors, or curriculum and instruction personnel?

### *Long-Term Questions*

1. Are there other stakeholders who should be included in the long-term discussions about how to address, systematically, present student risk factors? Examples may be community members, law enforcement representatives, court representatives, human services representatives, business representatives, local policymakers, parents, teachers, students, guidance counselors and central office staff. How will the team engage these stakeholders? How will it promote buy-in among these stakeholders?
2. What can the team do to ensure it can obtain additional data to identify underlying causes easily? What further information is needed to get a better picture? What types of information are difficult to obtain? How can that information become 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 some of these students?

## STEP 5—Assign and Provide Interventions

### What You Need for Step 5

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



### Description of Step 5

This section contains information on making decisions about strategies and resource allocation to support students at risk of dropping out of high school. The section also offers guidance on systematic ways to provide support to identified students using a tiered approach. During Step 5, the Early Warning Intervention and Monitoring System team matches individual students to specific interventions after gathering information about: (1) potential root causes for flagging of individual students; and (2) academic and behavioral support and intervention programs available in the school, district and community.

Step 5 aligns to the [Research and Select Evidence-Based Strategies](#) , [Plan for Implementation](#) and [Implement and Monitor](#) steps of the Ohio Improvement Process.

### Anticipated Outcomes for Step 5

1. Compiled inventory of supports and interventions available to students in the school.
2. Assignment of flagged students to supports and interventions based on student needs identified in Steps 3 and 4. These will be documented for each student in the early warning system 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*

Many schools and districts do not systematically apply their available student support resources and interventions or adequately coordinate their use. To introduce a more systematic approach, increasingly schools and districts are organizing specific strategies or programs into tiers based on the intensity of the interventions. Generally, the models have two- or three-tiered intervention systems. Tier I interventions are low intensity and apply to all students in the school. Tier II interventions are moderately intensive and apply to individuals or small groups of students with common needs. Tier III interventions are the most intensive and apply to individual students with the highest level of need. Figure 3 depicts a three-tiered model appropriate for academic and behavioral interventions.

### **Figure 3 (under development)**

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

- Clearly communicating the model's purpose to achieve buy-in at multiple levels, including stakeholders from state and local education agencies, families and students.
- Clearly defining each tier in the model so all stakeholders can easily understand them, including administrators, educators, families, school support staff and students.
- Establishing a protocol that allows students to move through the tiers seamlessly and efficiently as needs are identified and change.

The early warning system tool allows the Early Warning Intervention and Monitoring System team to monitor and adjust students' supports and interventions assignments within the tool and monitor their movements through tiers. In general, the early warning system tool assumes that in schools using a tiered approach, all students have access to Tier I interventions. Flagged students are eligible for Tier II or Tier III interventions, or both, based on the Early Warning Intervention and Monitoring System team assessment. These features will help schools and districts coordinate services and closely track individual students' participation in supports and interventions and their response to them.

To match students to supports and interventions, the team must understand which ones are available and the need or needs each support and intervention addresses. Creating an inventory of existing supports and interventions available to students in the school, district and community will give the team a resource for helping match students with specific supports and interventions. Because the Early Warning Intervention and Monitoring System process helps identify students early, schools may meet student needs using less intensive types of supports. Tool 2: Student Support and Intervention Mapping (in Appendix B) guides teams in developing an inventory of interventions.

After completing the inventory, the team must review information about students' needs, based on work done in Steps 3 and 4, to match students with appropriate supports and interventions. After assigning students to one or more interventions, the team can monitor their progress and adjust the program of support as needed (see Step 6).

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

Although the process relies heavily on data collected during Steps 3 and 4, ultimately team members must use their professional judgment to recommend student supports and interventions. To ensure each intervention or support assignment is appropriate and effective, the team continually monitors individual

students' responses to interventions (Step 6) and, when needed, revises student support assignments after revisiting Steps 3 and 4.

### The District's Role in Step 5

The district perspective provides longer-term solutions and strategies beyond those of the school level. The district can support Early Warning Intervention and Monitoring System teams in identifying appropriate interventions by:

- **Identifying common needs of students** in multiple schools.
- **Pinpointing districtwide solutions for common needs** of schools.
- **Providing solutions** for gaps in available interventions and supports.
- **Allocating resources** to identified needs of individual schools.
- **Supporting interventions to improve student readiness** for high school, such as elementary and middle-grades interventions and summer bridge programs.

