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PROGRAM REVIEW AND INVESTIGATIONS COMMITTEE

School Health Services for Students With Chronic Health Conditions

Research Report No. 374

Prepared by

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School Health Services for Students With Chronic Health Conditions

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Abstract

Schools must provide health services to students with diabetes, asthma, severe allergy, or epilepsy. However, the laws and regulations are complex, and oversight is fragmented and inadequate. Health services may be provided by physicians, nurses, or trained unlicensed school staff. There is controversy about the proper role of unlicensed staff. It appears that inappropriate care and improper limitations on care have occurred. These problems appear to occur less often when school nurses are present. School districts have struggled to find school health funding, and most have turned to health departments that can use Medicaid to offset some of the costs. The report's six recommendations cover facilitating access to health and educational records under federal law, clarifying relevant state laws, coordinating services among school districts and health service providers, ensuring compliance with laws and regulations, clarifying regulations and policies, and funding of services.

Foreword

At its January 2009 meeting, the Program Review and Investigations Committee directed staff to review the role that schools play in caring for students with potentially life-threatening chronic conditions such as diabetes.

Program Review staff thank officials of the Kentucky Department of Education; Kentucky Board of Education; the Department for Public Health; the Board of Nursing; the Board of Medical Licensure; the Department for Medicaid Services; University Health Care, Inc.; the Education Professional Standards Board; the Division of Protection and Advocacy; and the Division of Family Resource and Youth Services Centers; and the Department of Insurance for providing information for this report.

The Kentucky School Nurses' Association, Kentucky School Boards Association, Kentucky Education Association, Kentucky School Counselor Association, American Diabetes Association, Juvenile Diabetes Research Foundation, American Lung Association, Kentucky Families with Food Allergies, and the Epilepsy Foundation of Kentuckiana provided invaluable assistance. Nursing and medical faculty members at the University of Kentucky and University of Louisville provided important background information and data.

Program Review staff express special appreciation to the superintendents, school nurses, and other district staff of the 174 school districts of Kentucky for their willingness during the H1N1 flu pandemic to respond to several lengthy information requests and site visits. Staff also extend appreciation to the 42 health departments that provide services for school districts and that also took time from their flu prevention work to respond to information requests and visits.

Among Legislative Research Commission colleagues, Program Review staff thank the staff of the Office of Legislative Economic Analysis, Office of Education Accountability, Project Center, and Library.

Robert Sherman
Director

Legislative Research Commission
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Summary

The primary objective of the public school system is to provide a high-quality education. Student illness of any kind affects both attendance and learning and is a barrier to education. This report examines the efforts schools make to ensure that students with diabetes, asthma, severe allergy, and epilepsy are able to participate in school safely and to learn while there. All these conditions are chronic, meaning they can last for years and possibly for a lifetime. All of them have potentially life-threatening complications. Most of them require some kind of regular care during school hours.

Most school personnel and school nurses appear motivated to provide the best possible care for all students. Where there are school nurses, they typically seem to be dedicated and skilled in providing health services to students. In many schools, however, health services staffing is inadequate. Some parents and guardians and school staff members reported inappropriate care and improper limitations on care for students with chronic health conditions. Program Review staff surveys indicated more appropriate care and fewer limitations when school nurses were present.

The Legal Framework and Levels of Care

Most school districts have contracts with outside agencies, primarily health departments, for school nurses. The districts and health departments need to share both educational records and health information. The federal education privacy law can be an obstacle when health department nurses need educational information or need to enter information into the educational record. The federal health information privacy law can be a barrier to transferring health services documentation easily to school staff. The contracts between districts and health departments may need to be changed and federal input may be needed in order to permit legitimate information sharing.

Recommendation 2.1
In consultation with appropriate experts and federal authorities, the Kentucky Department of Education and the Department for Public Health should design a model relationship between school districts and local health departments that will permit the legitimate sharing of health information and educational records under federal education and health privacy laws, and they should ensure that school districts and local health departments establish relationships that conform to that model.

Multiple federal and state laws and regulations govern school health services. There are three levels of care that schools must consider. For students with significant disabilities affecting their ability to learn, the Individuals with Disabilities Education Act establishes the rules for determining the services needed, including health services for conditions that contribute to the education difficulty. However, most students with chronic health conditions would be considered to have a less severe disability under Section 504 of the Rehabilitation Act of 1973. This Act requires the schools to determine what accommodations are needed to ensure participation in

school and related activities. Some students with chronic health conditions might not be considered to have a disability but might still need health services during school and school activities. They are covered by KRS 156.502 and other Kentucky statutes.

The federal laws specify a process for determining disabilities and planning for services to meet students' needs. They were intended to allow local decision making based on the needs of each student. As a result, they leave many open questions about what services schools are obligated to provide and how they should provide them.

Kentucky has resolved some open questions by stating that the school districts are responsible for providing any health services necessary to ensure attendance and participation. However, some federal ambiguities remain, and some issues have arisen with Kentucky's laws.

Recommendation 2.2
The General Assembly may wish to consider establishing or clarifying school health policy in the following areas, within the limits of federal disability laws:

- **minimum staffing requirements for school health services;**
- **the meaning of "any necessary arrangement" in KRS 156.502;**
- **whether districts must provide health services at all school-related programs and activities;**
- **whether districts must provide health services in the school a student would ordinarily attend;**
- **whether KRS 156.502 should permit certain delegating actions consistent with licensing boards and specify how to change delegating providers;**
- **how districts should respond to emergency treatment orders for conditions not mentioned in statute;**
- **how districts should respond to prescriptions for new emergency treatments for conditions covered by statute;**
- **how districts should respond to requests from parents or guardians and physicians for students to carry and self-administer medications not mentioned in statute;**
- **the discretion districts should have when students with permission to carry medications misuse them;**
- **whether there should be a written individual health care plan for all students needing routine or emergency care;**
- **provision to protect physicians who agree to be district medical directors; and**
- **the role parents or guardians and their designees, including school employees, may have in providing health services to their children in school.**

Health Services in the Schools

Local health departments employ a greater portion of school nurses than school districts do. Coordination with school districts is good in many cases, but sometimes health departments and schools disagree on the services needed. The Department for Public Health allows health departments to provide direct school health services but requires the health departments to accept full liability for those services. The Kentucky Department of Education has not monitored these agreements adequately.

Recommendation 3.1
The Department for Public Health should advise local health departments on ways to assist school districts to meet their obligations under state and federal laws and on liability risk management. If necessary, the department should request that the General Assembly grant liability protection so that health departments may better serve school health needs.

School nurses are necessary for the provision of health services in Kentucky. Even if they do not actually provide direct care to students, they are needed to assess students; determine how their needs can be met; and train, delegate, and supervise any unlicensed staff that might perform health service tasks for specific students. Some school districts do not fully understand their obligations and the requirements for providing health services, and some appear not to be meeting the minimum requirements.

Recommendation 3.2
The Kentucky Department of Education should require all school district agreements with outside health service providers to be in writing and to be submitted to the department. The department should require all districts to submit regularly updated descriptions of their health services policies; procedures; and models of care, including the types, numbers, and supervisors of all licensed and unlicensed personnel. The agreements and descriptions should be sufficient to determine whether districts meet their obligations to provide health services under state and federal laws. The department should provide guidance to districts on their obligations and monitor their compliance.

Several additional issues need to be resolved. One such issue is the use of unlicensed school staff to supplement nurses in many school districts in Kentucky. There is disagreement even within the medical and nursing professions on the extent to which unlicensed staff should provide care. The department does not monitor the procedures used by districts to delegate and supervise unlicensed staff.

There have been serious disagreements among physicians, nurses, and diabetes advocacy organizations on whether it is appropriate to delegate insulin administration to unlicensed school staff. All of them agree that a nurse is the best choice, but many physicians, nurses, and advocates assert that use of unlicensed staff to administer insulin is acceptable. There are, however, many factors that would have to be considered before delegating this task, including whether the student's diabetes is stable enough for an unlicensed person to manage.

Questionable health service practices have been reported by parents and guardians and school staff. Some of these gaps and lapses in care indicate occasional violations of state or federal requirements. For example, schools may not always have someone present to administer emergency medication for a student with diabetes or epilepsy as required by Kentucky statute. Some schools reportedly do not allow students with diabetes to attend school unless a parent or guardian can administer the insulin. Other schools were reported to prohibit students from carrying asthma inhalers despite the statutory procedure to allow it. There were many other gaps or lapses reported.

There has been limited coordination among the agencies that have oversight over aspects of school health, but it has improved. These agencies are the Kentucky Department of Education, Department for Public Health, Board of Nursing, and Board of Medical Licensure. The agencies do not actively monitor the way school health services are provided. The Kentucky Board of Education and Kentucky Department of Education should take the lead in regulating and overseeing school health services. The department, while providing some guidance and technical assistance, has not assigned adequate resources to school health, does not monitor or exercise oversight of school health services, and does not utilize its student information system effectively to track health services.

Recommendation 3.3
The Kentucky Board of Education and Kentucky Department of Education should take the lead to ensure compliance with current and future statutes and regulations. They and the Kentucky Department for Public Health, Board of Nursing, and Board of Medical Licensure, in consultation with other stakeholders, should collectively review the issues identified in the Program Review and Investigations Committee report. Using their respective authorities, they should develop comprehensive school health regulations, advisory opinions, and advice for school districts, health departments, nurses, and physicians. These should be mutually consistent, should address statutory ambiguities, and should establish minimum requirements for school health services, with flexibility for justifiable variations among districts. If statutory changes would be helpful, the agencies should propose such changes to the General Assembly.

School Health Funding and Insurance

Many districts cite funding limitations as a reason for limited health services, but some districts in relatively impoverished counties have exemplary health services. Most school districts pay for their health services out of the general fund, which consists primarily of local tax funds and state education funds. Other sources include limited Medicaid, federal disability funds, and grants.

Health departments cover most of the cost of their school health services with Medicaid. Other sources of funds include contract payments from school districts and health department tax revenues.

Private insurance, suggested by health departments and school nurses, might be a source of additional funding, but there are barriers that make it difficult for states to mandate this coverage.

There are limited ways that the General Assembly might wish to consider to mandate private insurance for school health services, including for students with disabilities.

For various technical reasons, school districts cannot bill Medicaid for most of the services their nurses provide. Even so, Medicaid has become a crucial funding source for school health services because most health departments can bill Medicaid for school health services. Many school districts and health departments have found ways to share costs that benefit the districts. However, health departments in the 16-county Passport managed care region cannot bill Medicaid. So far, discussions among the parties have not produced an agreement.

Recommendation 4.1
The Department for Medicaid Services; Department for Public Health; local health departments; and University Health Care, Inc. should continue to seek an equitable method to cover school health services for students enrolled in Medicaid in the Passport region. If they are unable to reach an agreement, the General Assembly may wish to consider whether it can establish a solution within or outside the Medicaid managed care waiver.

Outside Passport, Medicaid reimburses health departments at an enhanced rate that applies more federal funds for a small state match. The rate was intended to help cover additional services. Because some health departments also charge school districts for the services, it is possible that some of them have a surplus from the school health program to support other programs.

School districts may choose the least-cost model of care, hiring the fewest nurses necessary and delegating unlicensed staff to provide the remaining health services. Best practice, however, is for as many health service tasks as possible to be performed by nurses. Health departments can share the cost with school districts and have proven a viable option in many places.

Some states provide school health incentives to districts, such as supplements in Louisiana and West Virginia, matching grants in Virginia, grants in South Carolina, a needs-based subsidy in Tennessee, and state-level funding in Georgia. South Carolina has an arrangement that permits school district nurses to bill Medicaid, but it is being challenged by federal Medicaid authorities. Kentucky might consider a similar arrangement if it is found permissible.

Most insurers and Medicaid provide coverage for diabetes, asthma, severe allergy, and epilepsy. A concern raised by several nurses and parents and guardians is that some insurance policies, as well as Medicaid, do not cover a second prescription for medication or equipment needed at school. If the necessary items were forgotten or lost, they would be unavailable in a life-threatening emergency.

Chapter 1

Background and Overview

The primary objective of the public school system is to provide a high-quality education. Student illness of any kind affects both attendance and learning and is a barrier to education. This report examines the efforts schools make to ensure that students with certain chronic health conditions are able to participate in school safely and to learn while there.

The health conditions covered in this report are diabetes, asthma, severe allergy, and epilepsy. All of them are chronic and have potentially life-threatening complications.

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Major Conclusions

This report has eight major conclusions.

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1. Most school personnel and school nurses appear motivated to provide the best possible care for all students. Where there are school nurses, they typically seem to be dedicated and skilled in providing health services to students.
2. In many schools, health services staffing is inadequate. Some parents and guardians and school staff members reported inappropriate care and improper limitations on care for students with chronic health conditions. Surveys indicated more appropriate care and fewer limitations when school nurses were present.
3. Multiple federal and state laws and regulations govern school health services and leave many open questions about what services schools are obligated to provide and how they should provide them. School districts do not fully understand their obligations and the requirements for providing health services.
4. The Kentucky Department of Education (KDE), while providing some guidance and technical assistance, does not exercise oversight of school health services and does not utilize its student information system effectively to track health services. Other agencies regulate aspects of school health but do not actively monitor services. Coordination has been limited but has improved.

5. Local health departments employ more school nurses than school districts do. Coordination with school districts is good in many cases, but sometimes health departments and schools disagree on the services needed.
6. Unlicensed school staff supplement nurses in many school districts in Kentucky and across the country. There is disagreement even within the medical and nursing professions on the extent to which unlicensed staff should provide care.
7. Many districts cite funding limitations as a reason for limited health services, but some districts in relatively impoverished counties have exemplary health services.
8. Medicaid has become a crucial funding source for school health services because most health departments can bill Medicaid for school health services that school districts cannot. However, health departments in the 16-county Passport managed care region cannot bill Medicaid.

Gathering Information for This Report

Much of the detailed information in this report came from information requests sent to Kentucky's 174 school districts. There were four requests for information about licensed health professionals, unlicensed assistive personnel, health services provided to students, and school health budgets. Staff also conducted anonymous surveys of school nurses and school employees. Most of the tables and figures in this report are based on the information requests and surveys. Appendix A provides more details on how the study was conducted. The survey questions and responses appear in Appendices E to I.

Review of Chronic Health Conditions

Diabetes, asthma, and epilepsy are the most frequent chronic conditions among children; asthma is the most common. Severe allergy probably is somewhat less common but is life-threatening.

The three most frequent chronic health conditions among children are diabetes, asthma, and epilepsy. Of these, asthma is the most common. Severe, life-threatening allergy probably is not as frequent as the other three, but a student with such an allergy presents serious challenges for a school. Other chronic health conditions occur less frequently or rarely in the student population.

Diabetes

Diabetes is an inability of the body to use glucose, a kind of sugar. It builds up in the blood and passes unused into the urine. The main type of diabetes in children, called type 1, results from a lack of insulin. It is the focus of this report.

Diabetes is an inability of the body to use glucose, a kind of sugar. Glucose builds up in the blood and passes unused into the urine. Diabetes occurs in two main types.

Type 1 diabetes results from a lack of insulin, a hormone that allows the body to use glucose. This type usually develops in children and young adults when the body destroys the cells that produce insulin.

Type 2 results from a failure of the body to respond to insulin. It most often develops in adults and is thought to be related to obesity, diet, and lifestyle. Among school children, the most prevalent form of diabetes remains type 1, but type 2 has increased among older students, as the frequency of childhood obesity has increased. Schools can help prevent type 2 diabetes by encouraging exercise and healthy eating.

This report focuses exclusively on type 1 diabetes. Most students with type 2 should be able to manage their condition with medications taken at home and with proper diet. Some students with type 2 need insulin; the school should serve these students in much the same way as students with type 1.

The main treatment for type 1 diabetes is insulin, which must be injected or given through a pump. The amount of insulin has to match the current blood glucose and the amount of carbohydrates eaten. Blood glucose tests and insulin doses must be given several times a day.

The main treatment for type 1 diabetes is insulin. Traditionally, insulin is injected several times a day. An alternative is the insulin pump, which provides insulin continually through a tube into the abdomen. The objective is to keep blood glucose levels within a normal range. People with diabetes have to match their insulin dose with the food they eat and the exercise they get. They need to measure their blood glucose levels frequently and adjust their diet and exercise as needed. All these tasks have to be performed at home and at school. The school should keep a written record of blood glucose tests if they are performed by staff and should provide the record, along with the record of insulin given, to the parents or guardians and physician.

Too much insulin can cause dangerously low blood glucose. Immediate treatment is important. Too little insulin causes high blood glucose, which can cause serious symptoms and death over time. In the long term it can cause blindness, kidney damage, nerve damage, and heart damage.

Too much insulin can cause dangerously low blood glucose levels as a side effect. This is called hypoglycemia and can occur when a person eats fewer carbohydrates than expected or has taken more insulin than needed. Hypoglycemia can result in shakiness, dizziness, headache, seizures, unconsciousness, and death. Usually, low blood glucose can be treated by consuming some form of sugar. If sugar does not work, or if the person has become unconscious, an immediate injection of the hormone glucagon is

needed. Schools are required to have someone available who is able to administer glucagon if needed. In addition, emergency medical services usually are called after glucagon is administered.

Too little insulin causes high blood glucose levels, called hyperglycemia. This can occur when someone eats more carbohydrates than expected or when the insulin dose is too low. A person with hyperglycemia will become very thirsty and need to urinate frequently. Untreated over time, hyperglycemia can result in diabetic coma or death. Usually, high blood glucose can be reduced by drinking large amounts of water and by exercising to use up glucose. Sometimes, blood glucose can become so high that it requires medical attention. Adjusting the amount of insulin or giving an extra dose to manage hyperglycemia requires a doctor's order.

Hyperglycemia and hypoglycemia can seriously affect a student's ability to pay attention, learn, and participate in education. Treatment for these complications also can take the student away from the classroom for extended times.

Over many years, even moderate and occasional hyperglycemia can have serious consequences, such as blindness and damage to the kidneys, nervous system, blood vessels, and heart. It is important that people with diabetes keep their blood glucose within the normal range as much as possible. Efforts to control blood glucose have led to increasingly intensive treatment regimens with more frequent blood glucose tests and insulin adjustments. These regimens have placed more demands on school health services.

Asthma

Asthma causes difficulty in breathing. Asthma attacks can be life threatening. Emergency medications should be available at all times.

Asthma causes constriction of the air passages and difficulty in breathing. Asthma attacks can be life threatening. People with asthma should check their breathing capacity regularly, take preventive medications, and have emergency medication available at all times.

The tool used to measure breathing capacity is called a peak flow meter. Students sometimes need to use peak flow meters at school. A doctor can write orders indicating what to do when the patient's breathing capacity is at certain levels.

Rescue inhalers are the most common treatments for asthma attacks. The inhalers can be difficult for young children to use.

The most frequent asthma treatment that schools encounter is called rescue medication, which is intended to treat an asthma attack. A student having an asthma attack has to breathe the

medication, and the most common method entails an inhaler that makes a mist of the medication. Older children and adults breathe in while pressing the inhaler. Younger children have difficulty pressing the inhaler and breathing at the same time. For them, the inhaler is attached to a device called a spacer that holds the mist while the child inhales through a mask or mouthpiece.

Some people need a larger dose or have trouble using an inhaler, even with a spacer. For them, a doctor might prescribe a nebulizer, and the school would need to use it to administer the medication.

Some students need to use asthma medication at specified times or before engaging in certain activities.

Some students with asthma require medication before exercising or at other known times to forestall asthma attacks. Most often, rescue medication is used for this purpose, but other inhaled or oral medications may be used.

Difficulty in breathing can prevent a student from paying full attention and participating in education, especially if the student and school staff do not recognize it. Asthma also significantly contributes to absences.

Asthma Management and Reduction. There is no known way to prevent asthma. Certain substances in the environment that trigger allergic reactions can also trigger asthma attacks, and avoidance of those substances is helpful when possible. Mold, pollen, exhaust fumes, and other substances may trigger asthma attacks.

Several Kentucky agencies are working on ways to manage asthma and reduce its effects.

Several Kentucky agencies are working on ways to manage asthma and reduce its effects. For example, the Kentucky Department for Public Health has received federal funding to initiate a statewide asthma management program. The department and KDE are members of the Kentucky Asthma Partnership, which has developed goals to reduce the burden of asthma in Kentucky, especially for schoolchildren. The Division for Air Quality in the Kentucky Energy and Environment Cabinet has facilitated and distributed federal grants to reduce the effect of school bus emissions on students with asthma.

Severe Allergy

"Severe allergy" refers to the life-threatening reaction called anaphylaxis. Medications, food, and insect stings are the most common allergens. People with this allergy must avoid the allergen and have emergency medication available at all times.

In this report, "severe allergy" refers to the life-threatening reaction called anaphylaxis.[1] Anaphylactic allergies are severe

[1] Except when otherwise noted, this report includes anaphylactoid allergy in the meaning of anaphylaxis. The symptoms and treatments for the two conditions are identical. True anaphylactic allergy requires prior exposure or sensitization to an allergen, but anaphylactoid allergy does not.

reactions that can result in hives, itching, difficulty breathing, shock, and death. The most common causes of severe allergies are medications, food, and insect stings. People with anaphylactic allergies must avoid contact with the specific substances, called allergens, to which they are allergic. They must have emergency medication available at all times.

Food allergy usually presents more of a problem in schools than does medication allergy.

Food allergens are the most difficult to avoid and present the most serious challenges to the schools. A student with a severe allergy to peanuts, for example, might have a dangerous reaction even to an invisible amount of peanut residue, yet peanuts are present in many foods and are difficult to avoid.

In most cases, students will not have anaphylactic reactions to medications at school. Some schools have a policy that the parent or guardian must administer the first dose of a medication at home in case a reaction occurs. Because anaphylaxis requires prior exposure, however, it is possible that a reaction could occur at school after a second or subsequent dose. Nevertheless, it probably is a beneficial policy.

There are additional considerations because some lessons and courses use substances that might cause anaphylaxis. For example, accommodations need to be made in biology labs that use oils, eggs, or other food substances; lessons that involve cooking; and any courses that require the use of latex gloves, if the student is allergic to latex.

Parents and guardians described several positive school practices to prevent anaphylaxis. School districts reported the types of actions they would take to accommodate students with severe allergy.

Some positive practices were described by parents and guardians. One school cafeteria manager took the student on a tour and pointed out the items that contained peanuts. One school posted signs at the entrances to inform students, employees, other parents and guardians, and visitors that there was a student with a severe allergy. One teacher switched from using milk cartons to juice cartons for arts and crafts when a student had a severe allergy to milk.

The Program Review information request to the districts asked what kinds of accommodations the districts would make for students with severe nut allergies. Table 1.1 shows the responses. Most districts indicated they would not make an entire school nut free; this is consistent with best practice guidelines that banning certain foods from school is unnecessary (Food).

Table 1.1
Accommodations Districts Would Make for Students With Severe Nut Allergies

Accommodation	Percent of Districts
Nut-free table in cafeteria	59%
Separate table or location for other students to eat food containing nuts	48
Nut-free food choices available on cafeteria menu	85
Food service staff made aware of students with severe nut allergy	97
Other parents and guardians made aware of students with severe nut allergy	69
Nut-free classroom	61
Nut-free school	26
Other	7

Note: Number of districts responding: 168. Percentages add to more than 100 because districts could choose multiple accommodations.
Source: Program Review staff information request to districts.

There is no preventive treatment, and the only treatment for an anaphylactic reaction is an injection of epinephrine.

Currently, there is no treatment that can prevent an anaphylactic reaction from occurring. The predominant treatment for a reaction is the hormone epinephrine. People with this kind of allergy must carry an epinephrine injection kit with them at all times.[2] When planning care for a student with a severe allergy, schools have to consider that a student might have a reaction and be unable to self-administer epinephrine.

Even people who have had only mild allergic reactions might become more sensitized over time and have a life-threatening reaction. Doctors sometimes prescribe diphenhydramine, an antihistamine, for people who have had mild reactions. However, doctors often also prescribe an epinephrine kit in case a more severe reaction should occur.

Epilepsy

Epilepsy is the result of disturbances in the electrical functions of the brain, resulting in seizures, some of which are obvious and many of which are not. There are many kinds of seizures besides the convulsive ones. A seizure may cause random mumbling or walking; in an absence seizure, the person is immobile and staring.

Epilepsy is the result of disturbances in the electrical functions of the brain. These disturbances cause seizures, some of which are obvious and many of which are not. In many cases, the seizure affects only a small part of the brain; but in some cases, the seizure affects the entire brain. Seizures can affect parts of the brain that control sensation, consciousness, movement, and other functions.

Most people think of a seizure as the "grand mal" convulsive type, known today as "generalized tonic-clonic." However, this is not the most frequent type of seizure. Other kinds of seizures in the

[2] EpiPen is the dominant brand, and people often use that name to refer to epinephrine kits. This report calls them "epinephrine kits," but Program Review questionnaires and surveys often used the EpiPen brand name.

school setting sometimes appear to be behavioral or discipline problems rather than seizures.

The "complex partial" seizure is common and consists of random complex movements, such as walking or mumbling. The person is not aware of what is going on and could end up in a dangerous situation—for instance, by leaving the building and going into a street. Sometimes, school personnel do not realize that these are seizures and discipline the student for misbehavior.

Another common seizure type is "absence," in which the person usually sits still and stares. School personnel sometimes assume a student with an absence seizure is daydreaming or ignoring the lesson.

Many students with epilepsy will have few or no seizures at school. The school should keep a record of seizures that do occur. When a seizure of any kind lasts more than 3 to 5 minutes, a rectal dose of diazepam, a benzodiazepine, may be required to prevent brain damage.

For many people with epilepsy, medications reduce or eliminate seizures. Because the medications usually can be taken at home, the school does not have to administer them. However, the school does need to monitor and help manage any seizures that occur. The school should keep a written record of the type of seizure, the time it started, and how long it lasted. The record should be provided to the parent or guardian and physician.

Students with epilepsy need assistance when a seizure might place them in danger. A student who is wandering should be followed and guided if necessary to avoid dangerous situations. A student who is convulsing should be protected from hitting objects that might cause injury. It is important that a responsible adult be present to observe a student with epilepsy who is participating in any activity during which having a seizure could be dangerous. Examples include climbing, operating machinery, and swimming.

No matter the kind of seizure, there is a possibility of brain damage and, rarely, death simply because of an extended state of seizure called "status epilepticus." If a seizure lasts more than 3 to 5 minutes, or if there are several seizures in rapid succession, medical intervention is recommended. The usual emergency treatment for seizures is to administer a rectal gel containing diazepam, a benzodiazepine. A more recent treatment is a nasal spray containing midazolam, another benzodiazepine. Schools are required to have someone available who is able to administer diazepam, but not midazolam, if needed. Emergency medical services usually are called after diazepam or midazolam is administered.

When a student has a seizure in the classroom, it is not necessary to clear the classroom. If diazepam is needed, then the classroom should be cleared because the student's genitals may be exposed. For the same reason, if the person administering diazepam is an unlicensed staff person, it is recommended that he or she be the same gender as the student if possible; it also is recommended that there always be another adult to witness the procedure. Tennessee law mandates a witness if there is enough time to enlist one.

Seizures themselves interrupt the student's ability to learn and participate in education. After a seizure, there can be an extended period during which the student cannot focus and participate. Seizure medications also can have side effects that inhibit learning. As a result, some students with epilepsy require special education services in addition to health services.

Prevalence of Chronic Conditions

The numbers are difficult to estimate. School districts reported their numbers of known students to Program Review staff.

The prevalence of these conditions is difficult to estimate because many children have not been diagnosed and because the public health and school reporting systems are limited. Program Review staff estimated the number of students with these conditions based on the responses of school districts to information requests.[3] The results are shown in Table 1.2. These numbers are then compared to results from other surveys, which are explained in Appendix A.

Table 1.2
Number of Students Reported and Estimated With Chronic Health Conditions

Condition	Reported	Estimated
Diabetes type 1	1,600	1,700
Asthma	31,100	32,000
Severe allergy	4,500	4,600
Epilepsy	2,500	2,500

Note: Number of districts responding: 168. Numbers rounded to the nearest hundred. "Estimated" was calculated by multiplying the number of students enrolled in the districts that did not respond to the survey by the per capita prevalence of each condition for the districts that did respond. This number was added to the number of students reported. Districts responding represented 97 percent of districts and 97 percent of statewide enrollment.
Source: Program Review information requests to school districts.

[3] Throughout this report, when the numbers of students in districts, regions, or the state are used in calculations, the numbers are 2008-2009 enrollments (Commonwealth. Dept. of Education. "Superintendent's").

Diabetes. Surveys of the general population suggest that 1,200 to 1,800 school-age children in Kentucky have type 1 diabetes and that 1,100 to 1,700 of these children attend public schools (American Diabetes. *Diabetes*). The prevalence estimated from school district reports is very close to the national average.

Asthma. During the 1980s and 1990s, the prevalence of asthma increased significantly. It is the most prevalent chronic illness facing school-age children. Based on surveys of the general population, the prevalence of childhood asthma in Kentucky is higher than in most other states. The same information also indicates that there should be around 87,000 school-age children with asthma in Kentucky, about 80,000 in the public schools (Child). School districts report only a fraction of these, probably because many students provide care for themselves or have very mild symptoms, so the parents or guardians and students do not inform the districts.

Severe Allergy. There is no way to tell how many people have severe allergies, because they might not have come into contact with the allergens yet. People who are severely allergic to food are the most likely to discover their allergies early, but people who have medication and insect sting allergies are less likely to know about them. Some experts estimate that there are more people with medication and insect allergies than with food allergies (Neugut).

To estimate the number of students with a severe allergy in Table 1.2, staff asked schools to report the number of students with an epinephrine prescription. School nurses pointed out that many physicians prescribe epinephrine as a precaution, even when people do not have confirmed anaphylactic allergy. As a result, the staff estimate may be higher than the actual number of students with a life-threatening allergy; but it is dangerous to try to distinguish people who might have a life-threatening condition from those who actually have one.

Epilepsy. Based on surveys of the general population, there should be 2,900 to 5,400 school-age children with epilepsy in Kentucky, about 2,700 to 4,950 in the public schools (Child). School districts reported somewhat fewer, indicating either that the lower estimate is more likely or that some students have well-controlled seizures that do not require any medication or intervention at school and so are unknown to the districts.

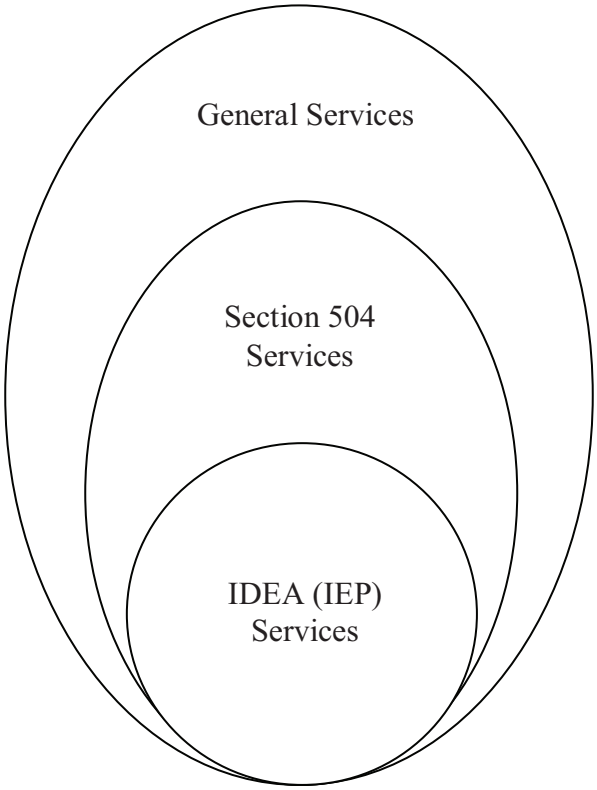
Levels of Student Health Care Needs

Students vary in their levels of need. Figure 1.A illustrates the different levels. The most complex and serious needs are at the bottom and the least at the top.

Students who have a disability that affects their ability to learn qualify for special education services under the Individuals with Disabilities Education Act (IDEA).

Some students have a significant disability that affects their ability to learn. Such students fall under the Individuals with Disabilities Education Act (IDEA). Students with chronic health conditions such as diabetes, asthma, severe allergy, or epilepsy are unlikely to need services at this level. The exceptions are some students with epilepsy who have frequent seizures and as a result learn at a slower pace than other students. For a student whose health condition requires major educational modifications, the school and family develop an individualized education program (IEP) under IDEA that includes arrangements and instructions for necessary care by nursing or unlicensed assistive personnel. IEP services often are provided in special education classes or resource rooms.

Figure 1.A
School Health Service and Accommodation Levels



Source: Adapted by Program Review staff from Silkworth 73.

Kentucky regulations provide for education in the home or hospital for a student whose disability is so severe that school attendance is not possible. When a student participates in the home/hospital program, the family and physician are responsible for the student's health care. The school district is responsible for providing a teacher who visits the student each week. Based on regulations and reports from parents or guardians, home/hospital teachers spend from 1 to 2 hours per week with each student.

Students who need other health services accommodations in order to participate fully in school qualify for services under Section 504 of the Rehabilitation Act of 1973.

Other students with chronic health conditions require some health service accommodations in order to participate fully in school. These students might fall under Section 504 of the Rehabilitation Act of 1973. Many students with chronic health conditions need services at this level. Using a process similar to that used under IDEA, the school and family create a plan outlining arrangements and instructions for the needed health services. Section 504 services and accommodations often are provided for students in the general education environment. Classroom teachers usually are included in creating the plan and are informed of the student's specific needs. For example, a student with diabetes might need extra restroom and water breaks and access to juice or other sources of sugar.

"General services" might not require a Section 504 plan or individualized education program (IEP). Every student with health care needs should have an individualized health care plan (IHP) that includes an emergency action plan. If there is a Section 504 plan or IEP, the IHP should be included in it. All relevant school staff should know about emergency health needs of students.

Most students with chronic health conditions need only occasional, minor services or accommodations in order to participate in school. In this report, we call these "general services." The schools are able to provide these services without a formal Section 504 plan or IEP. The KDE Health Services Reference Guide, in keeping with best practices, recommends that the school nurse develop an individualized health care plan (IHP) for all students who need any health services or accommodations.

For students with a Section 504 plan or IEP, the department recommends that those plans incorporate the IHP. The IHP also should have an emergency action plan section that clearly outlines the procedures to be followed in a medical emergency. Because students with diabetes, asthma, severe allergy, or epilepsy might face life-threatening complications, all such students should have emergency action plans, and all relevant school staff should know about them.

Table 1.3 shows the number of students reported by school districts as receiving services in each category of care. These numbers are far smaller than the numbers of students reported as having these chronic conditions. Other than epilepsy, these conditions should not affect learning and so should not require an IEP. However, it is possible that many more students would qualify for Section 504 plans than currently have them.

Table 1.3
Students With Disabilities From
Chronic Conditions at Each Level of Care

Condition	Home/ Hospital	IEP	Section 504
Diabetes	26	94	427
Asthma	35	163	376
Severe allergy	5	84	358
Epilepsy	37	341	143

Note: Number of districts responding: 168. Some students are included in more than one column. Except for epilepsy, the number of students with IEPs probably is an overstatement because some districts counted students with IEPs that had the given health conditions, not those that had IEPs because of the health conditions. Staff consulted with some districts and corrected some of their IEP numbers.
Source: Program Review information requests to school districts.

The KDE Health Services Reference Guide provides extensive information and guidance on the treatment of each of the chronic conditions covered in this Program Review report. Program Review staff commend the department for this technical assistance to the school districts.

Overview of School Health Services

School health services ensure that the student receives the care that is necessary to participate in school and school-sponsored activities to the fullest extent possible

The primary objective of school health services is ensuring that the student receives the necessary care to participate in school and school-sponsored activities to the fullest extent possible. Usually, this is accomplished by a combination of the efforts of the parents or guardians, school nurse, teachers and other school personnel, and the student.

Key health services questions:
1. Who is responsible for overseeing school health services?
2. What is the school's responsibility for providing the health services that students need in school and at school-sponsored activities?
3. Who should provide the health services that the school is obligated to provide?
4. What are the best practices for providing those services?
5. How can school health services be paid for?

Although there are specific methods for treating each of the four chronic conditions in this study, there are some key questions that determine how all school health services are provided.

1. Who is responsible for overseeing school health services?
2. What is the school's responsibility for providing the health services that students need in school and at school-sponsored activities?
3. Who should provide the health services that the school is obligated to provide?
4. What are the best practices for providing those services?
5. How can school health services be paid for?

Federal and state laws and regulations, as well as local school district and individual school policies, determine oversight and the scope of school health services. Chapter 2 presents the legal framework in Kentucky and other states and recommends ways to improve it.

Medical and nursing best practices also help guide school health services. Chapter 3 describes some of the services actually provided in Kentucky's schools and compares them with best practices. There are recommendations for improvement in the provision and oversight of services.

School districts have to balance the costs of health services with the costs of education. There is no direct state support for school nurses hired by the districts. More and more districts are turning to health departments to provide school health services because Medicaid will pay for some of the care. For individual students, insurance and Medicaid sometimes limit the availability of medications. Chapter 4 explores the financing of school health services and makes a recommendation for improvement.

Chapter 2

Legal Framework of School Health Care

Federal Provisions Relating to School Health Care

Section 504 of the Rehabilitation Act of 1973 and IDEA are the two major pieces of federal legislation affecting students with disabilities.

A number of federal laws, regulations, and court decisions relate to health services in schools. Section 504 of the Rehabilitation Act of 1973 and IDEA are federal laws affecting students with disabilities. Both laws are designed to protect individuals from discrimination on the basis of disability, and they overlap in many ways.

Section 504

The definition of a person with a disability is intentionally vague under Section 504, leaving the determination up to the schools. Schools are required to follow procedures to assess accurately the disability status of students.

Section 504 of the Rehabilitation Act of 1973 prohibits agencies and programs receiving federal funding, such as public elementary and secondary schools, from discriminating against people with disabilities. A person has a disability if he or she

- has a physical or mental impairment which substantially limits one or more major life activities,
- has a record of such an impairment, or
- is regarded as having such an impairment (34 CFR Part 104).

Section 504 does not specify the impairments that would qualify as disabilities, nor does it provide a comprehensive list of major life activities. For these reasons, a determination of whether or not a person has a disability under the law is made on a case-by-case basis. The law requires school districts to identify potentially qualified students and to conduct an evaluation that includes tests and other procedures that will accurately assess the student's capabilities and needs. School districts usually convene a committee consisting of school staff and parents or guardians to examine the information and determine whether a student qualifies. KDE recommends that a school nurse be part of the committee for health-related disability determinations. Once the evaluation is completed, the same committee develops a Section 504 plan. The plan ensures that reasonable accommodations are made for the student, including regular or special education and related services.

For students with disabilities, schools must provide a free appropriate public education in the least restrictive environment.

The law requires schools to provide a free appropriate public education for qualified students. Education and related services must be provided to students with disabilities, regardless of the severity of their conditions, without cost to the students or their

families, except for any charges imposed on students without disabilities or their families.

An implicit requirement is to provide the education in the least restrictive environment. This requirement is not stated explicitly in Section 504 but has been inferred from regulations (Schwab 339). Typically, the least restrictive environment for students with chronic health conditions is the same general education classroom as students without disabilities, where they receive any needed supplemental services. If this cannot adequately be accomplished and the student must be placed in a different setting, the proximity to the student's home must be taken into account.

Some districts have placed students in a designated school with a school nurse. Disability and education attorneys and federal courts differ on what constitutes the least restrictive environment.

Some districts have placed students with chronic health conditions in a designated school that has a school nurse, asserting that the cost of having a nurse at every school is prohibitive. The degree that cost must be considered is a point of disagreement among disability and education attorneys. Some assert that decisions should favor the student's placement ahead of cost (Schissler). Others assert that the district may fulfill its obligations by providing the services in a designated school (Lambert. July 31). Federal court decisions seem to indicate that there is no simple test to determine either placement.

The Americans with Disabilities Act Amendments Act of 2008 made a number of changes in disability law, including changes to Section 504 regarding the definition of a person with a disability.

Americans with Disabilities Act Amendments Act. Congress has kept Section 504 closely in conformance with the Americans with Disabilities Act. The Americans with Disabilities Act Amendments Act of 2008 included significant changes to Section 504 that may affect students with chronic health conditions. The changes generally indicated a broader interpretation of the term "disability" and may result in protection for a larger number of people. The new definition included additional examples of bodily functions or systems that might be impaired and major life activities that might be limited. The amendments also clarified that an impairment with symptoms presenting only on occasion or a condition that is in remission must still be considered a disability if it would substantially limit a major life activity when it is active. Perhaps most importantly, the amended act required that a disability be determined as it presents itself without mitigating measures, such as medications.

Education officials asserted that students with chronic health conditions would have been covered by the previous definition of disability. However, school district numbers showed few such students had Section 504 plans.

Although these changes have the potential to affect how districts determine eligibility for protection under Section 504, KDE's Office of Special Instructional Services asserted the changes would not greatly alter the eligibility of students with conditions of diabetes, asthma, severe allergy, or epilepsy. The office's position

was that they would have been covered under the old definitions (Lambert. August 3). However, Program Review information requests indicated that most students with chronic health conditions did not have Section 504 Plans or other special education plans, as shown in Table 2.1. It seems likely that many more of them are eligible than have been identified, possibly under the old criteria and certainly under the new ones.

Table 2.1
Percentage of Students With Chronic Conditions Having a Section 504 Plan or Individualized Education Program

Condition	Section 504	IEP
Diabetes	26%	6%
Asthma	1	1
Severe allergy	8	2
Epilepsy	6	14

Note: Number of districts responding: 168. Except for epilepsy, the percentage of students with individualized education programs (IEPs) probably is an overstatement because some districts counted students with IEPs that had the given health conditions, not those that had IEPs because of the health conditions. Staff consulted with some districts and corrected some of their IEP numbers.
Source: Program Review information request to school districts.

Enforcement of Section 504 is through the federal Department of Education and federal courts.

Enforcement. States are not required to have an appeal procedure for Section 504 decisions. The federal Department of Education's Office for Civil Rights examines complaints about whether a school district followed the required process. However, the office usually does not consider whether the decision itself was warranted by the evidence. If parents or guardians are not satisfied with the decision, and the decision was reached through a proper process, their recourse is federal court.

Individuals with Disabilities Education Act

IDEA applies to more severe disabilities than does Section 504.

Originally enacted in 1975 as the Education for All Handicapped Children Act, the Individuals with Disabilities Education Act was intended to meet the educational needs of students with disabilities who would likely not have an opportunity for an education. Like Section 504, IDEA requires the provision of a free appropriate public education. States must ensure that students with disabilities in need of special education and related services are identified and evaluated. IDEA requires that education and related services be provided in accordance with an individualized education program. The IEP is developed in a manner similar to the Section 504 plan and outlines the student's needs and the plan for meeting them. IDEA explicitly requires the least restrictive environment for

students with disabilities. As with Section 504, the standards for least restrictive environment are unclear.

Because IDEA was designed for students with severe conditions that would necessitate special education, many of the students with the conditions reviewed in this study would not fall under IDEA. As Table 2.1 shows, some students with severe epilepsy may require special education and be subject to the provisions of IDEA. The table probably also includes some students who have IEPs for other reasons but also have one of the chronic health conditions.

IDEA provides some federal funding to assist in accomplishing its goals while Section 504 does not.

A significant difference between Section 504 and IDEA is that limited direct funding for IEP services is available through Part B of IDEA. In addition, Medicaid will reimburse schools for services provided under an IEP if the services are covered by the state Medicaid plan. There is no federal funding for Section 504 services.

States are responsible for the first level of IDEA enforcement and dispute resolution. State and federal courts may hear IDEA cases.

Enforcement. States are required to have an appeals process for IDEA decisions. The Kentucky Board of Education has established three processes for dispute resolution: mediation, formal written complaint, and due process hearings. If parents or guardians are not satisfied with the resolutions offered, they may turn to state or federal courts.

Judicial Interpretation of Key Issues

A number of concepts related to IDEA and Section 504 have been tested in court and by federal administrative offices, resulting in additional guidance for state and local educational agencies. Even so, disagreements continue to occur because the statutes were designed to allow local decision making on a case-by-case basis.

Courts have found that districts must provide nursing services regardless of cost, but not physician services. Free appropriate public education has been defined to include field trips and other school-sponsored activities.

Courts have ruled that if a health service task does not require a physician and can be performed by a nurse or other qualified person, then it must be provided to the student. It was reasoned that congressional intent may have been to exclude medical services because of their high cost and that the exclusion could imply an obligation to provide school nursing services (*Irving v. Tatro*, 468 US 883 (1984)). Other cases have confirmed this and have further stipulated that costs should not be taken into consideration for eligible school health services since the law does not consider the costs associated with those tasks (*Cedar Rapids v. Garret*, 526 US 66 (1999)). Field trips and other extracurricular activities have been addressed by the United States Department of Education's Office for Civil Rights, which affirmed that students

with disabilities should be accommodated for school-sponsored activities (OCR No. 09-08-1395 (2009)).

The United States District Court for Eastern Kentucky ruled that costs could be considered when deciding where to provide a school health service.

Other courts have placed more emphasis on the costs to the school district. In 2008, the United States District Court for the Eastern District of Kentucky ruled in *B.M. v. Board of Education of Scott County, Kentucky* (2008 WL 4073855 (E.D.Ky.)) regarding the location of accommodations required by federal laws for a student with diabetes. The district had placed the student at a more distant school that already had a nurse rather than providing a nurse at the school the student would ordinarily attend. The district also provided transportation for the student. The court found that the district had met its obligation under Section 504.

According to the courts, a free appropriate public education does not guarantee a particular level of achievement. Schools are obligated to follow proper procedures and to provide a reasonable plan that ensures appropriate access to education (*Hendrick Hudson v. Rowley*, 458 US 176 (1982)).

School Food Services and Students With Chronic Conditions

Dietary accommodations may need to be made for a student with a chronic health condition. This requires assistance from the school food services staff.

Some students with chronic health conditions need special diets to maintain a stable condition. Examples of special diets include a low-sugar diet for students with diabetes, a ketogenic diet for students with epilepsy, or a diet that does not contain certain foods for students with severe allergies. Federal regulations issued by the United States Department of Agriculture (USDA) state that special meals must be served to a student who has a disability under Section 504 or IDEA when the need for the diet is certified by a medical provider. The meals must be served at no extra charge to the student (7 CFR 15b.40). Such a diet might be incorporated into the student's Section 504 plan or IEP, but this is not a requirement.