Districts also have a role to play in facilitating promising support and intervention programs. Working with Early Warning Intervention and Monitoring System teams, district personnel can help identify promising student supports and interventions, as well as share effective support and intervention practices among schools.

### Guiding Questions for Step 5

#### *Short-Term Questions*

1. What interventions currently are implemented in the school and district? How successful do they seem to be at keeping students in school or getting them on track for graduation? What type of ongoing help do they receive to thoroughly implement supports and interventions?
2. What structures, such as flexible scheduling, exist to support students who are at risk?
3. What trends in the data identify the immediate need for certain types of interventions, such as attendance monitors, professional development for teachers on instructional strategies, ninth-grade transition supports or opportunities for extended learning beyond the school day? Are there groups of students with similar needs?
4. Is Tier I, Tier II or Tier III support needed? If a tiered model is not already in place, is it possible to provide supports based on student needs that are tiered by intensity? What additional approaches can the team use to coordinate services and prioritize resource allocation?

5. Do the characteristics of the students identified as being at risk, such as disability, economically disadvantaged status or English learner status inform intervention decisions? Are there other ways to inform intervention decisions?

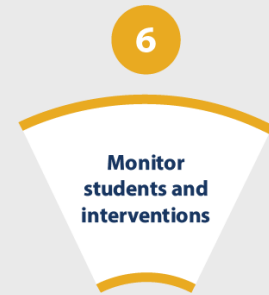
### *Long-Term Questions*

1. Which supports and interventions appear to be the most successful at helping students at risk get back on track for graduation? How do you know those approaches are most successful?
2. How will you learn about promising supports and interventions to address unmet student needs? For example, attending conferences, purchasing interventions, talking with other schools and districts, forming study teams, reviewing literature or seeking 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 in the Early Warning Intervention and Monitoring System efforts? How will the team communicate this information to them? How will they be involved in decision-making, implementation and monitoring?
4. What school policies must be in place to improve the implementation of support and intervention strategies?
5. What resources, such as time, materials, personnel and funding, are necessary to support interventions? What resources are available to support identified students? If the available resources are not sufficient, how will you secure additional resources, such as cost sharing across programs, grants or other funding sources? How will the resources be distributed among groups and individual students based on their needs?
6. What, if any, organizational or structural changes does the school or district need to support students?
7. How will the team communicate the results of this work to stakeholders, such as parents and students, teachers, administrators, communities, educators outside the district and the Ohio Department of Education?
8. How will students and parents be included in Early Warning Intervention and Monitoring System efforts? How will the district or school communicate with them?
9. How will the program and individual student successes be celebrated?

## STEP 6—Monitor Students and Interventions

### What You Need for Step 6

- A list of students receiving 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 individual student supports and the system of interventions available. It also offers guidance on how to monitor students receiving interventions by examining whether they start to get back on track, no longer showing indicators of risk. In this step, the Early Warning Intervention and Monitoring System team uses information from its progress monitoring to evaluate the impact of interventions on individual students and groups of students with common needs.

**Step 6 of the Early Warning Intervention and Monitoring System aligns with the [Implement and Monitor](#) step of the Ohio Improvement Process.**

### Anticipated Outcomes for Step 6

1. Knowledge about individual student progress and specific responses to assigned interventions that allow the Early Warning Intervention and Monitoring System team to make decisions about continuing, reassigning or terminating student interventions.
2. Identification of gaps in the supports and interventions available for students, recommendations for new intervention strategies and prioritization of new interventions based on early warning data.
3. Knowledge about the general effectiveness of interventions based on data from monitoring students receiving them.
4. Information shared 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.** The Early Warning Intervention and Monitoring System team should do this monitoring as part of

its review of early warning data (Step 3), which should be a regular item on the team's agenda. Specifically, the team should closely monitor students who were previously flagged and assigned to one or more interventions to see whether they are flagged again and for which indicators. For example, the team should follow students flagged for attendance problems and assigned to a program that includes attendance monitoring. This will help the team determine whether these students' attendance improves.