A school district is not required to provide a distinct food service to a student with a disability when the requested service is not offered to the general student population, unless it is specified in the student's IEP. For example, the school would not be required to provide breakfast if there is no breakfast service offered at the school. However, a school may agree to provide such a service voluntarily and may make it part of the IEP.

USDA guidance states that when a student has an anaphylactic allergy, measures should be taken to ensure the student's safety. School food service staff should make sure that foods given to the student meet the guidelines of the physician's order and that these

foods do not contain and have not come into contact with the prohibited allergen. In some extreme cases, separate meals may be made for students in order to avoid the potential for the ingredient to be served in processed or prepackaged foods. USDA's guidance also notes that in these cases, the student may be receiving a different meal from other students but a meal that is considered equivalent within the student's dietary restrictions.

It is not clear whether school staff may require students to choose and eat the foods provided for their special diets.

School district staff raised concerns about students who refuse to eat the foods in their diets or who insist on eating other foods. Some school officials asserted that schools are not allowed to tell students that they must eat or not eat certain foods. The responsibility of food services staff to require students to choose and eat the foods provided for their special diets is unclear.

Access to Student Health Records

Most school districts need to exchange educational records and health information with health departments. The federal education privacy law can be an obstacle when health department nurses access educational information. The federal health information privacy law can inhibit easy sharing of health services documentation. Federal guidance is not clear on this topic.

Most school districts have contracts with outside agencies, primarily health departments, for school nurses. The districts and health departments need to share both educational records and health information. The federal education privacy law can be an obstacle when health department nurses need educational information or need to enter information into the educational record. The federal health information privacy law can be a barrier to transferring health services documentation easily to school staff. The analysis in this section is tentative because Program Review staff were unable to find definitive federal guidance that clearly covered these situations.

The Family Educational Rights and Privacy Act protects the privacy of student educational records, such as student health records maintained by the school.

Records Maintained by the School. The Family Educational Rights and Privacy Act (FERPA) protects the privacy of student educational records. There are only a few situations under which records may be disclosed without permission of a parent or guardian. Any student health records maintained by the district are considered educational records and are covered by the Act.

Health department nurses frequently need educational records. These nurses also might see educational records when entering health information into student records. Most contracts with health departments do not meet the standard for sharing information with contractors.

FERPA may affect the access that contract nurses have to student records. Health department nurses frequently need to access educational records, including Section 504 plans, IEPs, and student behavioral records, in order to make proper nursing assessments and plans. Also, the districts may request these nurses to enter information into student records, such as medical alerts, health conditions, medication administration notes, immunizations, health screenings, and physical examination forms. While doing so, the nurses may see student information other than the information they are entering. Both types of access may be prohibited by the Act.

In order to meet the requirements of FERPA, the health provider's contract would have to specify that the nurses are "under the direct control of the agency or institution with respect to the use and maintenance of education records" and the provider must agree not to disclose educational information to anyone else without prior consent of the parent or guardian (34 CFR 99.31(a)(1)(i)(B)). Most, if not all, health department contracts fail to meet this standard, so there is some risk that districts with health department nurses sometimes violate the Act.

The Health Insurance Portability and Accountability Act (HIPAA) may prevent districts from seeing information about health department services provided in the schools. Federal guidelines are vague on the Kentucky model.

Records Maintained by a Health Services Provider. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) places restrictions on who may access health records without the permission of the patient or, for children, the parents or guardians. The HIPAA privacy rule applies primarily to health care providers who transmit health information electronically to other parties, including insurers and Medicaid.

Problems can arise when school health services are provided under a contract. Rather than contracting for school nurses to work under school supervision, Kentucky school districts contract with health departments for health services. Even so, school district staff still need to have records of health conditions, care plans, medication administration, immunizations, health screenings, and physical examinations.

Federal guidelines appear vague regarding the Kentucky model. The joint FERPA and HIPAA guidance clearly covers school nurses who are contracted directly to the school district. Health records in that situation are considered educational records subject to FERPA under an explicit federal exception to HIPAA (US. Dept. of Health and Human Services and Dept. 3).

The guidance also covers health services on school premises by parties "not employed by, under contract to, or otherwise acting on behalf of the school." In that case, the health records are not subject to FERPA but are subject to the HIPAA privacy rule, as long as the services are billed electronically (US. Dept. of Health and Human Services and Dept. 4-5).

In Kentucky, health departments supervise their school nurses, who provide health services at the school district's request. Existing contract language might subject health department records to the HIPAA privacy rule.

The Kentucky model differs from either of these because the health departments provide school health services at the request of the school districts so that the districts can fulfill their obligation to provide those services. At the same time, most contracts specify that the nurses are under health department supervision and that the

medical records belong to the health departments. Many of the contracts assert that the medical records are covered by HIPAA.

If a student's school health record is covered by HIPAA, then it probably is a violation for the health department to allow school district staff to access that information without explicit consent of a parent or guardian. That might be true even if the district has its own nurse to receive the information. Although HIPAA allows health care providers to share information for treatment purposes, the district nurse in this case would not be providing treatment (US. Dept. of Health and Human Services and Dept. 6).

Medicaid would not pay if school districts contracted with health departments for nurses to work under district supervision.

Program Review staff asked the Department for Medicaid Services whether a health department could bill for services if the school district contracted for nurses to work under district supervision. Although this arrangement would define all health records as educational records under FERPA, Medicaid would not permit the health department to bill for services, making the plan impractical (Dunn).

Three possible avenues for resolution are
- seeking guidance from federal health and education agencies,
- including permission to share information in the consent for treatment, or
- establishing a "business associate" relationship between districts and health departments, if possible.

It is not clear whether the last option is workable.

There appear to be at least three possible avenues for resolution of this issue. Program Review staff recommend that KDE and the Department for Public Health consult with HIPAA experts and consider all possibilities.

- The federal Department of Health and Human Services and Department of Education might provide specific guidance. Staff suggest that the Kentucky agencies contact the federal agencies; describe the Kentucky model; and ask whether the model permits sharing of information and, if not, how it might be modified to permit such sharing.
- Generally, parents or guardians must sign a consent form before the school health provider can treat their child. It might be possible to include permission to share information on the consent form.
- It is possible that a school district could be considered a "business associate" of a health department under HIPAA. At least one health department contract asserts that the school district is a business associate. However, it is not clear that the definition would apply because one federal document says disclosure is

  > *only* to help the covered entity carry out its health care functions—not for the business associate's independent use or purposes, except as needed for the proper management and administration of the business associate (US. Dept. of Health and Human Services. *Business* 1).

In this case, the health department is the "covered entity." All discussions of business associates imply that the access is provided on behalf of or to assist the covered entity.

Until the issues are resolved, it would be prudent for districts to treat health departments as if they were the families' physicians and exchange forms through parents or guardians.

In the absence of a relationship that permits sharing of health information, it would be prudent for each district to treat the health department in the same manner as a family's physician. The parents or guardians would be responsible for having the appropriate forms filled out and sent to the school or health department.

Recommendation 2.1

Recommendation 2.1

In consultation with appropriate experts and federal authorities, the Kentucky Department of Education and the Department for Public Health should design a model relationship between school districts and local health departments that will permit the legitimate sharing of health information and educational records under federal education and health privacy laws, and they should ensure that school districts and local health departments establish relationships that conform to that model.

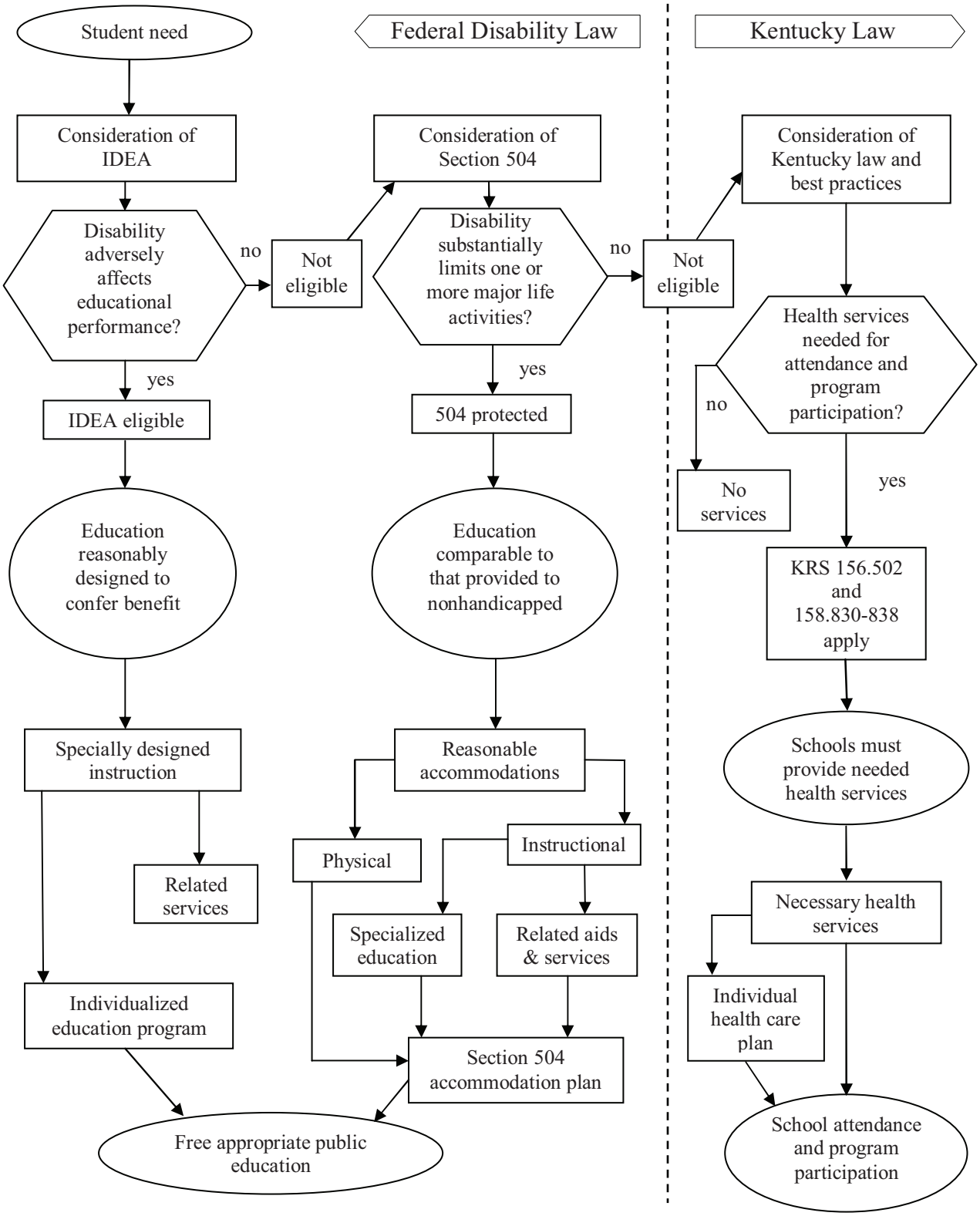
Kentucky's Laws Regarding School Health Services

Kentucky's fundamental school health policy is to "reduce physical … barriers to learning." Kentucky law applies after the requirements of federal disability laws have been met.

The General Assembly established the fundamental public policy on school health when it stated that "Schools shall reduce physical and mental health barriers to learning" (KRS 158.6451(1)(e)). Kentucky has a number of statutes and regulations related to health services in the school setting. Some of them meet requirements of federal legislation while others address general health services, including some specific chronic conditions.

Figure 2.A illustrates the process by which the level of services required for a student is determined under both federal and state laws. In this chart, the student is considered first for services under IDEA. If that level of service is not necessary, then the student is considered under Section 504. If a disability is not found, but health services are required for attendance and participation, Kentucky law applies. The individual health care plan is a document recommended in the KDE Health Services Reference Guide and nursing literature, although it is not mandated by law or regulation.

Figure 2.A
Decision Process for Levels of School Health Services



Source: Adapted by Program Review staff from Zaiger IX-23.

KRS 156.501 focuses on KDE's function, and KRS 156.502 focuses on the districts' roles in providing health services. These are the two primary statutes related to school health services.

KRS 156.501 focuses on KDE's function, and KRS 156.502 focuses on the districts' roles in providing health services. These are the two primary statutes specifying basic requirements for school health services.

Guidance and Technical Support

In response to KRS 156.501, KDE developed the Health Services Reference Guide; employed a school nurse consultant; and provided consultation and technical assistance to school districts, schools, and health departments.

KRS 156.501 charges KDE with providing guidance to local districts for student health services as well as developing and making available standard guidelines for the delivery of health services in schools, including items related to training, delegation, record keeping, and data collection. The Health Services Reference Guide is published by KDE and is available to school districts.

The statute also requires that KDE create a position to assist in carrying out the responsibilities contained in the statute. The Department for Public Health and KDE each must provide half the cost. The KDE school nurse consultant satisfies this requirement. KRS 211.287(3) clarifies the relationship by stating:

> It is the intent of the General Assembly that there be no duplication of services or duties between the Department of Education and the Department for Public Health relating to school health services and that the position created in KRS 156.501(2) serve as a technical advisor and liaison among state agencies, local school districts, and local health departments.

KRS 156.501 states that it is KDE's responsibility to provide consultation and technical assistance and to develop quality improvement measures for school districts, schools, and health departments. The KDE school nurse consultant has been working on these tasks.

Providers of Direct Health Services

KRS 156.502 describes how health services, other than emergency procedures, should be provided.

KRS 156.502 describes how health services are to be provided. Health services are defined as direct health care such as medication administration, the use of medical equipment, or the administration of clinical procedures. First aid and emergency procedures are excluded from the definition.

Physicians, nurses, and properly trained and delegated unlicensed school employees may provide school health services.

The statute dictates who may provide health services to students in school. Those permitted to provide services are physicians, advanced registered nurse practitioners, registered nurses, licensed practical nurses, and unlicensed school employees who have been properly trained and delegated.

Unlicensed assistive personnel (UAP) must be trained and delegated by a physician, advanced registered nurse practitioner, or registered nurse only for tasks within the permitted scope of practice. The Kentucky Board of Nursing and Board of Medical Licensure are responsible for defining the scope of practice.

Unlicensed school employees to whom tasks are delegated under the statute are known generally as unlicensed assistive personnel (UAP). The provider delegating the tasks must be a physician, advanced registered nurse practitioner, or registered nurse. Further, providers may delegate only those tasks that are permitted within their scope of practice. This provision makes the Kentucky Board of Nursing and Board of Medical Licensure responsible for determining what can be delegated.

Delegation must include training and written documentation in the UAP's personnel file to show competence and voluntary acceptance of the task. The specific students for whom the UAP will provide care must be determined and a copy of the UAP's delegation form placed in the students' record. The statute does not address supervision of the UAP, leaving that issue to the delegators' respective licensing boards.

Because UAP are not covered by malpractice insurance, the statute establishes protection from liability except in cases of negligence or other misconduct.

Inconsistencies between the statute and practice rules make it difficult for providers to know what is and is not permitted in schools.

- The delegating provider in school must train the UAP.
- The statute does not indicate what to do when a delegating provider changes.
- Licensed practical nurses may not delegate in schools but may do so in other settings.

These issues might be addressed by the General Assembly or the regulating agencies.

The relationship of this education statute with the nursing and medical licensure rules makes it difficult for providers in the schools to know what is and is not permitted. In addition to determining the scope of practice and level of supervision, the nursing and medical boards specify other rules that all nurses and physicians must follow. There are at least three ways that this statute and the nursing and medical practice rules are inconsistent.

- The education statute requires the delegating provider to train the UAP. In other settings, the delegating provider may accept adequate training from other sources.
- The statute does not indicate what should happen when the delegating provider changes. Although nursing and medical rules require the new provider to be responsible for the UAP and to ensure that the UAP is competent and appropriate for the student, it is not clear whether this statute requires the new provider to repeat the training and whether the written delegation must be redone.
- Licensed practical nurses in other settings may delegate to UAP, but the education statute does not include these nurses among the providers who may delegate in the schools.

These issues might be addressed by the General Assembly or by the regulating agencies. The agencies with jurisdiction are KDE, the nursing board, and the medical board.

Obligation To Provide Services

The statute requires school districts to "make any necessary arrangement" for health services to ensure "the student's attendance or program participation." This might require hiring a nurse or physician.

KRS 156.502(3) states:

> If no school employee has been trained and delegated responsibility to perform a health service, the school district shall make any necessary arrangement for the provision of the health service to the student in order to prevent a loss of a health service from affecting the student's attendance or program participation.

This subsection appears to establish the policy that students should be able to attend and participate in school regardless of their health service needs and regardless of cost to the district. It also appears to require school districts to use a nurse or physician to provide services when necessary. This would include the performance of tasks that cannot be delegated to UAP.

It is not clear whether school districts must provide health services at the school that the student would ordinarily attend. Tennessee and New Jersey have enacted such a requirement.

Like federal laws, Kentucky's laws are not clear on whether schools are required to provide health services in all schools or just in designated schools. KRS 159.070 states that parents or guardians are permitted to enroll their children in the school located closest to their homes. Program Review staff asked whether this implies a requirement that school districts provide any needed health services under KRS 156.502 in that school. Staff from the Legislative Research Commission's Office of Education Accountability suggested that the law does not mean the student must actually attend that school; rather, the district must allow the parent or guardian to enroll the student at the nearest school, but the necessary health services might require attending a different school.

Some states have decided that school health services should be provided in the school the student would ordinarily attend, at least under certain circumstances. Tennessee law specifically prohibits school districts from assigning a student to a school other than the one he or she would normally attend because the student has diabetes or epilepsy. New Jersey law has a similar provision for students with diabetes.

It is not clear whether school districts must provide health services at all school-related activities, during or outside the school day. Federal law does require health services in all these settings if the student is determined to have a disability.

Kentucky law also is not clear on whether schools are required to ensure attendance and participation in all school-related activities, such as transportation to and from school, field trips, before- and after-school activities, and school-sponsored events. The term "program participation" in KRS 156.502 is not defined. It might mean educational programs at school during the school day; or it might mean the entire array of school-related settings. Some statutes, such as KRS 158.838, apply during the "school day"; but

KRS 158.836 refers to all school-related activities. For students found to have a disability, however, federal laws prevail and require schools to make reasonable accommodations for participation in all school-related activities.

While most districts would provide health services in most settings, some districts would not provide services in certain settings. Students determined to be disabled under federal law must be provided services in all settings.

Most Kentucky districts reported that they would provide health services for students with diabetes, asthma, severe allergy, and epilepsy in most cases in most settings. There were some settings, such as buses to and from school, that were frequently mentioned as settings for which the district would not provide services. Table 2.2 shows the percentage of districts that would **not** provide services in each setting.

Table 2.2
Percentage of Districts Reporting They Would Not Provide Health Services for Students With Chronic Health Conditions

Setting	Diabetes	Asthma	Severe Allergy	Epilepsy
At school student would normally attend*	1%	1%	1%	1%
At any school in the district**	2	1	1	1
At before- or after-school activities	21	11	11	13
On buses to or from school	40	18	17	20
On daytime field trips	9	4	3	7
On overnight field trips	28	15	12	17
At other school-sponsored events	23	11	11	17
At summer school programs	30	20	16	21

Note: Number of districts responding: 168.
*These districts reported they would provide services, but not necessarily at the school the student would normally attend.
**These districts reported they would not provide services at any school in the district.
Source: Program Review information request to school districts.

Services Provided by Parents or Guardians

Schools generally accept that parents or guardians may provide health services for their children in school, but it is not mentioned in statute. Other issues are whether a parent or guardian may designate a school employee to provide services and whether a parent or guardian may provide services while employed by the school.

Although it is generally accepted that parents or guardians and people designated by them may perform health service tasks for their children in school, Kentucky's statutes and regulations do not mention it specifically. KRS 156.502 might even be interpreted to prevent parents or guardians from doing so. There also are questions of whether parents or guardians may designate school employees to perform health service tasks for their children and whether parents or guardians who are school employees may perform those tasks for their own children in school without being delegated by a nurse. Nevada regulations, for example, are more specific and state that a parent or guardian may designate someone to provide care in schools as long as that person is not a school employee.

Diabetes and Epilepsy Emergency Medications

KRS 158.838 addresses students with diabetes and epilepsy in emergency situations.

KRS 158.838 requires schools to be able to provide emergency care for students with diabetes and epilepsy, which is referred to in statute as "seizure disorder." The statute says that at least one school employee meeting the requirements of KRS 156.502 must be available during the entire school day at each school in which a student is enrolled who has diabetes and has been prescribed glucagon or who has epilepsy and has been prescribed diazepam rectal gel. The parent or guardian is responsible for providing the prescribed medication.

The statute requires schools to have an employee trained and delegated to administer medications, which may be problematic. Another issue is a new emergency drug for epilepsy that is not covered by the statute.

The wording of KRS 158.838 is potentially problematic in two ways. First, the word "employee" is more restrictive than the wording in KRS 156.502 and limits the options of the school district. Physicians and nurses, as well as UAP, meet the requirements of KRS 156.502 and would be able to satisfy KRS 158.838. The former statute does not require that the physician or nurse be an employee of the district. Under the latter statute, however, only physicians or nurses employed by the district would meet the requirement to provide emergency care. If "employee" is interpreted to exclude contracted providers, such as health department nurses, the districts would be unable to use them to satisfy the statute.

The second issue is that KRS 158.838 mentions two specific medications. These medications have been and remain standard medications for the emergency situations described. Medical treatments change, however, and a few school nurses reported that some physicians now prescribe a midazolam nasal spray as a substitute for diazepam. Because the law did not anticipate this change, school districts are not required to have someone trained to administer midazolam in a seizure emergency. In general, it is possible that other changes in medical treatments will occur and not be covered by the statute.

Self-carry and Self-administration

KRS 158.830 to 158.836 address a student's ability to carry and self-administer medications for asthma and severe allergy (anaphylaxis).

Kentucky law addresses asthma and severe allergy (known as anaphylaxis) differently than diabetes and seizure disorders. Instead of dealing with emergency situations, KRS 158.830 to 158.836 focus on self-care for students with either asthma or anaphylaxis. The laws require school districts to allow students with asthma or anaphylaxis to possess, carry, and self-administer prescribed medications. The school must have written permission from the student's parent or guardian and documentation from the student's physician before the student can self-administer. The

permission for self-administration allows students to possess and use their medications while at school, at a school-sponsored activity, under the supervision of school personnel, or before and after normal school activities while on school property, which includes school-sponsored child care or after-school programs.

The statutes do not provide a way for schools to respond to misuse of medications, and they do not address emergencies or need for the assistance of school personnel.

Several school nurses stated that some students misused their medications even though the parents or guardians and physicians had approved the students to carry and self-administer them. Examples included overuse of a medication and sharing or playing with a medication. School districts are placed in a dilemma because KRS 158.834 and 158.836 do not allow any discretion if the parents or guardians and physicians have provided the proper paperwork. Schools may discipline the students but may not revoke permission to carry and use the medications. School districts may ask the parents or guardians and physicians to reconsider their approval.

Another aspect of KRS 158.830 to 158.836 may be problematic. The statute does not create an obligation for schools to have someone present who can administer the medication in an emergency when the student is unable to do so because of immaturity or incapacity. Younger students with asthma and severe allergy might not be authorized to carry and self-administer these medications and would need someone to assist them. Further, any student suffering an asthma attack or anaphylaxis might be unable to self-administer emergency medications before becoming incapacitated. Only a few other states have laws specific to emergency administration of asthma medications, but several states do require schools to have UAP who can recognize and respond to anaphylaxis.