- **Identify student needs that are not being met.** Students who are receiving supports may continue to show signs of being at risk of being off track for their grade levels, promotion to the next grade or graduating from high school. There may be several reasons why the selected interventions are not meeting their needs: (1) an intervention may not be effective; (2) the information may not be frequent enough; or (3) the students may have additional needs emerge that assigned interventions do not address. Regular monitoring allows the team to identify such issues quickly.
- **Identify new interventions to meet student needs.** The Early Warning Intervention and Monitoring System 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 a student's need level. Then, the team must conduct a search and develop a list of potential interventions and strategies that may serve the need, determining their associated costs, such as resources, funding and staff time. After the team shares a student's need level and potential solutions with leaders and staff, it can implement appropriate interventions. New interventions can be added to Tool 2: Student Support and Intervention Mapping (Appendix B).
- **Examine the effectiveness of the interventions.** The early warning system tool also allows users to examine intervention programs for their effectiveness in getting students 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 statuses. Families also should be

informed when students appear to make improvements and when there is lack of improvement or further decline.

### **The District's Role in Step 6**

Individual student monitoring occurs at the school level, but the district can make more student interventions available by using its own resources to set up districtwide progress-monitoring measures. It also can use these measures to monitoring student trends over a school year or longer.

For example, a district can monitor certain supports and interventions for students and identify the scenarios in which they seem 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 its schools, a district is in a unique position to help schools and Early Warning Intervention and Monitoring System teams to provide information on how available supports and interventions meet specific student needs and on their effectiveness. Districts also can examine these intervention and student data over time to observe outcomes, for example, whether they are getting at-risk students back on track. Further, districts can allocate resources based on student and school needs.

### **Guiding Questions for Step 6**

#### *Short-Term Questions*

1. Are students who are participating in interventions showing improvement? How will a school determine if these students are making the desired progress?
  - a. What is the plan for monitoring student progress in the intervention?
  - b. What data will be collected?
  - c. Who will collect the data?
2. Are students receiving interventions continuing to display risk indicators? If the students are indicating risk, consider:

- a. Is the intervention inadequately supporting an individual student or group of students?
  - b. How will you determine if the intervention was delivered with fidelity?
  - c. Are there problems with how the intervention is being implemented?
  - d. Is the intervention failing to address the needs of specific students?
  - e. Must the school gather more information (Step 4) about students' needs to identify a better fit between interventions and student needs (Step 5)?
3. As interventions are implemented, do new student needs arise? Has the number of students flagged for each indicator changed since the team has put new interventions in place? How can interventions be modified or replaced?
  4. Does the school or district have enough resources to implement supports and interventions? If not, how might it identify additional resources for the short term?
  5. How does the team know whether the strategy is effective or if it should make a change? If the latter, what can it change? Examples may be intensity, duration, the person delivering the intervention or replacing the intervention with another one.

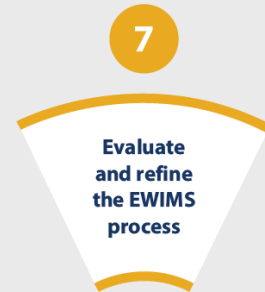
### *Long-Term Questions*

1. Over 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. Over several years, how effective are the existing interventions for improving outcomes for students assigned to them? Are some interventions better for addressing the needs of students with certain types of risk indicators or other underlying issues?
4. Which interventions seem to work for which students?
5. Which interventions do not seem to work for students? How might these interventions be improved? Should these interventions be eliminated?
6. How will you communicate the results of this work to critical stakeholders, such as parents and students, teachers, administrators, community, educators outside your district and the Ohio Department of Education?
7. What schoolwide policies must be in place to improve implementation of student support and intervention strategies?
8. Are there enough resources to implement supports and interventions now that the team has an efficient process for identifying needs? If not, how might the team identify additional resources for the long term?
9. Do you think the school or district needs organizational or structural changes to support students? If so, what changes do you recommend?

## STEP 7—Evaluate and Refine the EWIMS Process

### What You Need for Step 7

- Reports generated by the early warning system tool.
- Time to consider and identify ways to improve the Early Warning Intervention and Monitoring System process.
- Exported data from the early warning system tool to prepare for students in the next grade.



### Description of Step 7

To complete Step 7, the Early Warning Intervention and Monitoring System team should reflect on the system implementation process at least annually. The team should discuss what has worked, what it should change and what it should replace or eliminate.

Each decision should be based on data and evidence and documented. The current Early Warning Intervention and Monitoring System team and other school and district leaders should identify new team members and make sure they are trained to use the early warning system tool and understand the implementation process.

**Step 7 aligns with the [Examine, Reflect and Adjust](#) step of the Ohio Improvement Process.**

### Anticipated Outcomes for Step 7

1. Shared understanding of the strengths and challenges of Early Warning Intervention and Monitoring System implementation.
2. Clear recommendations for improving the process.
3. Team established for the following school year, composed of members who clearly understand the process and their roles.
4. Validated indicators that substantiate early warning data in the school and district.

### *Evaluating and Refining the Process*

When evaluating the Early Warning Intervention and Monitoring System process, the district or school should consider all aspects of implementation. The conversation should explore what is working, what is not working and how the team's work team could improve. For example, the team might analyze the risk

indicators and thresholds, or it might explore improvements in how efficiently the team can access reports.

### Locally Validating the Early Warning Indicators

While in many locations research has validated early warning indicators for high school dropouts and other key educational milestones, districts or states may want to ensure those indicators match local context using a validation process. To conduct this analysis, a member of the Early Warning Intervention and Monitoring System team or a designee with experience in data analysis would access at least three years of data and explore grade retention outcomes or look at four years of data to examine the high school graduation outcomes for at least two classes of students who have graduated from or dropped out of high school. An example would be grades 9-12 student data for the graduating classes of 2013 and 2014. An analysis of this nature looks at outcomes for students who did and did not display the indicators earlier in high school.

Ideally, the indicator thresholds predict a high percentage of eventual graduates and dropouts. That is, if the indicators would have flagged most of the students who dropped out and would *not* have flagged most of the students who graduated, those indicators would have high “hit rates.” They predicted the outcome accurately. But if most students who would have been flagged earlier in high school graduated, the thresholds may be overidentifying students at risk. If many students who eventually dropped out would not have been flagged using these indicators, the thresholds are under-identifying students at risk.

Districts and schools relying on these indicators might notice the national cut points for the indicators do not work well for flagging at-risk students in their communities. If this is the case, these districts and schools should further examine the predictive power of the indicators and thresholds for their communities. Doing this requires accessing and using multiple years of data.

If a district is interested in local validation, a [guide](#) from Regional Educational Laboratory West (Li, Scala, Gerdeman, & Blumenthal, 2016) could support this process. The resource describes, step-by-step, what school districts can do to identify their own early warning indicators. Included in the guide is a set of templates to organize the analysis so they can identify and select appropriate early warning indicators and document decisions.

### The District’s Role in Step 7

District administrators may be better able to resolve certain challenges than school-level staff. For example, a district may decide to take responsibility for ensuring the school-level early warning system tool is populated. A district team member also may be able to arrange Early Warning Intervention and Monitoring System professional development for staff and teachers districtwide.

Another role of the district is to lead or facilitate the validation process described in the box “Locally Validating the EWS Indicators.” This will help the district ensure early warning system data are as accurate and predictive as possible for local students. Because the district houses student data for all schools over multiple years, the district is well positioned to compile a database that can tell educators how well each indicator predicts whether a student will be promoted to the next grade and high school graduation.

### Guiding Questions for Step 7

The guiding questions for Step 7 encourage Early Warning Intervention and Monitoring System 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 districtwide Early Warning Intervention and Monitoring System team? Who will leave? Note that some individuals should overlap from year to year to ensure continuity.
2. Which other stakeholder groups should be represented on the team?
3. What recommendations do team member have for establishing a new team? Questions to guide these recommendations could include the following:
  - How frequently should the team meet?
  - How much time in-meeting and out-of-meeting time do individual members need to take part in team-related activities?
  - What resources could support the team, such as extra planning periods for team members?
4. What were the biggest challenges the team faced? What were the biggest successes?
5. What advice do you have for future teams in light of the successes and challenges team members had to address?
6. What made the team’s job easier and what made it harder than necessary? What changes could make the team’s job even easier?

#### **STEP 2—Use an Early Warning Data Tool**

1. How would you improve use of early warning system data tool, for example, changing the risk-indicator thresholds or the processes for keeping the tool up to date?

#### **STEP 3—Review Early Warning Data**

1. How would you improve the tool’s reports and their uses?

#### **STEP 4—Interpret Early Warning Data**

1. What additional data were important for identifying underlying causes for students being at risk?
2. What advice would you give to someone who is new to analyzing the data?
3. Were there any unintended, positive or negative consequences for students or staff because of the kind of information the early warning system tool contained?
4. Did you learn new strategies that supported interpretation of the early warning data?