It is possible that these and other emergency procedures would be considered part of first aid training. At least one adult trained in first aid and cardiopulmonary resuscitation is required by 704 KAR 4:020 to be present during the school day. The regulation does not specify whether first aid training should cover the emergency use of asthma inhalers, epinephrine, or other medications and does not mention settings outside the school day.

There is no statute that addresses self-carry and self-administration of emergency or routine medications for other health conditions, such as diabetes.

Kentucky law does not address self-carry and self-administration of interventions for other conditions, whether emergency or routine. For example, schools generally permit students to self-administer insulin. However, some students with epilepsy have a vagus nerve stimulator device and are able to apply it themselves if they notice the beginning signs of a seizure; many school districts indicated that they would not allow students to do so.

Regulation of Health Services

Kentucky Board of Education Regulations

There are no Kentucky Board of Education regulations directly addressing routine health services for students. There are no regulations and little guidance on the Section 504 process.

When asked about regulation of school health services, the Kentucky Board of Education responded that it had the authority to promulgate regulations for statutes under its jurisdiction, which included KRS Chapters 156 through 163 (Miller). These chapters include all the Kentucky statutes directly related to school health services. So far, the board has promulgated no regulations directly clarifying and specifying the requirements and procedures for providing routine health services to students; that is, services other than first aid, emergency care, and preventive care.

Similarly, there are no regulations and little guidance from the board or from KDE on the process of identifying, evaluating, and planning for a student with a disability under Section 504. The KDE Health Services Reference Guide provides a brief summary of the process and an example of a Section 504 plan. This is especially problematic for districts that use health department nurses who are not involved in the development of Section 504 plans.

In 2009, the board amended a regulation in order to require standardized training for medication administration.

In 2009, the board amended 704 KAR 4:020 to require standardized medication administration training that is approved by the Board of Nursing. It demonstrates that the Board of Education not only has the authority to regulate school health services but also can do so in cooperation with other agencies.

Other Education Regulations

Other regulations require each district to have a school district health coordinator and specify how IDEA should be implemented.

The position of school district health coordinator was created in 704 KAR 4:020. It states that the superintendent shall designate someone to serve in this capacity. Upon meeting the qualifications determined by the Education Professional Standards Board, the coordinator must work in cooperation with other personnel and agencies in both the school and the community to implement a school health services program.

Special education programs under IDEA are addressed in 707 KAR 1:002 to 1:380. Some students with chronic health conditions receive special education, either because of their conditions or for other reasons. The regulations specify what steps need to be taken to ensure that the state, as well as local school districts, provides a free appropriate public education to students as required by IDEA.

Kentucky Board of Nursing Regulations

Nursing regulations impact how nurses provide health services in schools, what tasks they may delegate, and how they must supervise UAP.

Because KRS 156.502 defers to the scope of practice of nursing, the Kentucky Board of Nursing determines the tasks that nurses may perform in the schools. The Kentucky Board of Education could further specify the services schools may provide, but it may not regulate the scope of nursing practice. For example, the education board might require schools to provide services outside the nursing scope of practice, but nurses could not be the providers.

State nursing laws and regulations determine what is considered to be within a nurse's scope of practice. KRS 314.011 defines the scope of practice for advanced registered nurse practitioners, registered nurses, and licensed practical nurses. Of the three, advanced registered nurse practitioners have the highest level of practice. For example, they can order treatment, prescribe drugs, and order diagnostic tests. Registered nurses have a narrower scope but may still provide care; give medications; and train, supervise, and delegate. Licensed practical nurses may provide care; administer medication; and train, supervise, and delegate within their more limited scope of practice.

Advanced registered nurse practitioners and registered nurses may delegate certain tasks to unlicensed school employees but licensed practical nurses may not under KRS 156.502. UAP perform many health service tasks for students in the absence of, or in addition to, a licensed professional. KRS 314.011 defines "delegation" as "directing a competent person to perform a selected nursing activity or task in a selected situation under the nurse's supervision and pursuant to administrative regulations promulgated by the board [of nursing]…."

The nurse's responsibility in the delegation process and other requirements are described in 201 KAR 20:400. At least three major points are addressed in the regulation:

- tasks to be delegated,
- training, and
- supervision and accountability.

A delegated task must be one that a nurse may prudently delegate and must be determined to be appropriate for the specific student.

The regulation states that a nurse may delegate a health care task within a nurse's scope of practice. Nursing regulations expand on the education statute, stating that UAP may perform health service tasks for a specific student only after a nurse has confirmed that it is appropriate for that student. Before delegating a task, the nurse must "determine the nursing care needs of the client. The nurse

shall retain responsibility…for…nursing assessment, planning, evaluation and assuring documentation."

The regulation does not list the tasks that may be delegated, but rather states that the task must be one that "a reasonable and prudent nurse would find is within the scope of sound nursing judgment and practice to delegate" and that "can be competently and safely performed…without compromising the client's welfare" and that "shall not require…independent nursing judgment or intervention."

The board sometimes issues advisory opinion statements to address questions that are not covered explicitly in regulations. These statements do not have the force of law, but they do indicate what the board considers appropriate nursing practice.

The nursing board has advised that nurses should not delegate calculation of drug dosage, injection of any drug, counting carbohydrates, and administration of insulin through a pump. Injection of certain emergency drugs may be delegated.

Advisory Opinion Statement 15, originally issued in 1987 and most recently revised in 2005, offered additional guidance for the supervision and delegation of tasks to unlicensed personnel. The opinion discusses nursing acts that should not be delegated, including the calculation of a drug dosage and the administration of medication by injection. Injection of glucagon, epinephrine, and diazepam in emergency situations in the school setting were excluded and may be delegated (Commonwealth. Board of Nursing).

A nursing board representative told Program Review staff that the opinion also covers counting carbohydrates and insulin administration using a pump. Counting carbohydrates is considered part of calculating a dose and administration of insulin through a pump is considered an injection (Mercer).

Training is an important part of the delegation process. In general, training is not standardized across the state, but medication administration training has been developed.

To delegate a task to an unlicensed person, the nurse must either have instructed the individual in the performance of the task or otherwise confirmed the competence of the unlicensed person to perform the task. The nursing regulation does not specify a particular method of training.

In collaboration with the nursing board and the Department for Public Health, KDE developed a module to train UAP in the administration of medications. The nursing board approved the training. The amended education regulation requires that all UAP receive the training starting in the 2010-2011 school year. The first training of trainers was conducted in March 2010.

The regulations are flexible about the degree of supervision and who may provide it. More explicit guidance might be helpful.

Supervision and accountability are part of the delegation process. "Supervision" is defined as

> the provision of guidance by a qualified nurse… with periodic observation and evaluation of the performance of the task including validation that the nursing task has been performed according to established standards of practice (201 KAR 20:400).

The regulation says the degree of supervision is to be determined by the nurse based on certain factors, which permits variation in the frequency and type of supervision. Some school districts may have no nurses providing health services but may have a nurse who delegates to UAP and is on call for questions. Although the delegating nurse bears ultimate responsibility and is accountable for the tasks performed by the UAP, more explicit guidance about acceptable levels of supervision might be helpful.

Board of Medical Licensure Opinion

The Board of Medical Licensure issued an opinion that a physician may train and delegate to UAP any tasks that the physician may perform and that the physician determines the UAP may safely and effectively perform.

KRS 156.502 permits physicians to provide care in schools and to delegate to school employees so that they may perform health service tasks. Unlike the nursing board, until December 2009, the medical board had issued no regulations or other guidelines for delegation by physicians to school employees. On December 17, 2009, the medical board issued an opinion that

> a duly licensed physician may provide any health service, in a school setting, which the physician is qualified to perform.… Furthermore, it is the opinion of the Board that a duly licensed physician may train school employees to perform any health service (medical procedure) which the physician is qualified to perform… and, which the physician determines may be safely and effectively performed by an unlicensed school employee. Once the physician has determined that the school employee may provide the particular health service(s) in a safe and effective manner, the physician may delegate the authority to that school employee(s) to perform the health service(s) (medical procedures) in a school setting pursuant to their employment (Commonwealth. Board of Medical 4).

The opinion leaves training and supervision of UAP to the discretion of physicians. It appears to apply even when the physician has no formal relationship with the school district, such as the family's physician or the student's parent or guardian who is a physician. The education regulation requiring that UAP receive specified training would still apply to these UAP.

This opinion does not describe how such a UAP should be trained or supervised but leaves those decisions to the physician. Also, the physician apparently is not required to have a formal relationship with the school district; rather, any physician, including the family's physician or the student's parent or guardian who is a physician, may train UAP and delegate tasks to them.

Education regulations must be considered in addition to medical practice. The amended education regulation, 704 KAR 4:020, requires any UAP who administer medication to complete a training approved by the Kentucky Board of Education. It will be important for physicians and school administrators to understand that a UAP must receive this training before administering any medication, even if the task was delegated by a physician.

Regulation of Backup Emergency Medications

Backup emergency medications may be needed when students do not have their own. One barrier is liability risk if school districts retain medical directors.

Schools and families may face problems when students lose or forget their medications, when the school or family is not aware the student has a life-threatening condition, and when insurance will not cover an extra prescription for school. If a student needs a prescribed emergency medication and it is not at the school, there can be serious medical consequences. Health department nurses often have backup medications and are authorized to administer them under protocols established by their medical directors. School districts usually do not have medical directors. One barrier is the liability a physician would face as a district medical director.

Policies and Procedures of Local Boards of Education

Local boards of education may adopt school health policies and procedures. Frequently, they adopt or modify models from the Kentucky School Boards Association. The association's guidance on Section 504 is commendable.

Local boards of education may adopt school health policies and procedures. Most boards use the Kentucky School Boards Association's policy and procedure services. Boards of education may adopt the association's models, modify them before adoption, or create their own policies and procedures.

The association reported that 173 of the 174 boards subscribe to the policy service and 141 subscribe to the procedure service. The services offer several model school health policies and procedures. Some of them address federal laws, while others address medication administration and health screenings. They reference relevant federal and state laws and regulations. The guidance on Section 504 is commendable.

Most of the association's model policies are very general, and there are deficiencies. Program Review staff identified several suggested improvements.

Most of the model policies are very general, and there are several deficiencies; however, the models do give boards some structure to follow while allowing the boards to include local specifics. Program Review staff identified the following additions or corrections that the association might consider for its model policies. This list contains only selected items.

- Rather than stating that actions will be taken as required by law, the policies could briefly state what the law requires.
- A basic policy would be that school districts must provide any health service necessary to prevent a loss of health service from affecting a student's attendance or program participation (KRS 156.502(3)).
- Based on federal disability laws, basic policies would be that
  - schools are required to seek out all students who might have a disability and to carry out an evaluation; and
  - schools are required to provide health services necessary for a student with a disability to participate in field trips, athletics, extracurricular activities, and other school-sponsored events. [1]

  The latter requirement might apply to all students in Kentucky, depending on how KRS 156.502(3) is interpreted.
- Based on KRS 156.502 and nursing board regulations, it would be helpful to note that the minimum requirement for a school district is at least one registered nurse whose duties are
  - to assess each child who needs a health service and determine whether it may be delegated,
  - to train UAP and delegate those health service tasks that may be delegated,
  - to be available at least by phone and periodically in person to supervise UAP, and
  - to perform health service tasks that may not be delegated.

  A district that used a physician in this capacity might follow a slightly different policy.
- Given the nursing board's advisory opinions, it would be helpful to note that it is unlikely that a nurse in Kentucky would delegate insulin administration. Therefore, any school district having a student with diabetes who cannot self-administer insulin must have a nurse to do so.
- Given the widely varying practices in the management of diabetes in schools, it would be helpful to include a statement that recommends that students with diabetes may receive their health services in the least restrictive manner and may carry

[1] Even though the association included these statements in its Section 504 procedure document, Program Review staff consider them important enough to be included as basic policy statements.

and use their medication and equipment, including food or sugar appropriate for hypoglycemia, when it has been determined that they are capable of doing so safely.
- It would be helpful to note that delegation of health service tasks is specific to a student. Each UAP must be assigned to perform tasks for particular students, not for students in general (KRS 156.502(2)(c)2).
- Policy 09.2241 should state that students with the appropriate permission from parents or guardians and physicians must be permitted both to carry and to self-administer asthma and anaphylaxis medications (KRS 158.834 and 158.836).

The association's model procedures and forms have some deficiencies, but they also include some best practices.

The association's model procedures and forms also have some deficiencies. However, Program Review staff commend the association for going beyond the legal minimum to include some best practices for medication administration.

Some school districts have significant misunderstandings of the legal requirements and best practices. Program Review staff suggest that the association consider improvements in its models and develop more detailed guidance for districts.

The responses of school district officials and school staff indicate that the actual practice of school health varies greatly and that some districts have significant misunderstandings of the legal requirements and best practices. Program Review staff suggest that the association consider improvements in its model policies and procedures. It would be helpful if the association developed more detailed guidance for school districts on the issues identified in this report.

Selected School Health Laws in Other States

Availability of School Nurses and Physicians

Some states mandate the hiring of school nurses.

At least 16 states mandate the hiring of school nurses. A few states even require physicians in schools, but not usually to provide direct health services. Some states require at least one nurse per district, some mandate one nurse per facility, and others require a mandated or suggested ratio of nurses to students. Instead of nurses, Hawaii allocates health aides to school systems to provide care for students. Rhode Island requires each school system to employ certified nurse-teacher personnel.

A number of states either require or encourage a certain ratio of nurses to students.

Those states requiring or suggesting certain nurse-to-student ratios have a wide range. Some states, such as Arkansas, follow the National Association of School Nurses' recommended ratio of one nurse per 750 students. Arkansas also requires schools with high concentrations of students with health care needs to have one nurse per 400 students. Alabama exceeds the national recommendation

with a requirement of one nurse per 500 students. Virginia has established a goal of one nurse per 1,000 students. Some states, Indiana for example, are now considering changing the state's rules to remove the currently recommended ratio of one registered nurse for every 750 students.

Some states require minimum qualifications for school nurses, such as requiring registered nurses (not licensed practical nurses) or nurses who have a school nurse endorsement or specialization.

Individual Health Services Planning

Some states have legislated responsibilities for student health assessment, planning, and coordination.

Nursing best practices dictate that the school nurse assess, evaluate, and develop a health care plan for each student who needs health services. The KDE Health Services Reference Guide recommends this practice and provides a template for planning. Some states have incorporated this process into law. Colorado requires a written contract among the school nurse, the student, and the student's parent or guardian for care provided to a student who has certain chronic conditions. Other states, such as South Carolina, require that an individualized health care plan be in place for all students with special health care needs. Some other states, such as New Jersey and Tennessee, require similar plans for students with certain health conditions.

Ensuring Awareness of Chronic Health Conditions

Ensuring the awareness of all relevant school staff is the goal of statutes in some states.

For a student with a potentially life-threatening health condition, it is important that all relevant school staff are aware of the student's condition and at least know what to look for and whom to call. Illinois and New Jersey both identify school bus drivers as needing to be aware of a student's medical condition and what to do in case a student needs care while on the bus. New Hampshire took a broader approach by establishing a council to promote the assessment of needs of students with chronic conditions and then to increase awareness in both the public and private sectors regarding issues that affect students with chronic conditions.

Conclusion and Recommendation

This chapter has presented several issues in school health on which the General Assembly may wish to establish or clarify policy. States have the authority to require services beyond those mandated by federal disability laws. Extensions include what health services should be provided for students in the general population and how services should be provided. Some Kentucky laws already extend beyond federal disability laws, but some clarifications may be helpful.

Where there is uncertainty within federal disability laws, states may decide to declare a preference. A state policy that exceeded the disability protections found by federal courts would serve to remove some of the uncertainty, such as when health services should be provided in the school the student would ordinarily attend. If a state adopted policies less protective than some federal court decisions, uncertainty would remain for the courts to resolve.

Table 2.3 summarizes the issues that the General Assembly may wish to consider. Some represent an extension of federal laws and some represent clarifications or extensions of state laws. Additional costs are associated with some of the issues. Following the table is the staff recommendation.

Table 2.3
School Health Policy Issues for Consideration

Type of Issue	Description
Clarification of state law	Should there be a minimum number of licensed health professionals per district, per school, or per student? May a district operate with no licensed health professionals?
Clarification of state law	What does "any necessary arrangement" include under KRS 156.502? It appears to require schools to take any steps, regardless of cost, to provide health services.
Extension of federal law	When are school districts responsible for providing health services to students, such as on transportation to and from school, on field trips, at before- and after-school activities, and at other school-sponsored events?
Extension of federal law and clarification of state law	Should school districts be required to provide health services for each student in the school the student would ordinarily attend, or may districts designate one or more schools for certain health conditions?
Clarification of state law	Should KRS 156.502 permit delegating providers to accept previous UAP training and permit licensed practical nurses to delegate, consistent with their licensing boards; and should the statute specify how to change delegating providers?
Extension of state law	Emergency care for diabetes and epilepsy is specified in statute, but other emergency procedures, such as for asthma or anaphylaxis, are not. Should there be a general statute specifying how school districts should provide for students with any condition for which a physician has ordered special emergency interventions?
Extension of state law	As medical treatments change, existing statutes may become outdated. Midazolam instead of diazepam for epilepsy is an example. Could references to specific treatments be replaced with general descriptions to make the statutes more durable?
Extension of state law	Self-administration for asthma and anaphylaxis is specified in statute, but other self-administered interventions, such as for diabetes and epilepsy, are not. Should there be a general statute specifying how school districts should respond when a physician and parent or guardian request self-administration of any intervention?
Extension of state law	Should statutes regarding self-carry and self-administration of medications provide the districts with some discretion when the student demonstrates inappropriate use of a medication?
Clarification of state law	Should all students needing routine health services or emergency care have a written individual health care plan to outline care and responsibility?
Extension of state law	If a school district has a medical director, it can keep backup supplies of emergency medications on hand in case students are unable to locate their own. Should the state limit physicians' liability when they agree to be district medical directors?
Clarification of state law	Should Kentucky statute specifically clarify whether parents or guardians and their designees may perform health service tasks for their children in the schools, whether they may do so if they are school employees, and whether they may designate school employees to perform those tasks?

Recommendation 2.2

Recommendation 2.2

The General Assembly may wish to consider establishing or clarifying school health policy in the following areas, within the limits of federal disability laws:

- **Minimum staffing requirements for school health services**
- **The meaning of "any necessary arrangement" in KRS 156.502**
- **Whether districts must provide health services at all school-related programs and activities**
- **Whether districts must provide health services in the school a student would ordinarily attend**
- **Whether KRS 156.502 should permit certain delegating actions consistent with licensing boards and specify how to change delegating providers**
- **How districts should respond to emergency treatment orders for conditions not mentioned in statute**
- **How districts should respond to prescriptions for new emergency treatments for conditions covered by statute**
- **How districts should respond to requests from parents or guardians and physicians for students to carry and self-administer medications not mentioned in statute**
- **The discretion districts should have when students with permission to carry medications misuse them**
- **Whether there should be a written individual health care plan for all students needing routine or emergency care**
- **Provision to protect physicians who agree to be district medical directors**
- **The role parents or guardians and their designees, including school employees, may have in providing health services to their children in school**

Chapter 3

School Health Practices

School Health Service Providers

The conventional view is that school nurses provide school health care. With a shortage of nurses, today's schools depend on nurse practitioners, nurses, trained unlicensed personnel, and parents and guardians to provide care.

The conventional view of school health is that a school nurse provides any needed services. Faced with a shortage of school nurses, today's schools depend on a variety of health service providers, including nurse practitioners, school nurses, specially trained unlicensed personnel, and parents and guardians.

Apparent Benefit of School Nurses

A survey of school personnel found in most cases that respondents from schools with full- or part-time nurses reported fewer problems than respondents from schools without scheduled nursing time. However, the survey cannot verify whether the school nurses were responsible for the differences.

The Program Review staff survey of school personnel found a potentially important difference in questionable health service practices when a school nurse was available. In most cases, the respondents from schools with a full- or part-time nurse reported fewer student absences, less difficulty for students participating in activities, and fewer questionable practices than respondents from schools with no scheduled nursing time. Where appropriate, these differences are shown in the tables that describe their responses later in this chapter.

The survey cannot verify whether school nurses were responsible for the differences. The primary motivation for some questionable practices is the lack of a nurse, so for those it seems reasonable that the presence of a nurse would reduce them. However, there are alternative explanations. For example, perhaps school districts that place a greater priority on school health are more likely to take action to address problems related to chronic health conditions, and one of those actions might be hiring nurses. In that case, it would be the school district's level of commitment to school health that caused the differences.

Types of Licensed Providers

Registered nurses are the most common licensed providers. Advanced registered nurse practitioners and licensed practical nurses also work in the schools. Physicians are permitted to work in schools, but there appear to be no physicians who provide school services on a day-to-day basis in Kentucky.

The most common licensed health service provider is the registered nurse. Registered nurses have the authority to perform all the tasks normally required by students with diabetes, asthma, severe allergy, and epilepsy. School district nurses perform these tasks, conduct health screenings, develop health care plans, and often are involved in disability determinations and planning under Section 504 and IDEA. District nurses also provide health education and oversee student health records.

When practicing under the supervision of a physician, registered nurses can conduct immunizations and school physical examinations. Local health department nurses who are properly certified can perform and bill for these services without a supervising physician. School district nurses usually cannot perform these services.

Advanced registered nurse practitioners, or also known as nurse practitioners, have the authority to prescribe medications and to provide a range of medical services. In the school setting, some nurse practitioners work as district school health coordinators or operate school-based clinics for a hospital or other agency.

Licensed practical nurses occasionally work in schools. They have a more limited scope of practice than registered nurses; but when working under the supervision of a registered nurse, they have the authority to perform all the tasks normally required by students with diabetes, asthma, severe allergy, and epilepsy.

Kentucky statute specifically mentions physicians as school health providers, but there appear to be no physicians providing day-to-day direct health care in Kentucky's schools. There are some physicians who visit school-based clinics occasionally, but they are not in the schools to provide daily care for students with chronic health conditions.

Preparation of School Nurses

Nurses need knowledge and training specific to school health services.

Nurses who come into the schools for the first time might not be intimately familiar with all the health conditions they will find and tasks they will need to perform. According to interviews with school nurses, in most instances they educate themselves by looking up information, asking other nurses, and asking students' physicians and family members about the plans of care.

Certification can lead to higher school nurse salaries. The Kentucky school nurse certification program requires only limited school health experience and training and appears to have limited significance. Increasing the requirements might make certification more meaningful.

Certification of School Nurses. There are two types of school employee: certified and classified. Certified employees, such as teachers, have a certificate from the Kentucky Education Professional Standards Board. School nurses with certificates are eligible for certified positions. All other school employees are considered classified. Certified school nurses generally earn more than classified nurses. Data from the KDE personnel accounting system showed that for the 2008-2009 school year, there were five school nurses in Kentucky in the certified category, earning an

average of $13,000 more per year than classified registered nurses.[1]

The standards board has offered certification for school nurses since 1980. There are three levels of nurse certification. Table 3.1 shows the number of active certificates at each level.

Table 3.1
Active Kentucky School Nurse Certificates

Type	Number
Provisional	30
Professional	17
Advanced	8

Note: Active certificates as of Nov. 23, 2009.
Source: Education Professional Standards Board.

The National Board for Certification of School Nurses offers a national school nurse certification that may be substituted for one of the requirements of Kentucky certification. The national board reported five certified school nurses in Kentucky in the fall of 2009.

In collaboration with the standards board, Western Kentucky University developed Kentucky's only school nursing certification program. However, initial Kentucky certification at any level does not require any prior experience or coursework in school health. Academic credit in school nursing is one of the options for renewal at the professional level, but it is not required; neither of the other levels specifies coursework or continuing education directly related to school nursing.

Because of the limited requirements for and availability of school health training and experience, there is some question about the significance of school nurse certification. Program Review staff encourage the board to consider requiring coursework or direct experience in school nursing for school nurse certificates.

An orientation for new school nurses has been developed and will be available online.

Additional Training for School Nurses. It may be impractical and unnecessary to require all newly hired school nurses to have school nurse certification. Rather, KDE could provide standard training modules and information for new school nurses. The Kentucky School Nurses' Association, KDE, and the Department

[1] This figure is based on KDE job class code 7262 Registered Nurse only. Most registered nurses were in job class code 7263 School Nurse, but that class also included licensed practical nurses, so it was not possible to obtain an average salary for the larger group.

for Public Health organized an orientation program for new school nurses over the past two summers, and it has been scheduled again for the summer of 2010. KDE and the Department for Public Health indicated that future live presentations would depend on funding, but that an online version of the orientation would be available and updated as needed. Program Review staff encourage KDE to consider ways to require and to ensure availability of standard training modules and other information for new school nurses.

New health department school nurses are required to complete pediatric assessment training. The Department for Public Health offers an annual school health continuing education session for all school nurses.

Health departments provide more than half of the school nurses in Kentucky and require some training relevant to school nursing. There is a pediatric assessment training that includes hands-on practice that must be completed before working with students. The Department for Public Health also offers an annual continuing education session in school health, which health department nurses are strongly encouraged to attend. This session also is open to school district nurses.

Delegation to Trained Unlicensed Personnel

Kentucky and many other states delegate school staff as unlicensed assistive personnel to provide health services. Most have other jobs, but some are dedicated health services assistants.

To address the lack of nurses, schools across the country have turned to their unlicensed staff and to parents or guardians. Kentucky statute establishes a procedure for training and delegating school personnel as unlicensed assistive personnel to perform health service tasks. UAP may perform only tasks that a physician or nurse has formally delegated. In many cases, UAP are teachers, office staff, or instructional assistants. Some districts hire dedicated health services assistants as UAP.

Decision To Delegate

UAP have been used to supplement school nurses. Medical and nursing opinion is mixed on when this is advisable.

There is mixed opinion within the medical profession on the advisability of having unlicensed personnel administer medications and provide other kinds of care for students. Interviews with physicians indicated that many, if not most, of them routinely expect unlicensed school personnel to provide care. The perspective of these practicing physicians is that if the parents or guardians are capable of providing care, then properly trained unlicensed school personnel should be able to do the same.

On the other hand, the American Academy of Pediatrics released a policy statement in October 2009 addressing these issues. The academy expressed a strong preference that nurses administer medications and provide other health services. The academy supported delegation only when it is impossible for a nurse to provide care.

Within the nursing profession, opinion also is divided. Many boards of nursing in Kentucky and around the country have placed limits on delegation. Interviews with school nurses and nurses working in pediatric practices indicated that many accept the necessity of delegating tasks to UAP, but most would prefer to see an adequate number of school nurses. The National Association of School Nurses stated that when nurse staffing is not adequate to meet the needs of students, "appropriate delegation of responsibilities and tasks to UAP is critical in meeting the increasing need for nursing services at school, where permitted" (*Delegation* 3).

Delegation must be done within the scope of practice of the delegating nurse or physician. The scope of practice and supervision of UAP are determined by the respective licensing boards.

Delegation of health service tasks must be done within the scope of practice of the delegating nurse or physician. Other than the procedural details outlined in statute, the scope of practice and rules for supervision of UAP are established by the respective licensing boards.

The Kentucky Board of Nursing has addressed when nurses may delegate health service tasks and has issued a nonbinding advisory opinion excluding tasks related to the administration of insulin.

The Kentucky Board of Nursing has issued regulations and opinions to describe what tasks nurses may delegate and what kind of supervision is required. In general, registered nurses or advanced registered nurse practitioners may delegate any of the health service tasks typically needed by students with the four chronic conditions, with one significant exception. The board has issued a nonbinding advisory opinion that it is not within their scope of practice to delegate the counting of carbohydrates; calculating a dose; or injecting any medication, including insulin, using a syringe or pump.

The Kentucky Board of Medical Licensure issued an opinion that physicians may train and delegate UAP. The opinion left the types of tasks, nature of training, and level of supervision to the physicians.

The Kentucky Board of Medical Licensure issued an opinion stating that a physician may train and delegate to a UAP any tasks that the physician may perform and that the physician determines the UAP may safely and effectively perform (Commonwealth. Board of Medical 4). At this time, there appear to be no physicians providing health services in Kentucky's schools on a day-to-day basis, but there is at least one UAP delegated by a physician: a family physician delegated health service tasks to a special-education aide. It also seems that a physician who is the parent or guardian of a student might be able to delegate tasks to UAP for that student.

However, unlike the nursing board, the medical board has not issued any regulations or opinions regarding the suitability of certain tasks for delegation, the type of training required, or the level of medical supervision of UAP. The medical board left these decisions to the physicians.

Even though delegating a task may be permitted in principle, it might not be advisable to delegate in all situations. The decision should be made on a case-by-case basis.

Even though delegating a task may be permitted in principle, it might not be advisable to delegate in all situations. The decision should be made on a case-by-case basis. From interviews with school nurses and review of the literature, there appear to be several important factors in the decision, including

- whether the nursing services provider, typically the school district or health department, has determined that the student's safety and the provider's liability risk are acceptable;
- whether there is reliable nursing or emergency medical backup for the UAP;
- whether the student's health plan and emergency plan are clear and detailed;
- whether the UAP will perform the task often enough to remain familiar with it;
- whether the UAP will perform the task for only one or a few students and, therefore, be familiar with those students' individual needs;
- whether the student's health condition is stable and predictable enough that a UAP can expect to perform the task without having to call on nursing judgment;
- whether the UAP can educate the student in self-care, leading to eventual independence when possible;
- whether the UAP is dedicated to health service tasks or does them in addition to another job;
- whether the UAP is willing to perform the task;
- whether the UAP has additional health services training, such as being a certified medical assistant; and
- whether the student's physician and parent or guardian have said that delegation is acceptable.

The task of administering insulin illustrates many of the factors that enter into delegation. An accurate dose has to be calculated each time.

Administration of Insulin. The task of administering insulin illustrates many of the factors that enter into delegation. Unlike most medications, the amount of every dose of insulin has to be calculated at the time it is administered. The dose is based on the amount of carbohydrates consumed and the current blood glucose level, according to a formula provided by the physician. The formula will vary from one student to another, and mistakes could be made. A large overdose of insulin can have dangerous consequences. Not administering enough can interfere with learning and cause long-term problems.

The nursing board has issued a nonbinding opinion that insulin-related tasks may not be delegated. A pediatrician and the National Association of School Nurses strongly urged that nurses administer insulin when possible.

The Board of Nursing's nonbinding advisory opinion states that nurses should not delegate counting carbohydrates, calculating a dose, or administering insulin. An opinion column in the journal *Pediatrics* strongly urged the use of school nurses for the administration of insulin, stating that "there are circumstances in which it is not feasible to have a nurse routinely administer insulin, but let us not allow these exceptions to drive the norm" (Taras 1212). The National Association of School Nurses has stated that insulin administration and other diabetes-related tasks should be performed by a nurse if possible and that delegation should be done only if necessary and on a case-by-case basis (*Position Statement: School*).

Schools, however, must find a way for students with diabetes to participate in all school activities.

Schools, however, are required to find a way for students with diabetes to participate fully in school and school-sponsored activities. Kentucky nurses are unlikely to delegate insulin-related tasks, considering the nursing board's opinion. If a school has two students who need insulin and one of them is scheduled for a field trip, the school district has to find a way to have a nurse or parent or guardian in both locations when needed. When parents or guardians refuse or are unavailable, the district faces a serious dilemma.

If a student can do the injection, the student may call a nurse or parent to calculate the dose. A UAP may verify that the student has transferred the dose correctly.

Parents and school personnel described ways that schools work around the shortage of school nurses to provide diabetes care. The Board of Nursing allows some flexibility for students who can inject insulin themselves but who have not mastered counting carbohydrates and calculating the dose. If a UAP is present, the student may call the school nurse or parent or guardian. The person on the phone counts the carbohydrates and computes the dose. The UAP confirms that the student has applied the number correctly to the insulin syringe or pump, and the student then self-administers the insulin. The Program Review survey of school personnel asked how frequently this procedure was done with a parent. Of 7,390 respondents who indicated there was a student with diabetes, 8 percent said it was done often and 18 percent said sometimes. Of 255 school nurses responding to the same question, 9 percent said often and 24 percent said sometimes.

Using a chart can simplify dose calculation. Some insulin pumps include a computer to calculate the dose. Insulin pens have a dial to set the dose once it has been calculated. Even so, errors could occur.

There are ways the process can be simplified. Some clinics provide a chart that allows the care provider to read the dose by finding the number of carbohydrates and the blood glucose level on the chart. Some insulin pumps include a computer that will calculate the dose when the carbohydrate count and blood glucose level are entered. Some insulin syringes, known as pens, do not require the insulin to be drawn out of a bottle; rather, once the dose is known, a dial on

the prefilled pen is turned to the dose amount and that amount is injected. Nevertheless, there are opportunities for error in the dose calculation and dialing the dose on the pump or pen.

The American Diabetes Association prefers nurses to administer insulin, but asserts that UAP can safely perform all diabetes tasks.

The American Diabetes Association prefers that school nurses provide diabetes care, but asserts that UAP can safely perform all diabetes care tasks, including administration of insulin. The association repeats the argument of many physicians that parents or guardians are unlicensed but regularly provide competent diabetes care for children ("Comments").

Some families have found it difficult to manage blood glucose levels at home. It might be inappropriate to ask UAP to provide care for those students.

However, there are questions about the care that some parents provide. Of respondents to Program Review staff surveys, 71 percent of school nurses and 32 percent of school personnel indicated there were students who had difficulty with a chronic condition at school because their parents had provided inadequate care at home. Several school nurses pointed out that they had to work extensively with some families to ensure that the parents provided adequate care at home. When a student comes to school with blood glucose levels already too high or too low, the nurses assert that nursing judgment is required and that a UAP would not be the appropriate provider.

Some students have diabetes that does not respond as expected and sometimes require emergency room treatment. It might be inappropriate to expect UAP to provide care for these students.

School nurses also told staff that some students have less stable diabetes than others. These students often do not respond in the expected way to a correct insulin dose or to sugar consumed to raise low blood glucose. The nurses said that even with the most conscientious and capable parents, these students sometimes require emergency room visits because of dangerous blood glucose levels. For these students, the nurses argued, the schools are obligated to provide an even higher standard of care than capable parents, so it would be improper to delegate their care to UAP.

For certain students, under certain conditions, UAP might be an appropriate choice to administer insulin on a day-to-day basis. If so, immediate access to a nurse would be needed.

On the other hand, for a student whose care at home is reliable and who has stable diabetes, delegation of insulin administration might be considered. Diabetes care is needed day after day, so UAP could remain very familiar both with the procedure and the student's needs. If the school could identify enough willing and capable UAP to provide care for these students, perhaps assigning only one or two students to a UAP, then it might be appropriate to delegate the administration of insulin. In fact, for field trips, it probably would be better to have a UAP who performed the task regularly than a UAP who did it only when a nurse was unavailable. Even so, according to the National Association of School Nurses, "If diabetes care is delegated to [licensed practical nurses] or UAP, the school nurse needs to be immediately accessible to provide direction" (*Position Statement: School*).

School nurses indicated that if delegation of insulin administration were to be allowed, the decision should be made case by case. Of those surveyed who had a student with diabetes, 12 percent thought it could be delegated in at least some situations.

Interviews with school nurses indicated that there is not a consensus about whether insulin administration should be delegated. As with delegation in general, they asserted that delegating insulin administration, if it were to be allowed, should be determined case by case. Of respondents to the Program Review survey of school nurses, 12 percent of those having a student with diabetes thought these tasks could be delegated in at least some situations.

It appears that physicians may delegate insulin administration if they determine that it may be done safely.

The Board of Medical Licensure appears to allow physicians to delegate any task, including insulin administration, as long as the delegating physician determines that the UAP can perform the task safely. Presumably, the physician would consider issues such as family medical compliance, stability of the student's response to insulin, and whether access to a nurse was necessary and available.

If sanctioned, it would be important to ensure that delegation of insulin administration was based solely on medical and nursing judgment and not on cost.

Sanctioning delegation of insulin administration, however, might place pressure on physicians and school nurses to do so when it is not prudent because the cost of a UAP is much lower than that of a nurse. Medical and nursing judgment, not cost, should determine delegation. Any plan to allow delegation of insulin administration should establish a mechanism to ensure appropriate decision making.

Challenges of Delegation

UAP must be assigned to specific students, and the nurse must evaluate the student to ensure delegation is appropriate and assign the student to a specific UAP.

Delegation requires not only that UAP be trained for specific tasks but also to be assigned to specific students. KRS 156.502 requires that the UAP's delegation form be filed in the student's record. Under nursing regulations, the delegating nurse must confirm that having a UAP perform health service tasks is appropriate for each student.

Nurses must assess students who need health services. The individualized health care plan is a standard format, but in many districts the nurse workload is so heavy that full assessments have not been done.

Nursing regulations also require the nurse to complete a nursing assessment and plan. The nursing literature suggests that an individualized health care plan is the desired format. School nurses and KDE officials acknowledged that in many districts the nurses have not developed full nursing assessments because of their heavy workloads.

The delegating nurse must supervise the UAP, based on professional judgment, perhaps with the assistance of another nurse.

Once a task is delegated to a UAP, nursing regulations require the delegating nurse to provide supervision. The degree of supervision is left to the nurse's professional judgment. Although another nurse might have direct supervision of the UAP, the delegating nurse must be available. According to the nursing board, if the delegating nurse leaves the district, another nurse must confirm that all UAP

are able to perform the tasks, must sign the delegation paperwork, and must assume responsibility for their supervision.

The supervising nurse should be immediately available by phone or other means, but not all districts have met this standard.

At a minimum, the supervising nurse should be available immediately by phone or some other means, but not all districts have met this standard. In some districts, there might not be a nurse available at all times. In at least one district, the only school nurse resigned and the UAP had no supervision while the district searched for a replacement.

Nurse access is important because some students have health conditions unknown to their schools, their parents or guardians, or themselves. UAP are not prepared to deal with such situations.

Access to a school nurse is important when the school is unaware of a student's health condition. Sometimes the parent or guardian does not inform the school of a student's health condition and sometimes even the parent or guardian and the student do not know because no one has diagnosed the condition. It would be potentially dangerous for unlicensed school personnel to determine how to respond to a student who has no health care plan or emergency action plan.

Undiagnosed health conditions can be mistaken for behavior problems or other problems.

When a student's condition has not been diagnosed, it can be mistaken for something else. For instance,

- a student with high blood sugar from undiagnosed diabetes may appear to be sleep-deprived or inattentive or may be identified as having a behavior problem because of frequent requests for water and bathroom breaks,
- a student with mild asthma symptoms may be sleep-deprived or appear to be inattentive or to have poor stamina, or
- a student with some forms of epilepsy may appear inattentive or may be identified as having a behavior problem.

A small number of students with chronic health conditions were discovered by schools, but they could include some life-threatening situations. One elementary student had lost 40 pounds over the summer and was found to have diabetes.

Table 3.2 shows the numbers of students whose condition was discovered by the school based on symptoms rather than information from the families, in the 2008-2009 school year. Of that number, the table also shows how many were not previously diagnosed. Compared with the total number of students, these numbers are not large, but they could include some life-threatening situations.

For example, at the beginning of the school year, in an elementary school visited by Program Review staff, a teacher noticed that a student did not seem well. That teacher asked the prior year's teacher, who saw that the student had lost 40 pounds and had dark circles around his eyes. The teacher then communicated the information to the nurse, who referred the student to medical care, where the student was diagnosed with diabetes. Although the

teachers discovered the problem, the school nurse initiated a quick referral and diagnosis.

Table 3.2
Students Discovered at School as Having Health Conditions

Condition	Condition Not Known to School but Known to Family	Condition Not Known to School or to Family	Total Students With Condition Discovered at School
Diabetes	9	17	26
Asthma	187	135	322
Severe Allergy	15	16	31
Epilepsy	14	36	50

Note: Number of districts responding: 168.
Source: Program Review information request to school districts.

Using teachers as UAP might affect classroom instruction. If so, other staff members might be a better choice.

A problem with using teachers as UAP for routine care, particularly for diabetes and asthma, is that it takes instructional time from the whole class. On the other hand, if the UAP is a classroom aide, office worker, or other school staff member who can visit the classroom when needed, then the disruption is minimized for everyone.

UAP training varies from district to district. A new medication administration training module approved by the nursing board is now required for UAP. Additional standardized trainings are needed.

The training of UAP varies from district to district. To address concerns that the training for UAP is highly variable and might be inadequate, KDE now requires a training module approved by the Board of Nursing for UAP who administer medications. Program Review staff urge the agencies to expand the standardization of training to include other health service tasks that might be delegated. In particular, the agencies should consider training for blood glucose testing, management of low and high glucose levels, and seizure management.

General Training for School Personnel

All school personnel should have a basic knowledge of symptoms of common health conditions so they can call for assistance when necessary. Some school districts provide general training or widespread training on specific issues.

Interviews with parents and school nurses suggested that all school personnel should learn to recognize the symptoms of common chronic health conditions. Often, no nurse or UAP is present when students experience hypoglycemia, asthma attacks, anaphylactic reactions, and seizures. Sometimes, a student will experience symptoms for the first time at school. It is up to the student, teacher, or other school personnel to notice that something is wrong and to call for assistance.

Some districts already provide some general training. Many school districts reported training all their staff on the administration of epinephrine, even though such training is not required.

One school district reported training every staff member to recognize and provide basic first aid for seizures. Because of the wide variety of seizures and the difficulty distinguishing a seizure from a discipline problem, the Epilepsy Foundation recommends that all school personnel, especially teachers, have training on the types of seizures and how to recognize them. This recommendation applies even when there is no student at the school known to have epilepsy because the school might not know that a student has epilepsy or a student could develop epilepsy at any time (Epilepsy; McGrath).

Program Review staff urge KDE to consider requiring that all school personnel receive training to recognize symptoms of the most common chronic health conditions, especially if a student in the school is known to have such a condition.

Perceived Quality of Care Provided

Nurses and school personnel rated health services generally as good to very good, except for student self-care.

Program Review staff surveyed school nurses and other personnel about the quality of care provided by nurses, parents, UAP, and the students themselves. Table 3.3 shows that nurses' care was rated higher than any other type of provider. School personnel rated care providers more favorably than the school nurses did. Most of the ratings were in the range of good to very good, although nurses rated the self-care of students from fair to good.

Table 3.3
Reported Quality of Care Provided

	Rated by	
Provider of Care	**Nurses**	**Other Personnel**
Care provided by the school nurse	NA	3.6
Care provided by other school staff	3.0	3.4
Care provided by the parent	2.9	3.2
Self-care performed by the student	2.7	3.0

Note: Number of respondents varied for each item: nurses, 250-286; other personnel, 6,807-8,660. Rated on scale very good=4, good=3, fair=2, poor=1. Rating of school nurses based on respondents that had a nurse in the school at least part time.
Source: Program Review surveys of school personnel.

Health Services Staffing Models

Staffing models range from nurse only through different mixes of nurses and UAP to having no nurses or UAP at all.

School districts use several different organizational models for providing school health services. Some districts provide care with nurses and no UAP. Other districts have a nurse in most schools

along with UAP. One district has nurse practitioners supervising a limited number of RNs, several home health nurses who provide care for individual students, and a large number of UAP. A few districts have no nurse providing direct care but use UAP. A few other districts have no nurses or UAP and depend entirely on parents or guardians and emergency medical services.

Nurse Employers and Numbers

About a third of districts indicated they have nurses from more than one employer and most of those indicated shared supervision between the district and other employer. Health departments are the dominant school nurse employers.

Table 3.4 provides a basic summary of the models that include school nurses. It was not possible for Program Review staff to determine the detailed model of every district. However, of the 169 districts responding to this information request, 49 indicated having nurses from more than one employer, usually including the district itself. Of those, 42 indicated shared responsibility for supervision between the school district and another employer, usually the health department.

Table 3.4
Some School Nurse Organizational Models

Employed by	Following Protocols of	Supervised by
School district	School district	School district
Health department	School district and health department	School district and health department
School district	School district and health department	School district and health department
School district and health department	Employer	School district and health department
School district and health department	Employer	Employer
Health department	Health department	Health department
Hospital or primary care center	School district	School district and employer

Note: "Employer" means the nurses followed the protocols or were supervised by their respective employers, not jointly.
Source: Program Review staff compilation of school district interviews and responses to information requests.

Looking at the number and full-time equivalent (FTE) of school nurses reported by districts, Table 3.5 illustrates that health departments now provide more than half of the nurses. Districts themselves employed 43 percent of nurses. Other school nurse employers included universities, hospitals, and home health agencies. There were no districts that reported using volunteer nurses.

Of the 56 local health departments, 42 reported that they were providing health services at school sites. Together, these 42 health departments served 109 school districts. Two health departments were in the process of negotiating with additional school districts.

Table 3.5
Percentage of Licensed Providers by Employer

Employer	Percent of Head Count	Percent of FTE
Health department	52%	53%
School district	43	44
Other agency	5	3

Note: Number of districts responding: 169.
Source: Program Review information request to school districts.

The national recommendation is one school nurse per 750 students, with fewer students if many of them have special health care needs. A nurse in every school was mentioned as a goal but has not been achieved. The number of students per nurse has been difficult to determine because the number of nurses has been uncertain.

The National Association of School Nurses recommends a nurse in every school and at least one nurse per 750 students. The association states that more nurses are needed if there is a large number of students with special health care needs. In that case, the association recommends no more than 225 such students per nurse, stating that the actual needs of students should dictate the number of nurses, perhaps even requiring a nurse dedicated to an individual student (*Delegation* 3). School nurses and administrators in Kentucky often mentioned a nurse in every school as a goal. For most schools, that would more than meet the national recommendation. Table 3.6 shows, however, that most Kentucky schools did not have a full-time school nurse.

Table 3.6
Percentage of Schools Covered by Licensed Providers

Level of Coverage	Percent
Provider present full time	38%
Provider present part time	30
Provider on call or as needed	16
No provider available	17

Note: Number of districts responding: 169. For districts reported as not having a nurse for direct care, all schools were counted as "No provider available." Percentages do not add to 100 because of rounding.
Source: Program Review information request to school districts.

Previous efforts to count the number of school nurses in Kentucky have depended on the number who marked school nursing as their practice setting on their nursing license renewal forms. The nursing board reported 488 school nurses for the 2008-2009 school year, giving a ratio of 1,375 students per nurse. According to the board,

this number may have been low because it probably did not count some of the health department nurses who worked in schools. For those who were counted, it might have been a slight overestimate because some school nurses worked part time.

Program Review staff used two approaches to determining the number of school nurses. Neither method is fully reliable, but both methods suggest there are more than 488 full-time equivalent nurses in Kentucky's schools.