#### **STEP 5—Assign and Provide Interventions**

5. What existing strategies ensured students got back on track or were headed in that direction?
6. Did the team’s analysis of the early warning data and interpretation techniques allow the team to match students to appropriate interventions?

#### **STEP 6—Monitor Students and Interventions**

1. How did existing supports and interventions for students flagged as being at risk help them get back on track or headed in that direction? Were some strategies better suited for groups of students with common needs?
2. Which strategies still are needed to support students as they get back on track for graduation?

#### *Long-Term Questions*

1. What school- and district-level policies, organizational systems or approaches yielded more effective supports and interventions?
  - By looking at multiple years of data for the same classes or cohorts of students over time, how does the school or district validate the early warning risk indicators?
  - How many or what percentage of students who were not flagged did not graduate with their cohort or dropped out?
  - How many or what percentage of students who were flagged graduated on time?<sup>7</sup>
  - Do the percentages show any district trends or individual school trends? If trends are apparent, do they continue over time?
2. Do the early warning data reveal systemic problems in the district or school, such as risk factors that are prevalent from year to year, schools that have persistent problems or groups of students who are consistently identified?

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<sup>7</sup> These retrospective percentages determine the hit rate of the early warning indicators.

## Conclusion

The seven-step high school Early Warning Intervention and Monitoring System process provides a framework for schools and districts to organize their implementation of an early warning system. These steps can guide users in examining indicator data for high school students 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 the school and district levels to create and maintain organized, 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 Early Warning Intervention and Monitoring System 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 helping them develop a comprehensive, systematic dropout prevention process that can help keep students in school, support identifying the most promising school and district interventions and raise graduation rates around the country.

For additional information about early warning systems and dropout prevention, see these resources:

- ***Developing Early Warning Systems to Identify Potential High School Dropouts (Issue Brief)***

<http://files.eric.ed.gov/fulltext/ED521558.pdf>

This resource provides factors that help predict whether students will eventually drop out of high school before graduating. It includes step-by-step instructions for building an early warning system.

- ***Approaches to Dropout Prevention: Heeding Early Warning Signs With Appropriate Interventions***

[http://www.air.org/sites/default/files/downloads/report/NHSC\\_ApproachesToDropoutPrevention\\_0.pdf](http://www.air.org/sites/default/files/downloads/report/NHSC_ApproachesToDropoutPrevention_0.pdf)

This report outlines steps schools can take to identify at-risk students and provide relevant support systems and interventions to help students earn high school diplomas. The report also offers information about using early warning

data systems to target interventions for groups and individual students. It offers a variety of best-practice approaches occurring in high-performing high schools and presents effective, current programs being used to address the dropout problem.

- ***Getting Students on Track for Graduation: Impacts of the Early Warning Intervention and Monitoring System***

[https://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL\\_2017272.pdf](https://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2017272.pdf)

This report provides an evidence base for the Early Warning Intervention and Monitoring System. The report claims to provide rigorous, initial evidence that even with limited implementation during the first year of adoption, a comprehensive early warning system can reduce the percentage of students who are chronically absent or fail one or more courses.

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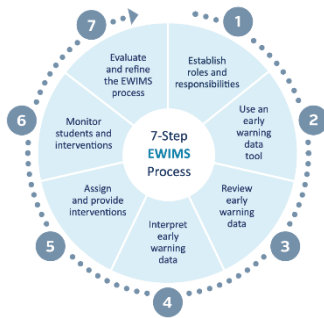
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## Appendix A

### Crosswalk: Early Warning Intervention and Monitoring System and the Ohio Improvement Process



Early Warning Intervention and Monitoring System (EWIMS)	Ohio Improvement Process (OIP)	Comments
Step 1: Establish roles and responsibilities		EWIMS roles and responsibilities might be embedded in or aligned to the OIP team framework, depending on local context and preferences.
Step 2: Use an early warning data tool	<a href="#">Step 1: Identify Critical Needs.</a>	Decisions should be made only after analyzing data from multiple sources, including district, school and classroom, ongoing student performance, adult implementation, organizational, school climate and culture, and family and community stakeholder data. Data must be collected and
Step 3: Review early warning data		