Program Review staff used two methods to estimate the number of nurses and the number of students per nurse. Both show more nurses and fewer students per nurse than previous estimates but still fall short of the national recommendation.

For the first estimate, Program Review staff combined information from the KDE accounting system and from health departments. For the 2008-2009 school year, KDE recorded 254 FTE nurses employed by school districts. An additional 24 nurses were employed as district school health coordinators, who might or might not provide direct services. Health departments gave Program Review staff numbers of nurses for the 2009-2010 school year, which indicated that there were 425 health department nurses in the schools, but the information did not indicate whether they were full-time nurses. Staff determined that the health departments increased their number of nurses since the previous school year, including some nurses who moved from school district employment to health departments. Allen, Todd, and Christian Counties are examples of districts that transferred their nurses to health departments. After correcting roughly for duplicates and assuming that health department nurses worked full time, staff estimated that there were 675 nurses for a ratio of 994 students per FTE nurse.

For the second estimate, Program Review staff asked school districts to list the number and types of nurses who were available in the 2008-2009 school year to provide day-to-day direct care to students with chronic health conditions. Of the 174 districts, 169 responded. Staff removed nurses who were known to work one on one with specific students. The resulting numbers are shown in Table 3.7. Using the student population for those districts, not for the state as a whole, staff estimated 971 students per FTE nurse.

Table 3.7
Head Count and Full-time Equivalent
of Licensed Providers by Type

Type of Provider	Head Count	FTE
Registered Nurse	559	539.4
Licensed Practical Nurse	123	119.8
Advanced RN Practitioner	25	18.4
Total	707	677.6

Note: Number of districts responding: 169. Nurses known to be dedicated to a single student and not available for other students were removed. It is possible that some dedicated nurses were unknown to Program Review staff and remained in the results. Some districts may have overstated FTE.
Source: Program Review information request to school districts.

There is considerable variation in the number of schools and students per nurse. Using full-time equivalent nurses reported by districts, two regions of the state had student-to-nurse ratios near or better than the national recommendation, but the goal of a nurse per school was not met.

There is considerable variation among regions in the number of schools and students per FTE nurse for districts that responded. In Table 3.8, staff calculated the number of schools and students per FTE nurse for districts that responded. In two regions of the state, districts reported student ratios near or better than the national recommendation, although the goal of a nurse per school was not met. Figure 3.A shows the regions defined by Program Review staff.

Figure 3.A
Program Review Regions for School Health Comparisons

Source: Program Review staff.

Table 3.8
Regional Variation of Schools and Students
Per Full-time Equivalent Nurse

Region	Schools Per FTE Nurse	Students Per FTE Nurse
Bluegrass	1.9	1,118
Eastern	1.4	612
North Central	4.1	2,489
Northern	1.6	950
South Central	1.6	779
Western	1.5	744

Note: Number of districts responding: 169. These ratios are based on the number of schools and students in the districts that responded to the Program Review staff information request.
Source: Program Review information request to school districts.

Of the 169 districts responding to the Program Review information request, 70 indicated that their staffing of licensed providers was inadequate. Collectively, they reported that they needed 376 additional full-time nurses to meet their needs. Such coverage would represent a 55 percent increase in the current number of licensed providers. If the school districts had the number of nurses they desired, the number of students per FTE nurse would be 625, exceeding the national recommendation.

Health Departments and School Health

Because of the dominance of local health departments among outside agencies that provide school nurses, this report focuses on their role as a supplement for school district nurses. Staff acknowledge the contribution of universities, hospitals, and home health agencies, particularly in a small but growing number of school-based health centers.

Health departments have the potential to promote the integration of education and school health. The ability to bill Medicaid is the primary driver for expanding health department involvement.

Health departments have the potential to promote the integration of education and school health. Health departments are devoted to health education and disease prevention, which school district nurses might have limited time to provide. Health department nurses can perform immunizations and other services that school district nurses cannot. Nurses from the health department also can provide the same direct health services that school district nurses can. The primary driver for the expansion of health department nurses into the schools, however, is financial. School district nurses cannot bill Medicaid for their services, but health department nurses can.

School health is one of the Department for Public Health's highest-volume programs. The department places responsibility and liability on the local health departments. Actual local practices varied greatly.

Officials of the Department for Public Health stated that school health is one of the department's highest-volume programs in terms of patients served. The department considers school health to be an optional service and places responsibility and liability on the local health departments.

The Department for Public Health's Public Health Practice Reference describes the protocols followed by all local health departments. It does not include any protocols for direct services, such as administration of insulin, glucagon, asthma inhalers, epinephrine, or diazepam. Instead, the reference provides the following guidance for school health services:

> [Local health departments (LHD)] may elect to provide additional school health services not included in the [Public Health Practice Reference]. These additional services are provided under LHD authority without authorization from or liability to [the Department for Public Health]. Adoption of local guidelines and local Board of Health approval are recommended. Examples of services to be included in local guidelines include administration of medications, training and delegation of nursing functions to unlicensed school personnel and special clinical procedures.

The reference also states that school nurses should follow the guidelines of KDE and the National Association of School Nurses for services that are not part of the reference.

Program Review staff visited school districts; interviewed school officials, health department officials, and health department nurses; and reviewed the agreements between health departments and school districts. The actual duties performed by health department nurses varied greatly from one local department to another.

Most health department nurses provide day-to-day care for students with chronic conditions and usually bill Medicaid. Some use UAP.

Most health department nurses do provide day-to-day care for students with chronic health conditions, which they usually bill to Medicaid when the student is eligible. Some health department nurses train and delegate tasks to UAP. Some health departments stated that their nurses might perform any task their licenses allowed.

Only 18 of 42 health departments clearly outlined school nurse tasks in their agreements. Different agreements included different tasks. However, it is not clear that health department nurses always meet the needs of students and the requirements facing schools.

All 42 health departments that provide school health services sent copies or descriptions of their agreements with school districts to Program Review staff. A review of the agreements showed that only 18 of them clearly outlined school nurse tasks. The following tasks were specified in one or more of the agreements:

- First aid
- Immunizations and immunization surveys, outreach, and follow-up
- Well-child screenings
- Home visits
- Medication administration oversight and training of school personnel
- Nurse oversight of emergency action plans and coordination of care with outside providers for students with diabetes, seizures, asthma, and allergies
- Preventive health education
- School staff services including blood pressure checks
- Establishment and maintenance of school health record for each student seen in the schools, not typically including documentation of health services provided
- Documentation of services for patients seen in the schools, typically kept by the health department

Meeting the Needs of School Districts. Although health department nurses have been a boon for many school districts, it is not clear that they always meet the needs of the schools. Best practices dictate that the nurses and the schools should be tightly integrated and should meet the needs of the students and the requirements placed on the schools.

Six health departments offered limited services and required the school district to provide backup coverage.

Six health departments stated in their agreements that school health services are not a mandated core health function and therefore offered limited services. The agreements stipulated that health departments' services were offered to assist the district in complying with KRS 156.502. Therefore, the health departments did not guarantee continuous coverage and stated that it was the responsibility of the school district to do so. They tied the scope of the services provided to the availability of funding, the utilization in various schools, and the availability of nurses to provide services. In such situations, the agreements required that the school district assign trained backup personnel for medication administration and other clinical procedures.

There are some school districts in which health department nurses do little more than health education and preventive services. In most districts, they do not participate in disability decisions and planning. Some do not delegate to UAP or perform certain other tasks. Concern with liability is a major obstacle.

Interviews and a review of agreements indicated that there are school districts in which the health department nurses do little more than health education and preventive services. They might or might not conduct school health screenings. In most districts, they do not participate in developing Section 504 plans or individualized education programs for students with disabilities. In at least one district, health department nurses see only students who have Medicaid coverage. Some health departments do not allow their nurses to train and delegate UAP. Many health department nurses do not update students' school records but rather maintain only the health department's medical records. Two health departments specified that collecting student health data and recording it in the student information system is the school's responsibility. Some school districts reported that the services provided by health department nurses did not meet their needs.

A major obstacle preventing health departments from providing the full range of school health services is a concern with liability. Some health departments have determined that it is an acceptable risk to provide direct school health services, while others have not. Program Review staff recommend that the Department for Public Health advise the health departments on this issue.

Recommendation 3.1

Recommendation 3.1

The Department for Public Health should advise local health departments on ways to assist school districts to meet their obligations under state and federal laws and on liability risk management. If necessary, the department should request that the General Assembly grant liability protection so that health departments may better serve school health needs.

Review of health department agreements raised some concerns. Agreements ranged from oral agreements to formal contracts. Many were not formal contracts but memoranda. Many were vague and did not address key issues.

Oversight of School Health Contracts. The review of contracts and agreements between health departments and school districts raised several additional concerns. The agreements ranged from two oral agreements for backup nurses to formal contracts that clearly outlined school nurses' tasks. Many of the written agreements were not formal contracts but were memoranda of agreement or memoranda of understanding. Many were vague, and some did not address what tasks the nurses should perform. Twelve health departments did not refer to any nursing practice guidelines or policies in their agreements. There was no explicit statement about the supervision of school nurses in the agreements of 23 health departments. Several agreements mentioned training of UAP, but only one explicitly stated that health department

nurses would delegate tasks to UAP; five stated that the school district was responsible for UAP.

KDE officials stated that there is no requirement that school districts provide copies of their agreements and no requirement that KDE review them. Some districts voluntarily have sought technical assistance with these agreements. Program Review staff recommend that KDE increase its oversight of school health services agreements.

Unlicensed Assistive Personnel Types and Numbers

Most districts use UAP to supplement nursing services, mostly during the school day.

School districts often struggle to find funds for school nurses; therefore, many schools do not have a nurse available at all times. Most districts reported using UAP during the school day to supplement nurse coverage. Some are hired as dedicated health services assistants, but most are delegated while holding other job positions. Some districts also used UAP to provide care outside the school day. Table 3.9 shows how many districts used UAP at different times, how many districts used dedicated UAP, and how many used other personnel as UAP.

Table 3.9
Percentage of Districts Using Unlicensed Assistive Personnel

Setting		Districts
During the School Day	Using Any UAP	71%
	Using Dedicated UAP	24
	Using Other Personnel as UAP	65
Other Times		44

Note: Number of districts responding: 168. Dedicated and other personnel UAP district percentages total more than "Any UAP" because some districts used both types.
Source: Program Review information request to school districts.

The number of UAP was reported by school districts responding to a Program Review information request. Table 3.10 shows the head count for UAP with different types of jobs. Most of the dedicated health services assistants were hired into full-time positions. Districts reported 274 FTE for these UAP.

Table 3.10
Number of Unlicensed Assistive Personnel Available During the School Day for Chronic Health Conditions

Job Type	Head Count
Health services assistant (dedicated)	286
Office manager, secretary, or clerical staff	1,188
Regular education teacher	2,825
Regular education instructional assistant	632
Special education teacher	786
Special education instructional assistant	957
School counselor	131
Principal or assistant principal	226
Food service and nutrition staff	123
Bus driver	1,359
Other	728
Total	9,241

Note: Number of districts responding: 168. One district reported training all school staff in two tasks that probably did not strictly require delegation. Those numbers were excluded. The district reported a smaller number of UAP for other chronic health condition tasks but did not break them down by job type. That number was included in "Other." One district reported two more people in its breakdown by job type than in its overall total. Those two are included here.
Source: Program Review information request to school districts.

Most districts using UAP during the school day were satisfied with their coverage. Those who had dedicated UAP with prior health care training were very satisfied with them.

Of the 120 districts using UAP during the school day, all but 17 were satisfied with their coverage (with 168 responding). Some of the dedicated health services assistants had prior health care training, such as certified medical assistants. Schools appeared to be very satisfied with such UAP, according to interviews.

Backup Providers

A school district should have someone to cover when a nurse or UAP is absent. Most districts indicated they did, but some did not. Some health departments would not guarantee backup nurses, but others routinely provided them.

Besides having enough providers for a typical day, it is important that a school district have backup providers in case a nurse or UAP is absent for any reason. Most districts indicated that they had a backup nurse and backup UAP, but some acknowledged that if their nurse was out, there was no coverage. In their contracts, some health departments specifically stated that they would not

guarantee backup coverage. However, other health departments routinely provided backup nurses.

Role of Parents and Guardians in School Health

Almost all school districts ask parents to assist with care at school and in other settings, especially for students with diabetes. Most districts permit parents or guardians to designate a family member or other person to provide care.

Kentucky law does not explicitly say that parents or guardians may provide care to their children at school, but it is a common expectation. Virtually all the school districts visited and school nurses interviewed stated that they depend heavily on parents or guardians to provide care when school nurses and UAP are unavailable. Diabetes care appears to be the most frequent reason for calling on parents or guardians. Because the nursing board discourages delegation of insulin administration, many schools ask parents or guardians to accompany their children on field trips because there are not enough nurses to provide care both in the schools and on field trips. Some schools depend entirely on parents or guardians for diabetes care both at school and in other settings.

Sometimes a parent or guardian is not available when a child needs care at school. Most districts permit a parent or guardian to designate another family member or an unrelated person who is knowledgeable about the student's care. Some districts responded that they would not permit parents and guardians or designees to perform any health service tasks. Table 3.11 shows the percentages of districts that would allow parents and guardians, designated relatives, and other designees to perform at least some tasks for students with diabetes, asthma, severe allergy, or epilepsy in different settings.

Table 3.11
Percentage of Districts Permitting Parents and Guardians, Designated Relatives, and Other Designees To Perform Health Service Tasks

Setting	Parent or Guardian	Relative	Other
At school during the school day	93%	87%	81%
At before- or after-school activities	95	87	81
On buses to or from school	75	71	65
On daytime field trips	95	88	82
On overnight field trips	95	86	80
At other school-sponsored events	95	87	81
At summer school programs	90	84	78

Note: Number of districts responding: 168. A district was counted if it permitted some or all tasks to be performed by the person indicated.
Source: Program Review information request to school districts.

Much of parent dissatisfaction was with the failure of schools to provide care. Some parents reportedly recruited school staff and trained them to perform health service tasks for their children. This arrangement may be illegal.

In interviews, some parents reported being dissatisfied with the care offered by the schools. Some of their dissatisfaction was directed at school nurses or UAP, but in most cases it resulted from the failure of the schools to provide care. Some parents reported making their own arrangements with school personnel, usually office staff or instructional aides, to perform health service tasks for their children. These parents trained the school personnel and reported being confident that the school personnel provided satisfactory care. Such arrangements may be illegal because school employees under KRS 156.502 should be trained and delegated by a nurse or physician before performing health service tasks. However, it may be that the law does not exclude parent or guardian designees if the school district permits them to act on their own and not as employees. Certainly, such school personnel would not be covered by the liability protections in that statute.

Program Review staff asked school nurses and other school personnel if they were aware of such arrangements. Table 3.12 shows that school personnel trained by parents probably performed health service tasks regularly at a few schools. For several health service tasks, nonnursing personnel in schools with full- or part-time nurses reported many fewer instances of these arrangements than those with no scheduled nursing coverage.

Table 3.12
Percentage of Nurses and School Personnel Reporting Health Service Tasks Performed by Staff Who Were Trained by Parents

Task	Reported by	Performed Often	Performed Sometimes
Counted carbohydrates, calculated an insulin dose, or injected insulin	Nurses	1%	3%
	Other personnel	3	9
	In schools with nurses	2	8
	In schools without nurses	4	10
Injected glucagon to lower blood glucose*	Nurses	0	<1
	Other personnel	1	5
Performed other tasks for a student with diabetes, such as blood glucose checking	Nurses	4	9
	Other personnel	5	13
	In schools with nurses	4	12
	In schools without nurses	8	16
Administered an asthma inhaler	Nurses	3	14
	Other personnel	4	17
	In schools with nurses	3	15
	In schools without nurses	7	21
Injected epinephrine	Nurses	0	1
	Other personnel	1	7
	In schools with nurses	<1	6
	In schools without nurses	1	9
Managed a student having a seizure	Nurses	2	10
	Other personnel	4	24
	In schools with nurses	3	21
	In schools without nurses	5	32
Administered diazepam rectal gel for a seizure	Nurses	<1	1
	Other personnel	1	3

Note: Number of respondents based on having a student in school with the corresponding conditions varied for each item: nurses, 249-291; other personnel, 3,647-9,679; other personnel having nurse, 2,677-7,001; other personnel without nurse, 970-2,678. Where shown, differences between other personnel having a nurse at the school and without a nurse were significant at the 0.001 level or better using the chi-square test of significance.
*The glucagon item was worded incorrectly on the survey instrument; glucagon actually raises blood glucose. There might be some bias introduced on this item.
Source: Program Review surveys of school personnel.

KDE and the Board of Nursing should address school health service deficiencies and determine whether parents and guardians may designate school employees. If parents may not do so, the General Assembly may wish to consider the issue.

Program Review staff encourage KDE and the Board of Nursing to address any school health service deficiencies that encourage this practice and to determine whether the practice is permissible under the law. If it is not, then the General Assembly may wish to consider whether the law should permit such arrangements. For example, Washington State statute expressly permits parents or guardians to designate either school employees or outside volunteers to perform health service tasks for students with diabetes. The statute also protects school districts and volunteers from liability.

Minimum School Health Staffing

Some districts responding to a Program Review information request indicated that they had no nurses providing direct care to students.

In 1999, of 130 districts responding to a Legislative Research Commission task force survey, 22 had no school nurses (Commonwealth. Legislative 4). Of the 169 districts responding to a Program Review information request in 2009, only 13 indicated they had no school nurse providing care to students. Some of those had a nurse whose job was to train and delegate tasks to UAP. At least one had no nurse or UAP but depended on parents or guardians and emergency medical services.

Availability of school nurses has improved since 1999, but a few gaps remain. Whenever parents and guardians are unable or unwilling to help, school districts must provide health services. Some school districts may be in violation of this requirement.

Although the availability of school nurses has improved, a few gaps remain. If any student requires a health service and the parent or guardian is unable or unwilling to provide it, the school district must do so. The district may not require a parent or guardian to perform health service tasks and may not deny attendance and participation because of a lack of health services. Without formal training and delegation, unlicensed school personnel may not legally administer any nonemergency medications or provide any other routine health services. Because so many students require some kind of medication, it seems unlikely that a school district could follow the law without arranging for a nurse or physician in some capacity.

For some students with chronic health conditions, there are additional requirements. If a student has a prescription for glucagon or diazepam, the school is required to have an employee on-site who can administer that emergency medication at all times, regardless of a parent's or guardian's willingness to assist. In order to have such a UAP, the school district must have a nurse or physician who can train, delegate, and supervise the UAP.

Whether a nurse who only oversees UAP is sufficient depends on whether there are students who need nursing services and whose parents or guardians are not available to provide them. For a student with diabetes who cannot self-administer insulin, a nurse or parent or guardian may be required to administer it. Finally, the district must arrange for a nurse, physician, or parent or guardian to perform any other health service tasks that would be imprudent to delegate given a specific student's condition.

It also is required that a nurse assess each student who needs care before delegating care to a UAP, that the student be assigned to a specific UAP, and that the delegation form be in the UAP's personnel file.

Program Review staff did not determine whether all students who received care from UAP were assessed by the delegating nurse, whether students were assigned to UAP, or whether delegation forms were in the personnel files of UAP. However, these are important aspects of determining delegation on a case-by-case basis and are legal requirements.

KDE does not maintain copies of school district health services policies and procedures, and the department has not monitored how districts provide health services.

KDE officials stated that the department does not maintain copies of school district health services policies and procedures. KDE also does not actively monitor how school districts provide health services. Program Review staff recommend that KDE develop a system that informs the department about how the districts provide services. Staff also recommend that KDE create a summary of the requirements, obligations, and limitations of school districts, school nurses, physicians, UAP, and parents and guardians.

Recommendation 3.2

Recommendation 3.2

The Kentucky Department of Education should require all school district agreements with outside health service providers to be in writing and to be submitted to the department. The department should require all districts to submit regularly updated descriptions of their health services policies; procedures; and models of care, including the types, numbers, and supervisors of all licensed and unlicensed personnel. The agreements and descriptions should be sufficient to determine whether districts meet their obligations to provide health services under state and federal laws. The department should provide guidance to districts on their obligations and monitor their compliance.

School Health Care Practice

Integrated Education and Health Services

Many school districts treat health as separate from education. Some schools, however, consider health and education as linked.

In many districts and schools, health is seen as separate from education. Teachers and instructional staff want health services for students but do not want health concerns to intrude into instruction. School nurses, while valued, often report being treated as adjunct staff who have little to do with instruction and learning. In some districts, school nurses, particularly health department nurses, were not involved in the committees that develop Section 504 plans for students with health conditions. One school district stated that the district "is an educational institution and should not be a health care center." There are examples, however, of programs and schools that do treat education and health as linked.

Coordinated School Health is a federally promoted model for integrating health and education. Schools should be concerned about the effect of health on attendance, learning, and participation. Such concern leads to involvement with family, community, and public health.

The Coordinated School Health Program is a model of school health services promoted by the federal Centers for Disease Control and Prevention (CDC). The model calls for schools to serve as a link among families, community medical and mental health providers, community organizations, and public health initiatives. In Kentucky, CDC funds an initiative through KDE in collaboration with the Department for Public Health to increase the capacity of schools, districts, and communities to adopt the model. Several community partners, including the American Lung Association, American Heart Association, Alliance for a Healthier Generation, and Foundation for a Healthy Kentucky, also promote this model.

The rationale for the CDC model is that schools occupy a unique position in the lives of children. Other than home, school-age children spend most of their time at school. Their health needs become a matter of concern to the school to ensure attendance, learning, and participation. By addressing these basic educational mandates, schools inevitably become involved in family, community, and public health matters.

The priority given to school health depends on seeing how education is linked to many other factors and processes.

The priority and role that school districts, schools, and individual teachers give to health services depends on whether they perceive education as an independent process or as a process that is linked to many other factors and that contributes to many other processes. The interplay between education and health can be illustrated with five examples.

Program Review staff visited one of several districts that have adopted the Coordinated School Health model. Each school has a school nurse who works closely with teachers and other staff as well as with students. Across the district, the school health coordinator, Family Resource and Youth Services Centers, director of pupil personnel (truancy officer), school psychologist, counselors, and nurses work together to identify barriers to attendance and participation. School nurses also work with teachers and principals to determine the best ways to accommodate health care needs to maximize learning. Although it has not yet seen increased attendance resulting from the program, district officials reported a reduced dropout rate and improved graduation rate since implementing the model.

The University of Louisville is working with the Jefferson County schools and health department to implement a system to track absences geographically. The data will allow school nurses and the health department to identify clusters of students with various

health conditions and to seek community-level interventions that could improve community health and school attendance.

In another school district, a student with diabetes was discovered because the teachers noticed significant changes and informed the school nurse. When teachers are familiar with the school nurse and the ways the nurse can help, the school health system can provide better care.

Truancy often involves family difficulties, delinquency, and health conditions. In Fayette County, the Family Court Truancy Initiative has implemented a truancy prevention program that includes integrated efforts by the schools, health care providers, child protective services, and juvenile justice.

In many school districts, health departments provide school health services. In addition to providing direct nursing care, they promote public health objectives and help the school by offering immunizations, school physicals, and required health screenings.

Allaying the Fears of School Personnel and Other Students

Teachers and school staff often feel overwhelmed and want someone else to provide health services. Many are afraid they will make a mistake, and the health conditions themselves may frighten some school personnel.

Teachers and other school personnel often feel overwhelmed by students' health needs. In interviews and surveys, school personnel frequently expressed the opinion that they entered education to teach, not to provide health care. They stated that they wanted health services for their students but that school nurses or others with appropriate training and skills should provide them. Many school personnel did not want to be trained to perform health service tasks.

Interviews with teachers and parents supported the idea that many school personnel are afraid that they will make a mistake when a student needs health services. In some cases, it appears that the condition itself frightens teachers and other staff; in particular, epileptic seizures can seem disturbing. The thought of injecting a needle for someone with diabetes or severe allergy can be frightening. Sometimes parents reported that a lack of knowledge led teachers or other staff to mistreat a student with a chronic condition. Some UAP who were providing care reportedly experienced significant anxiety when the plan of care or medical device was changed.

Table 3.13 shows the percentages of school personnel who indicated they were willing to perform various health service tasks. The tasks that school personnel were least willing to perform involved a rectal medication to control seizures and injections related to diabetes, all of which might seem disturbing.

Table 3.13
Willingness of School Personnel To Perform Health Service Tasks

Task	Willing	Maybe	Unwilling
Checking blood sugar	47%	26%	27%
Counting carbs, calculating a dose, and injecting insulin	28	26	46
Injecting glucagon to raise blood sugar	29	25	46
Administering an asthma inhaler	57	26	17
Injecting epinephrine	48	27	25
Managing a student having a seizure	44	33	23
Administering diazepam rectal gel to control a seizure	20	22	57

Note: Number of respondents: 11,247. Counting carbs, calculating a dose, and injecting insulin currently are not permitted for UAP, but the question was asked hypothetically. Percentages may not total 100 because of rounding.
Source: Program Review staff survey of school personnel.

There are several apparent benefits to having schoolteachers and staff trained in school health matters. Training also seems to alleviate concerns and increase comfort.

The belief that teaching should not involve health care illustrates the lack of integration between education and health services, but teachers and other staff have the most contact with students and often will be the ones who notice unusual symptoms that might indicate serious problems. This is true both for students who have identified needs and those whose conditions are new or undiagnosed. School personnel could help more effectively if they had some familiarity and comfort with the conditions their students are most likely to have. Some chronically ill students also would benefit because they could spend less time traveling to the school office and more time in the classroom.

Training for school personnel seems to alleviate some of their concerns. One study found that teachers' comfort level in helping students with severe allergy increased from 54 percent to 71 percent 3 months after a brief presentation of food allergy guidelines (Stephenson). Many school districts already educate their staff on some of the chronic health conditions. Program Review staff urge all districts to provide general information about chronic health conditions to all school personnel.

Colleges of education could help future teachers by including pediatric health as a required course.

Colleges of education could help future teachers by including pediatric health as a required course. This was suggested by a faculty member at the University of Kentucky's College of Nursing and a colleague in the university's pediatric pulmonology clinic. Such coursework could include visits to a pediatric medical

facility to shadow nurses and observe the basics of care for common health conditions.

Peers of students with chronic health conditions may react in negative ways. The student with the condition should have some choice in how peers are informed. Students with chronic conditions, especially epilepsy, are at risk of being taunted or bullied.

A student's peers also are affected when a chronic health condition causes unusual behavior or symptoms. They notice when a fellow student with diabetes or asthma has to leave a classroom to have symptoms checked or medications given. Classrooms and even entire schools might have to forgo peanuts or other foods when there is a student with a severe allergy. Depending on their ages, peers may react in negative ways to these and other health-related situations.

School nurses sometimes provide general education about common health conditions; however, specific information about individual students should be considered carefully. Interviews with parents and former students suggested that the student who has the condition should have some choice in whether and how peers are informed. Parents of elementary students sometimes visit and explain the condition to the entire class. Older students seem to want more privacy and keep the knowledge of their conditions within a group of friends.

Of special concern is peer response to students with epilepsy. Sometimes peers are afraid of students who have seizures, and this can lead to taunting and bullying. The Epilepsy Foundation provides presentations tailored to students of different ages that educate peers about seizures.

A peer tutor group in Fayette County has spread understanding of special needs across the student body.

In Fayette County, a special-education teacher recruited peer tutors from regular education classes to work with the special-education students, some of whom had epilepsy. The peers' familiarity and comfort with the special-needs students appears to have spread to other students. According to one teacher, "You certainly changed the culture of special needs students and the whole school mentality on acceptance!!" (Molsky). This concept could be expanded to involve peers of any students with special health care needs.

KDE should consider promoting student health courses in colleges of education and should provide districts with guidelines and assistance on ways to increase awareness and comfort among teachers and students.

Program Review staff urge KDE to consider working with appropriate authorities to create student health courses in Kentucky's colleges of education. KDE also should develop and provide guidelines and technical assistance to districts on ways to increase the awareness and comfort of teachers and peers of students who have chronic health conditions.

Health Service Tasks Performed in Schools

School districts provided information on how often tasks related to chronic health conditions were performed and how often different providers performed them.

Program Review staff, with consultation from school nurses and others, developed a list of health service tasks that students with chronic health conditions might need in order to attend and participate in school. Staff asked school districts to estimate how often these tasks were performed and who performed them for students. Table 3.14 shows how much each task contributed to the total workload and how often each was performed by different providers.

Table 3.14
Relative Workload for Health Service Tasks

Health Service Task Performed	Percent of Total Tasks	Percent by Type of Provider		
		School Nurse	Unlicensed Assistive Personnel	Parent/ Guardian or Designee
Carbohydrate count, insulin dose calculation	14%	87%	NA	13%
Insulin administration	11	89	NA	11
Glucose monitoring	24	62	33	5
Glucagon administration	<1	81	5	14
Low-glucose intervention	6	56	38	6
High-glucose intervention	6	54	40	7
Asthma inhaler administration	33	32	64	4
Nebulizer administration	3	32	67	1
Peak flow meter measurement	<1	34	66	<1
Epinephrine administration	<1	97	2	1
Seizure management or charting	2	38	54	7
Diazepam administration	<1	39	61	<1
Vagus nerve stimulator administration	<1	15	77	8
Midazolam administration	0	98	2	—
Total	100%			

Note: Number of districts responding: 168. Low-glucose intervention includes providing glucose pills or candy or juice. High-glucose intervention includes providing water, allowing access to rest room, excusing from physical activity, or checking ketones. Percentages may not total 100 because of rounding.
Source: Program Review information request to school districts.

Questionable Practices—General

There are significant differences in health service practices. This report presents some of the questionable practices so appropriate oversight can help reduce them.

Along with the wide variation in school health staffing models, there are significant differences in the health service practices among and within districts. School staff, outside health care providers, and parents reported both exemplary and questionable practices. This report presents some of the questionable practices so that appropriate oversight can help reduce them. The practices listed were mentioned often enough that they probably are not

isolated incidents. Some practices apply to multiple health conditions and are presented in this section on general practices.

Table 3.15 describes practices that were mentioned in interviews and focus groups, along with reasons that they are questionable. Four of these practices are potentially dangerous, while five others may be a violation of statute.

Table 3.15
General Health Service Gaps and Lapses

Description	Basis for Concern
• Classroom teacher is unaware of the health care plan or emergency action plan for a student. • Substitute teacher is unaware of the health care plan or emergency action plan for a student. • Bus driver is unaware of the health care plan or emergency action plan for a student. • Necessary medications are locked in the office, and there are times that no one has access to them.	Poor practice; dangerous
• No UAP are trained even though a plan was written indicating they should be. • Student is unable to attend an activity or class party because no one is available to provide care. • School refuses to allow student to participate in a field trip, athletics, or other school event because of health condition. • Parent or guardian must accompany student on field trips. • School refuses to permit student to have a service animal trained to detect symptoms of the health condition.	May be a violation of statute

Source: Program Review staff compilation of interviews.

Some of these practices were included in the Program Review surveys of school nurses and other personnel. Table 3.16 provides information from those surveys on how often two of the practices occurred. The differences between the responses of nurses and other personnel here and in other tables probably resulted from the different perspectives of the two groups and the fact that many of the other personnel worked in schools that had no regular school nurse.

Nurses, teachers, and parents often reported that school personnel were unaware of a student's health condition and needs.

Lack of communication with teachers was mentioned frequently. The pattern reported in Table 3.16 suggests that communication probably is better in schools with nurses but that concern about the issue may also be greater there. Parents and teachers stated that health information is sometimes not communicated from the

school office to the teacher or other responsible staff, such as the bus driver. Several respondents to the Program Review survey of teachers commented that they were unaware of a student's condition until told by the student or parent or they noticed that something seemed wrong with the student. From their comments, it is clear that teachers wanted to know if they had a student with a chronic condition. It is important that they know so that they can watch for symptoms and respond appropriately.

Table 3.16
Percentage of Nurses and School Personnel Reporting Specified General Health Service Practices

Practice	Reported by	Happened Often	Happened Sometimes
Medications needed by a student were not available because they were locked up and no one on-site was able to get to them.	Nurses	1%	5%
	Other personnel	1	7
	In schools with nurses	<1	6
	In schools without nurses	1	8
A substitute teacher was unaware that a student in class had diabetes, asthma, severe allergy, or epilepsy.	Nurses	6	44
	Other personnel	8	30
	In schools with nurses	7	30
	In schools without nurses	12	28

Note: Number of respondents based on having a student with at least one condition: nurses, 293; other personnel, 10,647. All differences between other personnel having a nurse at the school and without a nurse were significant at the 0.001 level or better using the chi-square test of significance.
Source: Program Review staff surveys of school personnel.

The ability of students to attend school and participate in school activities was an issue with all the chronic health conditions.

Effect on Attendance and Participation. The ability of students to attend school and participate in school activities was an issue with all the chronic health conditions. Program Review staff surveys of school personnel asked whether students were unable to do so because no one was available to provide health services. This means that neither the parent nor the school was able to provide care. Table 3.17 shows the responses by school nurses and other school staff.

The differences between nurses and other personnel might result from their different perspectives. Among other personnel, the responses differed significantly between those who did have and those who did not have nurses in the schools. In all settings, respondents with a full- or part-time nurse reported fewer problems than other respondents. However, nurses themselves reported more problems than other personnel related to participation in field trips and extracurricular activities. Interviews with school nurses indicated that they were sensitive to these participation problems.

Table 3.17
Percentage of Nurses and School Personnel Reporting That Students Sometimes or Often Were Unable To Attend or Participate in School Activities

Setting	Nurses	Other Personnel		
		Overall	In Schools With Nurses	In Schools Without Nurses
Attend school	10%	22%	19%	29%
Ride the bus to and from school	14	14	12	17
Go on daytime field trips	16	14	13	15
Attend before- or after-school programs and activities	16	14	13	16
Participate in athletics	14	21	20	25
Go on overnight field trips	14	9	8	10
Attend other school-sponsored events	12	13	12	15
Attend summer school	6	6	6	7

Note: Number of respondents based on having a student with at least one condition: nurses, 293; other personnel, 10,647; other personnel having nurse, 7,732; other personnel without nurse, 2,915. All differences between other personnel having a nurse at the school and without a nurse were significant at the 0.01 level or better using the chi-square test of significance.
Source: Program Review staff surveys of school personnel.

Parents reported frustration resolving disputes with the schools and were unaware of information from KDE. KDE does not have a dispute resolution process for most health services. KDE should consider ways to make parents aware of available information and to facilitate dispute resolution.

Resolving Disagreements. Parents in focus groups frequently reported frustration with the process for resolving disagreements with the schools. Parents turned to school superintendents, boards of education, the Kentucky Division of Protection and Advocacy, support and advocacy organizations, and the courts, but none of those interviewed mentioned KDE. The department does provide information in the form of consultation and technical assistance to parents or guardians and districts but does not have a dispute resolution process for school health services provided outside the Individuals with Disabilities Education Act. Program Review staff urge the department to consider ways to inform parents and guardians about available assistance and to facilitate dispute resolution on school health issues.

Questionable Practices—Diabetes

Parent focus groups, school surveys, interviews, the University of Kentucky, and the American Diabetes Association provided examples of questionable practices in managing diabetes.

Table 3.18 summarizes the reported gaps and lapses in diabetes care, in addition to the issues listed in Tables 3.15 and 3.16. These reports came from parent focus groups, school surveys, and interviews with nurses and school personnel; University of Kentucky information collected from parents of children with diabetes; and a summary of issues reported to the American Diabetes Association.

Table 3.18
Diabetes Gaps and Lapses

Description	Basis for Concern
School requires parent or guardian to administer insulin because no nurse is available.	May be a violation of statute
At times during the school day, there is no one available at school to administer insulin.	Depending on the diabetes management plan, this may be poor practice
There is no written plan for emergency administration of glucagon.	May be a violation of statute
There is no one at the school trained to administer glucagon.	May be a violation of statute
When a nurse is not available to administer insulin, UAP administers insulin, parent or guardian has to keep the student home, or parent or guardian has to go to school to administer insulin.	First option conflicts with nursing board opinion; others may be violations of statute
Nurse counts carbohydrates incorrectly.	Poor practice; dangerous
Teacher does not allow enough time for blood glucose checks.	Poor practice
Student with hypoglycemia is sent unescorted to the office for treatment.	Poor practice; dangerous
Schools advise families that a student with diabetes is not eligible for a Section 504 plan.	May be a violation of statute
Students are not permitted to perform self-care tasks, such as testing blood glucose, having a snack, drinking water, and administering insulin via a pump.	Poor practice; students should be encouraged to develop self-care skills
Students are not permitted to carry supplies needed for self-care.	Poor practice; dangerous
Students are required to perform diabetes self-care in the school office, reducing their instructional time.	Poor practice
Parent or guardian who wants to accompany student on field trip is discouraged or prevented from doing so.	Poor practice
Student must attend a different school because that school has a nurse.	May be a violation of statute, but court rulings are mixed

Source: Program Review staff compilation of Scott; Perry; and interviews.

There were some possible violations of the statute that requires school to have someone trained to administer glucagon.

The Program Review staff survey of school personnel asked about some practices that might be ill-advised. In addition, the first item in Table 3.19 violates a Kentucky statute; the second item fails to comply with a nursing board advisory opinion and would be illegal if the UAP were not delegated. The third item, sending a student with diabetes alone to the office, is potentially dangerous if the child becomes disoriented. Unlike most other items, many more nurses reported this practice than did other school personnel, even though in schools with nurses, school personnel reported it less frequently than those in schools without nurses. Interviews with school nurses indicated that they were very concerned about the need to have someone accompany a student who has diabetes.

Table 3.19
Percentage of Nurses and School Personnel Reporting Questionable Diabetes Health Service Practices

Practice	Reported by	Happened Often	Happened Sometimes
No nurse or trained staff person was on-site to inject glucagon in case it was needed for a student with diabetes	Nurses	3%	7%
	Other personnel	6	14
	In schools with nurses	4	14
	In schools without nurses	12	12
A school staff person (not a nurse) counted carbs or administered insulin for a student, without consulting a parent or nurse.	Nurses	2	5
	Other personnel	3	7
	In schools with nurses	3	7
	In schools without nurses	4	8
A student with diabetes was sent to the office alone to take care of low or high blood sugar.	Nurses	8	42
	Other personnel	5	21
	In schools with nurses	4	20
	In schools without nurses	8	26

Note: Number of respondents based on having a student in school with diabetes: nurses, 255; other personnel, 7,390; other personnel having nurse, 5,545; other personnel without nurse, 1,845. All differences between other personnel having a nurse at the school and without a nurse were significant at the 0.001 level or better using the chi-square test of significance.
Source: Program Review staff surveys of school personnel.

Most districts would allow students to carry their diabetes medications and equipment and to self-administer them, even though it is not required under Kentucky law. Some would not.

Although not required by statute, most school districts reported that they would allow students to carry diabetes equipment and medications with them. Statute also does not address whether schools should allow students to perform tasks related to diabetes management. Most districts indicated that they would allow students to self-administer insulin and perform other self-care tasks. Table 3.20 shows the percentage of districts that would not allow students to carry these items or perform these tasks.

Table 3.20
Percentage of Districts With Prohibitions on Carrying or Self-administering Diabetes Items

Item	Not Allowed To Carry	Not Allowed To Self-administer
Blood glucose monitoring kit	6%	2%
Insulin	14	5
Ketone test kit	13	10
Glucose source (pills, candy, or juice)	3	5

Note: Number of districts responding: 168.
Source: Program Review staff information request to districts.

For students who need help calculating a dose, it is permitted but not recommended for a student to call a nurse or parent or guardian to calculate the insulin dose, then for a UAP to verify that the student has the right dose when self-administering. This is a routine practice in some districts.

Some students are able to inject insulin or adjust their pumps but are unable to calculate a dose without assistance. For these students, the nursing board and KDE told Program Review staff that it would be acceptable, but not desirable, for students to call a parent or guardian or school nurse as long as a UAP was present to verify that the dose calculated by the parent or guardian or nurse was accurately transferred by the student to the syringe or pump.

Interviews indicated that several school nurses employ this method. The Program Review survey of school personnel asked how often they were aware of a parent doing this. Table 3.21 shows that in some schools, it is a routine practice. Unlike many of the other items on the survey, nurses reported it as happening more often than other school personnel reported. It may be that the nurses were more aware of these arrangements because they should have helped set them up. Although the responses of other school personnel differed statistically depending on whether or not the school had a nurse, the differences were not very large.

Table 3.21
Percentage of Nurses and School Personnel Reporting Parents Assisting Students With Diabetes Care by Phone

Practice	Reported by	Happened Often	Happened Sometimes
A student on the phone with a parent counted carbs, calculated an insulin dose, and administered insulin while an unlicensed assistive person observed.	Nurses	9%	23%
	Other personnel	7	16
	In schools with nurses	7	16
	In schools without nurses	9	17

Note: Number of respondents based on having a student in school with diabetes: nurses, 255; other personnel, 7,390; other personnel having nurse, 5,545; other personnel without nurse, 1,845. Difference between other personnel having a nurse at the school and without a nurse was significant at the 0.001 level or better using the chi-square test of significance.
Source: Program Review staff surveys of school personnel.

Questionable Practices—Asthma

It was reported often that teachers might not know about the asthma emergency action plan.

One gap from the general list that was mentioned often regarded asthma: regular and substitute teachers did not know about a student's emergency action plan. Table 3.22 shows other gaps and lapses in asthma care in addition to those listed in Tables 3.15 and 3.16. Being able to carry medication to school and back on the bus is important for families that have only one inhaler.

Table 3.22
Asthma Gaps and Lapses

Description	Basis for Concern
Student's asthma is triggered by an allergen in the school environment, such as mold or classroom pet, and the school does not fix the problem.	Poor practice; dangerous
Students are not allowed to carry asthma medication on the bus if they are not able to self-administer.	Poor practice; dangerous

Source: Program Review staff compilation of interviews.

There were some possible violations of the statute permitting students with asthma to carry and self-administer their medications.

Kentucky statute requires schools to allow a student to carry and self-administer asthma or anaphylaxis medication when the parent or guardian and health care practitioner confirm that the student is capable. Table 3.23 shows that some respondents to the Program Review survey of school personnel reported activities that might be violations of this statute. The survey did not attempt to distinguish between asthma and anaphylaxis medications. School nurses reported a much lower occurrence than other school personnel did. Although the responses of other school personnel differed statistically depending on whether or not the school had a nurse, the differences were not very large.

Table 3.23
Percentage of Nurses and School Personnel Reporting a Specified Questionable Asthma Health Service Practice

Practice	Reported by	Happened Often	Happened Sometimes
A student with an inhaler or epinephrine kit was prevented from carrying the medication, even though the student was capable and had permission from the parents and doctor.	Nurses	0%	3%
	Other personnel	5	8
	In schools with nurses	4	8
	In schools without nurses	6	9

Note: Number of respondents based on having a student in school with asthma or severe allergy: nurses, 292; other personnel, 10,166; other personnel having nurse, 7,372; other personnel without nurse, 2,794. Difference between other personnel having a nurse at the school and without a nurse was significant at the 0.01 level or better using the chi-square test of significance.
Source: Program Review staff surveys of school personnel.

Questionable Practices—Severe Allergy

Students with severe allergy must avoid contact with the allergen and have an epinephrine kit available at all times. Some districts appear to have failed to follow the statutes and best practices.

The two most important practices related to severe allergy are preventing contact with the allergen and having a prescribed epinephrine kit available at all times. Table 3.24 shows gaps and lapses in severe allergy care that are in addition to those listed in Tables 3.15 and 3.16. Being able to carry medication to school and back on the bus is important for families that have only one epinephrine kit. Table 3.23 in the previous section suggests that

some districts also violated the statute allowing students to carry and self-administer anaphylaxis medications.

Table 3.24
Severe Allergy Gaps and Lapses

Description	Basis for Concern
• Student is not allowed to attend school on certain days when allergen will be present. • Student is not allowed to participate in science or other classes that involve the allergen, such as peanut oil or eggs, in experiments and demonstrations.	May be a violation of statute
• "Allergen-free" areas are used for other purposes and not cleaned to ensure that no allergen residue is present when the student uses them. • Class pet food contains allergen. • Teachers leave food with allergen in common areas. • Extracurricular events, such as dances and athletics contests, have snacks with allergens.	Poor practice; dangerous

Source: Program Review staff compilation of interviews.

Questionable Practices—Epilepsy

It was reported that students with epilepsy sometimes were not allowed to go on field trips. There were some additional lapses.

One gap from the general list in Table 3.15, refusing to allow students to go on field trips, was mentioned frequently for students with epilepsy. Table 3.25 shows gaps and lapses in epilepsy care that are in addition to those listed in Tables 3.15 and 3.16.

Table 3.25
Epilepsy Gaps and Lapses

Description	Basis for Concern
Teacher or school staff mistakes a complex partial seizure for a discipline problem.	Poor practice; dangerous
Teacher or school staff mistakes an absence seizure for an attention problem.	Poor practice; dangerous
Classroom is cleared whenever a seizure occurs.	Poor practice
School refuses to acknowledge need for individualized education program and emergency action plan.	May be a violation of statute; dangerous

Source: Program Review staff compilation of interviews.

There were some possible violations of the statute requiring schools to have someone present trained to administer diazepam.

KRS 158.838 requires schools to have someone on site at all times who is trained to administer diazepam rectal gel for a student with epilepsy for whom it has been prescribed. Table 3.26 shows that some respondents to the Program Review survey of school personnel reported activities that might be violations of this statute. Nurses reported fewer instances of this problem than other

personnel did. Other personnel at schools without nurses reported many more instances.

Table 3.26
Percentage of Nurses and School Personnel Reporting a Specified Questionable Epilepsy Health Service Practice

Practice	Reported by	Happened Often	Happened Sometimes
There were times that no nurse or trained staff person was on-site to administer diazepam rectal gel in case it was needed for a student with epilepsy.	Nurses	2%	4%
	Other personnel	4	10
	In schools with nurses	2	10
	In schools without nurses	10	10

Note: Number of respondents based on having a student in school with epilepsy: nurses, 249; other personnel, 3,647; other personnel having nurse, 2,677; other personnel without nurse, 970. Difference between other personnel having a nurse at the school and without a nurse was significant at the 0.001 level or better using the chi-square test of significance.
Source: Program Review staff surveys of school personnel.

School bus drivers face special problems managing and treating seizures. They are reluctant to administer diazepam and prefer to radio for assistance.

School bus drivers have expressed reluctance to administer diazepam for their passengers. Managing a seizure or administering diazepam rectal gel on a bus presents special problems. Often, the driver is the only adult present. Seats are obstacles for the student having a seizure and for the adult trying to help. Many times, the bus is full of other students; some students may need to move to permit access to the student having a seizure, and the driver remains responsible for all passengers. Most drivers indicated that they would radio for emergency medical services, if possible.