Step 4: Interpret early warning data		organized so it can be understood and interpreted accurately.
Step 5: Assign and provide intervention	<a href="#">Step 2: Research and Select Evidence-Based Strategies</a>	Data analysis results help teams take a systematic approach to selecting strategies and programs that address the needs identified in previous steps.
	<a href="#">Step 3: Plan for Implementation</a>	Appropriate plans are put in place with assigned resources, actions and progress monitoring.
Step 6: Monitor students and interventions.	<a href="#">Step 4: Implement and Monitor</a>	Implementation includes regular, systematic monitoring of adult practices and student outcomes. It provides opportunities to collaboratively plan and assess the usefulness of interventions and supports.
Step 7: Evaluate and refine the EWIMS process.	<a href="#">Step 5: Examine, Reflect, Adjust</a>	Teams reflect on their process to determine what strategies worked and should be maintained and what strategies did not work or yield the anticipated outcome. These reflections, when noted, refine future implementation cycles.

## Appendix B. Supporting Documents

Tool 1: Early Warning Intervention and Monitoring System Action Planning Tool (Used in Step 1)

Tool 2: What Are Our Current Interventions? Student Support and Intervention Mapping (Used in Step 5 and Step 6)

**Tool 1: Early Warning Intervention and Monitoring System Action Planning Tool**

**Directions:** The school or district Early Warning Intervention and Monitoring System team can use this tool to begin planning and implementing a 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? (Assign individuals to be responsible for these actions.)
1. Establish roles and responsibilities			
2. Use an early warning data tool			
3. Review early warning data			
4. Interpret early warning data			
5. Assign and provide interventions			
6. Monitor students and interventions			
7. Evaluate and refine the EWIMS process			

### Tool 2: What Are Our Current Interventions?

Complete the matrix below to catalog interventions and supports. Include how many students can be served, the intervention’s focus, its evidence base or additional notes.

	TIER I	Availability	Details	TIER II	Availability	Details	TIER III	Availability	Details
<b>Attendance</b>	<i>Example: Automatic calls</i>	<i>100% students</i>	<i>Robocalls sent daily at 10am to all absent students and their families</i>	<i>Peer wake-up calls</i>	<i>100 students per 2 weeks</i>	<i>Student council members (10) can be assigned up to 10 students to text each morning for 2 weeks</i>	<i>Parent conference</i>	<i>As needed</i>	<i>Dean will set up parent attendance conference</i>
<b>Behavior</b>	<i>Example: Expectations of PBIS impact schoolwide</i>	<i>100% students</i>	<i>Students can earn PBIS points and qualify for weekly raffles and monthly assemblies</i>	<i>Lunch group</i>	<i>40 students per 6-week session</i>	<i>Each school social worker (2) runs 2 groups of 10 students for 6-week sessions</i>	<i>Referral to in-school or out-of-school counseling</i>	<i>In-school: 20 Out-of-school: unlimited</i>	<i>See school counselor</i>
<b>Course performance</b>	<i>Example: Study hall with math teacher</i>	<i>30 students</i>	<i>Available from 3:30-4:30 p.m. in Room 307</i>	<i>Tutoring</i>	<i>5 aides available</i>	<i>1:1 tutoring in math or ELA with aides</i>	<i>Individualized online math program</i>	<i>100 licenses</i>	<i>Math teachers can refer students to dean</i>

## Appendix C. Early Warning System Data Entry and Review Calendar

Key Activities	School Calendar Date	Process
<b>Date summer intervention data is available</b>	Click here to enter text.	
<b>First day for teachers</b>	Click here to enter text.	
<b>First day for students</b>	Click here to enter text.	
<b>Before the start of the school year</b>		<p>Designate the team.</p> <p>Provide professional development to team members about the implementation process.</p> <p>Gather the team.</p> <p>Set up the early warning system data tool.</p> <p>Import student information and, if available, incoming risk indicator data.</p> <p>Review and interpret student needs based on data from the previous year.</p> <p>Identify interventions for incoming students based on the needs identified.</p>
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	
<b>At the beginning of the school year</b>		<p>Reconvene the team.</p> <p>Verify student information, especially enrollment status, and update student roster to reflect new enrollees, students transferring in and out, and other classifications.</p> <p>Review previous year data, including any additional information that helps interpret student needs.</p> <p>Identify and implement student interventions or supports based on incoming information on risk indicators, if available.</p>

Key Activities	School Calendar Date	Process
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	

Key Activities	School Calendar Date	Process
<b>Early attendance</b> <b>First <input type="checkbox"/>20 or <input type="checkbox"/>30 days</b>		Update the student roster to reflect new enrollees, students transferring in and out, and other classifications. Import students' absence data. Review and interpret student- and school-level reports Identify and implement student interventions. Monitor students' initial responses to their interventions. Revise students' intervention assignments, as needed.
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	
<b>End of Quarter 1</b>		
<b>Date Quarter 1 data available</b>	Click here to enter text.	
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	

Key Activities	School Calendar Date	Process
<b>End of Quarter 2</b>		<p>Update the student roster to reflect new enrollees, students transferring in and out, and other classifications.</p> <p>Import students' absence data, course failures and behavior information.</p> <p>Review and interpret student- and school-level reports.</p> <p>Identify and implement student interventions.</p> <p>Monitor students' responses to their interventions.</p> <p>Revise students' intervention assignments, as needed.</p>
<b>Date Quarter 2 data available</b>	Click here to enter text.	
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	
<b>End of Quarter 3</b>	Click here to enter text.	<p>Update the student roster to reflect new enrollees, students transferring in and out, and other classifications.</p> <p>Import students' absence data, course failures and behavior information.</p> <p>Review and interpret student- and school-level reports.</p> <p>Identify and implement student interventions.</p> <p>Monitor students' responses to their interventions.</p> <p>Revise students' intervention assignments, as needed.</p>
<b>Date Quarter 3 data available</b>	Click here to enter text.	
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	

Key Activities	School Calendar Date	Process
<b>End of Quarter 4</b>	Click here to enter text.	<p>Update the student roster to reflect new enrollees, transfers in and out, and other classifications.</p> <p>Import students' absences, course failures, and behavior information.</p> <p>Review and interpret student- and school-level reports.</p> <p>Identify and implement student interventions.</p> <p>Monitor students' responses to interventions in which they are participating.</p> <p>Revise students' intervention assignments, as needed.</p>
<b>Date Quarter 4 data available</b>	Click here to enter text.	
<b>Last day for teachers</b>	Click here to enter text.	
<b>DATA ENTRY DUE</b>	Click here to enter text.	
<b>TEAM MEETING</b>	Click here to enter text.	

## About This Guide

The Early Warning Intervention and Monitoring System Implementation Guide was developed by the National High School Center, which is operated by American Institutes for Research. This guide was adapted for Ohio by the Great Lakes Comprehensive Center and College and Career Readiness and Success Center. The Ohio Department of Education offers the guide to Ohio districts to support their implementation of Early Warning Intervention and Monitoring Systems and help them use data to support their students more effectively.

Content for the guide was developed under a grant from the U.S. Department of Education and adapted for Ohio through the federally funded Great Lakes Comprehensive Center and College and Career Readiness and Success Center. The content does not necessarily represent the policy of the U.S. Department of Education and is not necessarily endorsed by the federal government.

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## About the Great Lakes Comprehensive Center

The goal of the Great Lakes Comprehensive Center is to provide high-quality technical assistance that focuses on key initiatives, aligns with the work of the Content Centers and builds the capacity of state education agencies to implement, support, scale up and sustain statewide initiatives. It also helps state education agencies lead and support their districts and schools in improving student outcomes while working closely with other technical assistance providers, regional comprehensive centers, national content centers and the regional educational laboratories.

The technical assistance Great Lakes Comprehensive Center:

- Uses research-based practices and emerging promising practices;
- Is highly relevant and useful to policymakers and practitioners; and
- Provides timely, cost-efficient strategies for state education agencies.

This technical assistance must help state education agencies build their capacities to implement state-level initiatives and support district- and school-level initiatives

that improve educational outcomes for all students, close achievement gaps and improve the quality of instruction.

Building capacity includes helping state education agencies (a) build internal organizational strength through such activities as creating sustainable organizational structures and effective performance management systems, building staff expertise within those structures to ensure districts and schools are provided high-quality services and supports, and better aligning programs and policies through strengthening connections among different work streams (for example, divisions or grant programs); and (b) build organizational capacity to support district- and school-level implementation of effective practices to improve student outcomes (for example, by working collaboratively and productively with districts and schools; identifying and implementing a continuum of supports and interventions to address the needs of districts and schools; supporting the implementation and scaling up of innovative and effective strategies; sustaining effective practices; engaging effective external service providers; and involving key stakeholders, including parents, in decision-making).

Additional information is available on the Great Lakes Comprehensive Center and College and Career Readiness and Success Center website at <http://greatlakes-cc.org>.