Most districts would allow students to carry their epilepsy medications and equipment and to self-administer them, even though it is not required under Kentucky law. A significant number would not.

Although not required by statute, most school districts reported that they would allow students to carry epilepsy equipment and medications with them. Statute also does not address whether schools should allow students to perform tasks related to epilepsy management. Just over half the districts indicated that they would allow students to self-administer a vagus nerve stimulator magnet. Table 3.27 shows the percentage of districts that prohibited students from carrying these items or performing this task.

Table 3.27
Percentage of School Districts With Prohibitions on Students Carrying or Self-administering Epilepsy Items

Item	Not Allowed to Carry	Not Allowed to Self-administer
Rectal diazepam	22%	NA
Vagus nerve stimulator magnet	30	48
Nasal midazolam	44	NA

Note: Number of districts responding: 168.
Source: Program Review information request to school districts.

Availability of Medication and Equipment

There are circumstances in which a student may not have necessary medications or equipment. This can lead to life-threatening situations, especially if emergency medical services cannot arrive in time.

In order for schools to provide health services, the necessary medications and equipment, such as syringes and test kits, must be available. It is generally accepted that parents or guardians should provide the necessary items. Schools and families may face problems when students lose or forget their medications, when the school or family is not aware the student has a life-threatening condition, and when insurance will not cover an extra prescription for school.

If a student has lost or forgotten to bring medication or a related item, there can be serious medical consequences. Similarly, students may have health conditions that no one is aware of. They might experience severe symptoms at school and have no medication available. Lack of emergency medications—including glucagon for diabetes, rescue inhalers for asthma, epinephrine for severe allergy, and diazepam for epilepsy—can result in death or serious impairment. In the absence of backup medications, the school's only option is to call emergency medical services and the parents or guardians. Because of the immediate danger of death in some situations, help might arrive too late.

Backup medications not prescribed for a specific student must be administered by a registered nurse. They require a physician's order. Many schools with health department nurses have backups because the health department has a medical director; most school districts do not have a medical director.

Some schools are fortunate to have backup medications for some of the more serious conditions. A registered nurse must determine when a backup medication is needed and must administer it. However, the possession and use of medications that were not prescribed for a specific person are permitted only under orders from a physician. Many school districts that contract with health departments have backup medications because the health departments have medical directors, and the medications are under the control of health department nurses. However, school districts generally do not have medical directors, and those districts would not be able to have backup medications on their own.

Table 3.28 shows the results of a Program Review survey of school nurses. The nurses responded that asthma rescue inhalers were the most frequently used backup medication and that epinephrine was the most frequently kept. The percentage of school district nurses reporting backup medications seems high. It may be that they worked for districts that had backup medications through the health department.

Table 3.28
Percentage of School Nurses
Having and Using Backup Medications

	Had and Used		Had but Did Not Use	
Medication	School District	Health Dept.	School District	Health Dept.
Glucagon	2%	1%	17%	34%
Rescue inhaler*	19	30	3	11
Epinephrine	2	1	26	49
Diazepam	2	1	13	19

Note: Number of respondents from school districts, 144; health departments, 149.
*Because albuterol is the most frequent rescue inhaler medication, the survey specified albuterol as the medication. It is possible that responses would have been higher if the generic term had been used.
Source: Program Review staff survey of school nurses.

There are ways to increase the availability of backup medications. One is to increase the use of health departments to provide school health services. Another is to change the statutes to limit the liability of physicians who agree to be school district medical directors. There may be additional options that KDE and other agencies could explore.

Recordkeeping and Reporting for School Health Services

Documentation of Health Services Provided

Instructions for documenting school health services are confusing.

School district nurses and UAP understandably are confused about their responsibility for documenting school health services. The KDE Health Services Reference Guide states that one objective of documentation is "creation of a legal record of nursing services provided to students" and that documentation is a communication tool, but the guide leaves responsibility for documentation policy and procedures to the districts (Commonwealth. Dept. of Education 16). The referenced record retention schedule does not mention documentation of direct nursing services (280). The example of a student cumulative record form does not represent

adequate documentation of nursing interventions according to the nursing literature, but there is an example of a daily health services log that might be used (Exhibit 3I and Exhibit 7F).

Instructions for documenting medication administration are inconsistent, but this might result from the KDE guide's use of examples contributed by school districts.

Students with chronic health conditions often receive medications. The KDE guide again is ambiguous. It states: "Each school district is responsible for adopting their own policy for administering medications to students" and that proper documentation is one important issue "for school districts to consider…" (136). These statements give the impression that districts might even choose not to document the administration of medications at all. However, on a later page, under "General Recommendations for Distribution of Medication to Students," the guide states: "All medication given must be documented on the Student Daily Medication Record Form" (138). This inconsistency may result from the use of forms and procedures contributed by school districts rather than written by KDE staff.

It was not clear how districts recorded health services other than medication administration. Program Review staff did not review documentation for privacy reasons.

School districts generally appeared to maintain a medication administration log for each student. It was not clear how districts recorded other health service tasks, such as checking blood glucose, providing juice to raise blood glucose, using a peak flow meter to measure breathing capacity, or monitoring and timing seizures. Program Review staff did not attempt to review student health records for privacy reasons.

Health departments keep their student medical records separate from school district records. Health department nurses do fill out some school district forms, such as when they conduct required school physicals, but this is the same process that a private physician would follow when providing such services. Many health department nurses do not fill out any of the school's other forms or enter information into the student information system.

KDE has implemented a new student information system for school districts. There have been several issues preventing KDE from extracting accurate health information.

Student Information System. Over the past 3 years, KDE adopted and implemented the Infinite Campus student information system in all school districts. Some districts piloted the system, while others adopted it later. Some districts first used the system in the 2008-2009 school year, so they have had little experience with it. The type and reliability of information entered about students with chronic health conditions varied greatly among districts. In addition, there were some problems in transferring information from the previous system to Infinite Campus, so that the number of students with chronic health conditions might not have been reliable in the new system.

Issues included the personnel entering the data, staff workload, availability of computers, and health department rules. The original design of Infinite Campus made it unnecessarily difficult to enter health information. Some of the instructions are ambiguous.

Interviews indicated that the person entering health information into Infinite Campus might be a nurse but often is an untrained office staff person. Questions were raised about the ability of untrained personnel to recognize significant health conditions that require alerts and to select the correct diagnosis code. Interviews also indicated that whether information was entered depended on the workload of nurses or office staff and on the accessibility of computers. Some health departments did not permit their nurses to enter information.

The original design of Infinite Campus made it unnecessarily difficult for school staff to enter health information. The screen for entering health conditions was in a different section of the system from the screen for entering medical alerts, so that staff had to navigate to two separate screens to complete entry for any student who might need emergency care. The screen for conditions recently was changed to allow adding an alert from that screen, which appears to be a commendable improvement.

The instructions focus on entering conditions that have scheduled interventions but are ambiguous on how to enter information about conditions that require unscheduled interventions. For example, it is impossible to predict when a seizure will occur. Also, some students with asthma may need to use their inhaler before any physical activity, whether scheduled or not. While it would be possible for staff to enter "as needed" or "before physical activity," KDE's instructions do not make this clear.

When someone enters a medical alert, an icon appears on the student's main information screen. Some districts might not permit all relevant staff to see details of the alert and the health condition.

The medical alert screen provides a place for school personnel to enter information about emergency care that a student might need. Examples are glucagon for diabetes, rescue inhaler for asthma, epinephrine kit for severe allergy, and diazepam for epilepsy. The personnel may enter a description, including the location of the emergency medication. When a medical alert is present, authorized school personnel who open the student's main information screen will see a medical alert icon on the screen. If a staff member positions the pointer over the icon, a brief note about the alert will appear.

To see detailed information about the medical alert and the health condition, the staff member has to have permission to open the medical alert and the health conditions screens. According to school personnel, in some districts not everyone who needs this information has access to it. Some health department nurses reported that they did not have access to Infinite Campus health

information. Access rules appear to be a school district decision, and it is important that the districts set them up properly.

KDE has generated an annual report of students with health conditions. Despite having Infinite Campus, the report continues to be compiled manually from reports from the districts, some of which are not submitted. KDE should take advantage of Infinite Campus's ability to build a statewide student database.

For several years, the KDE school nurse consultant has generated an annual report on the number of students with different health conditions. Before the introduction of Infinite Campus, this report was a compilation of individual district reports. Partly because of the limitations of Infinite Campus and partly because of some districts' lack of familiarity with it, KDE has continued to request that each district extract data from the system and send its own report. The statewide report has never included all districts because not all districts have sent their numbers. The school nurse consultant has compiled this information by hand.

Infinite Campus is a centrally located information system that has the capability to create a consolidated statewide database of student data. KDE has not taken advantage of that capability but is considering ways to do so. KDE should exercise its authority under federal and Kentucky laws to consolidate information from all school districts and produce statistical and management reports from it, including health services reports.

Student Attendance Records

KDE should work with the developers of Infinite Campus to record what health condition, if any, was the cause of an absence.

The Infinite Campus attendance function is not designed to track absences that result from specific health conditions. It captures only that the student was absent and whether the absence was excused. The description of the absence is free-form text that is not suitable for computer analysis. Attendance data limitations are one reason the University of Louisville and Jefferson County Schools decided to open a call center to track the reasons for absences. KDE should work with the developers of Infinite Campus to record what health conditions, if any, were the causes of or contributed to absences and tardiness.

Tracking School Health Personnel

There is no comprehensive system for tracking and reporting school nurses. School district nurses appear to be tracked in the school personnel system, but there is no tracking of health department and other agency nurses.

There is no comprehensive system for tracking and reporting school nurses. The school accounting system tracks personnel by job code, and KDE has issued job codes for school nursing positions. School districts are free to modify job descriptions, but it appears that most school nurses are coded properly. There is no similar tracking system for health department nurses or other nurses working in the schools.

The personnel system tracks most health services assistants, but there are problems with job descriptions. There is no tracking of other UAP.

For dedicated UAP, KDE has issued job codes for health services assistants. Most school personnel who provide health services as part of their job descriptions appear to be included among these job codes. There is a small number that are not included because the districts are free to modify job descriptions and to use other job codes. For example, one district hires full-time UAP for health services but does not use the Health Services Assistant job code. Instead, it uses Instructional Assistant and assigns the position a health services function code. KDE staff stated that they are unable to cross-reference job codes and function codes, so it is not possible to track these positions.

Any UAP who perform health service tasks in addition to their regular jobs are not tracked or monitored. Local school districts are responsible for recordkeeping, and it was clear from site visits that they varied in the amount of information they kept. Generally, it appeared that districts managed their UAP by manual methods, perhaps assisted by spreadsheets. No state agency attempts to audit the districts to ensure compliance with training of UAP, their delegation paperwork, or their supervision.

Some UAP reported being told they had to accept delegation. It may be that job descriptions have been changed for existing employees to include health service tasks. That does not appear to be the legislature's intent. There appears to be no state oversight of job descriptions.

Kentucky law states that school personnel have the right to refuse to be UAP unless it is part of their job description. Yet 21 percent of 2,818 UAP responding to a Program Review survey indicated that they had been told they had to accept delegation. As one UAP responded to the Program Review survey, "When many clerks complained that we were not nurses, it was written into our job descriptions. Jobs many of us had done for years and years." This does not appear to be the legislature's intent. Some districts have changed job descriptions for new hires only, which does seem to meet legislative intent. However, there appears to be no state oversight of school district job descriptions.

State Agency Oversight of School Health

Four agencies are explicitly or implicitly involved in the oversight of school health services:
- Department of Education
- Department for Public Health
- Board of Nursing
- Board of Medical Licensure

The General Assembly recognized the link between school health and public health when it enacted KRS 156.501 and 156.502. The KDE school nurse consultant position is mandated by that statute, and the cost is shared by KDE and Department for Public Health. Both departments have an interest in promoting and overseeing school health services. The statute mentions the Kentucky Board of Nursing and includes the Board of Medical Licensure implicitly in school health oversight.

Of these four agencies, all except the medical board have worked together on school health issues. Until 2009, the medical board was

not involved because physicians have had virtually no role in providing school health services. There are ways that physicians might play a greater role, and the medical board has decided to consider physicians' roles in school health. In December 2009, the board took the first step of issuing an opinion on the physician's role in training and delegating UAP.

Comprehensive Regulation and Guidance Are Needed

The Kentucky Board of Education and KDE have the primary responsibility for regulation and oversight of school health, in cooperation with the other agencies.

The Kentucky Board of Education has the primary responsibility to regulate, and KDE to oversee, school district health services, regardless of who provides them. The General Assembly clearly did not want duplication of services or duties between KDE and the Department for Public Health (KRS 211.287(3)). The General Assembly also specifically directed KDE to coordinate with the Kentucky Board of Nursing (KRS 156.501(1)(a)).

Guidance from KDE is important because school district administrators and school personnel generally are not familiar with the laws and regulations that govern public health, nursing, and medicine. A potentially bewildering combination of laws and regulations governs school health. For example, administrators need to understand that the role of nurses is determined mostly by nursing laws, regulations, and opinions and less by education laws, but health department nurses also have to follow their practice reference along with the contract with the school district. A physician's role mostly is determined by state medical practice laws and sound medical judgment. Minimum service and staffing requirements can be determined only by combining state and federal education laws, federal disability laws, state nursing and medical practice laws, and nursing and medical judgment.

School administrators need help understanding the combined effect of education, disability, public health, and nursing and medical practice laws and regulations. KDE should summarize these requirements and consider regulations to consolidate and clarify them.

Administrators need a summary of the combined effects of education, disability, public health, and nursing and medical practice laws and regulations. The Health Services Reference Guide fails administrators because information about the requirements and obligations of school districts is limited and because much of it is dispersed among discussions of coordinated school health concepts and technical nursing guidelines. Particularly needed is a discussion of the minimum requirements for providing and staffing school health services. The summary should be written for school district administrators and placed near the beginning of the guide or kept as a separate document.

Similarly, it might be helpful to have education regulations that consolidate and clarify the combined impact of applicable federal

and state laws and reference the relevant regulations of other agencies. KDE staff expressed concern that any regulations promulgated by the Kentucky Board of Education should be consistent with the regulations of these other agencies and should not intrude on their authority. Program Review staff agree and urge the board and KDE to take the lead in regulating school health services in close consultation with all other relevant agencies.

Oversight Is Limited and Should Be Increased

Oversight appears to be limited by funding, level of knowledge, and the desire of semiautonomous school districts and health departments to operate on their own.

KDE and the Department for Public Health carry out limited oversight of school health. This limitation appears to result from lack of funding, lack of knowledge about the local provision of services, and the desire of the school districts and health departments to operate on their own. School districts and health departments are semiautonomous agencies of the state.

Neither KDE nor the Department for Public Health tracks or directly monitors nurses, UAP, or health procedures and practices of schools and health departments. KDE has statutory responsibility and has not exercised it.

Neither KDE nor the Department for Public Health tracks or directly monitors the nurses and unlicensed assistive personnel that work in schools. Neither agency directly monitors the health procedures and practices of school districts and health departments. In particular, KDE has statutory responsibility for statewide data collection, reporting, and quality improvement measures, but it appears that the count of students with certain health conditions is the only health services report.

KDE has not assigned adequate resources for oversight. KDE could mandate standardized procedures and forms for school health. School nurses asked for standardized forms and mandatory protocols. Nurses also suggested possible synergy between the KDE and public health protocols.

Within KDE, the school nurse consultant is the only staff member dedicated to school health services. She reported that she spends most of her time providing technical assistance to the districts on school health issues. Upon review of the many tasks related to overseeing school health services, it is clear that one person cannot carry them out. Program Review staff urge KDE to assign additional resources to the oversight of school health.

The Health Services Reference Guide is KDE's set of protocols and guidelines produced to meet the requirements of KRS 156.501. The guide was developed in 2004, and KDE plans to revise it for the 2011-2012 school year. It has been presented to the school districts as guidance and not as a set of requirements. Program Review staff interpretation of the statute suggests that the Kentucky Board of Education probably could mandate the use of the guide or other protocols and guidelines. Comments from school nurses indicated that they would prefer that there be mandated procedures and standard forms for collecting information, making health care plans, and providing services.

School nurses also suggested that there could be a useful synergy between the KDE guide and the Department for Public Health's Public Health Practice Reference. The public health reference does recommend following the KDE guide and national school nursing guidelines for practices that are not included in the reference. Program Review staff urge the two agencies to determine whether there is any other way to coordinate protocols used in school health services.

The Department for Public Health has not provided adequate oversight of school health services provided by health departments.

The Department for Public Health has a half-time pediatric and school nurse consultant. There is another staff member who promotes coordinated school health. Some oversight of school health also comes from the department's quality assurance unit, billing review team, and contract review staff. The department's oversight of school health services, however, is not adequate. School health is one among more than a hundred public health programs. Quality assurance at the local level covers only a random selection among these programs, and the billing review might occur only every 2 years. Although the department had copies of some contracts and agreements with school districts, it was not aware of others. The department was not aware of the actual practices of some health department school nurses. The department also did not know the number of local health department nurses who provided school health services.

There are numerous issues that would benefit from the direct attention of the Kentucky Board of Education and KDE, in collaboration with other agencies and organizations as needed.

Table 3.29 summarizes the issues that would benefit from the direct attention of the Kentucky Board of Education, KDE, the Department for Public Health, the Board of Nursing, and the Board of Medical Licensure. Some of the issues presented for consideration by the General Assembly are repeated here in case regulation might resolve them. The Board of Education and KDE should take the lead and collaborate with the other agencies as needed.

Additional agencies and organizations need to be involved in order to represent the school districts, health departments, and other parties in resolving outstanding issues. The following list is a starting point; further agencies and organizations should be consulted as needed.

- Department for Medicaid Services
- Division of Protection and Advocacy
- Education Professional Standards Board
- Kentucky School Boards Association
- Kentucky Health Departments Association
- Kentucky School Nurses' Association
- American Diabetes Association

- Juvenile Diabetes Research Foundation
- American Lung Association
- Kentucky Families with Food Allergies
- Epilepsy Foundation of Kentuckiana

Table 3.29
Issues Related to School Health Services Needing Clarification

- Should there be a minimum number of licensed health professionals per district, per school, or per student? May a district operate with no such professionals?
- What preparation or training should new school nurses receive? Should the school nurse certification program require school health training and experience?
- To what extent should the Kentucky Board of Education regulate the provision of school health services and require the use of standard procedures and forms?
- Should health department nurses who practice in schools perform all the functions expected of a school district nurse? If not, what should the health department nurses' roles be, and how will the school districts ensure all necessary health service functions are performed?
- What role should the Department for Public Health play in coordinating and overseeing school health services?
- Under KRS 156.501, what should the quality improvement measures be? How can school district compliance with best practices be monitored and ensured?
- What data should be collected to adequately report health conditions and absences? Who should enter the data, and how should KDE compile it?
- What data should be collected on the number and qualifications of licensed health professionals and UAP providing care in Kentucky's schools?
- What documentation is required for school health services provided by physicians, nurses, and UAP, including the documentation that health professionals from the health department or other contract agency should maintain?
- What does "any necessary arrangement" include under KRS 156.502? It appears to require schools to take any legally permissible steps, regardless of cost, to provide health services.
- When are schools responsible for providing health services to students, such as on transportation to and from school, on field trips, at before- and after-school activities, and at other school-sponsored events?
- Statute does not specifically provide for emergency administration of asthma inhalers or epinephrine. What is the responsibility of the schools for emergency care for students needing these medications who are not able to self-administer because of immaturity or incapacity?
- Statute does not specifically provide for self-administration of diabetes or epilepsy interventions. Under what conditions should schools permit self-administration for students with these conditions and other conditions not covered by statute?
- Should all students receiving health services or needing emergency care have an individualized health care plan to outline care and responsibility?

Table 3.29 (continued)
Issues Related to School Health Services Needing Clarification

- How can schools safely and legally have backup supplies of emergency medications on hand in case students are unable to locate their own? If a medical director is required, should the state limit physicians' liability when they agree to be district medical directors?
- Should basic pediatric health courses be required for graduation from colleges of education?
- Should all school personnel receive general training on health symptoms and issues?
- How should school districts be monitored to ensure that delegation to UAP is performed according to statutory and regulatory requirements, including written documentation of delegation, assignment to specific students, supervision, and continued competency?
- Should all school personnel be required to learn how to recognize symptoms of the common chronic health conditions so that they can alert licensed health professionals or UAP immediately when potentially life-threatening complications occur?
- Should nursing regulations specifically reflect differences in the school setting, including that licensed practical nurses cannot delegate and that UAP must be trained by the delegating nurse? Could education regulations clarify what to do when the delegating provider changes?
- What level of medical or nursing supervision and supervisor availability should be required for UAP?
- What responsibility do school districts have to ensure there is always someone (licensed health professional or UAP) available to provide needed care?
- What clinical procedures are considered to be under the definition of "health services" in KRS 156.502? Are there tasks, such as taking a temperature, that do not require training and delegation? If so, what are they?
- Taking into account the individual student's condition and other factors, are there situations in which a nurse or physician might safely delegate carbohydrate counting, insulin dose calculation, and insulin administration to a UAP?
- Should the training for UAP meet minimum standards developed for each task or health condition for which they are delegated?
- Are there conditions under which it would be legal for parents or guardians to designate (not delegate) school employees to perform health service tasks for their children?
- How should district compliance with voluntary delegation be monitored? Should districts be permitted to rewrite job descriptions for existing employees to include health service tasks?
- Should health service tasks be performed in the classroom or in the school office? For each task, what constitutes the least disruption to the instruction of the student and peers, and what are the medical considerations?
- Should the peers of students with chronic health conditions receive information to improve understanding and reduce anxiety and potential bullying?
- How should KDE assist parents or guardians and facilitate resolution of disagreements between parents or guardians and school districts?
- How should KDE enhance its use of Infinite Campus for school health oversight?

Recommendation 3.3

Recommendation 3.3

The Kentucky Board of Education and Kentucky Department of Education should take the lead to ensure compliance with current and future statutes and regulations. They and the Kentucky Department for Public Health, Board of Nursing, and Board of Medical Licensure, in consultation with other stakeholders, should collectively review the issues identified in the Program Review and Investigations Committee report. Using their respective authorities, they should develop comprehensive school health regulations, advisory opinions, and advice for school districts, health departments, nurses, and physicians. These should be mutually consistent, should address statutory ambiguities, and should establish minimum requirements for school health services, with flexibility for justifiable variations among districts. If statutory changes would be helpful, the agencies should propose such changes to the General Assembly.

Chapter 4

Funding and Insurance for School Health Services

The Kentucky Department of Education and local officials mostly agreed that there has not been enough state and local funding for school health. There are a few exceptions.

The Kentucky Department of Education and local officials mostly agreed that there has not been enough state and local funding for schools or health departments to implement comprehensive school health services programs. There are a few exceptions. By partnering with the local health department, one district has a nurse for every 440 students, far better than the national recommendation of 750, and has committed to integrating health services and education. The district pays for the nurses with Medicaid and education funds. This chapter reviews some of the school health funding and cost issues.

School Health Budgets

Tracking School District Health Budgets

KDE was unable to provide school district health budgets. Program Review staff urge KDE to maintain school health budget information.

KDE was unable to extract school health budgets from its accounting system, even though the system does have the health function separated at the district level. When the districts report their budgets to KDE, they combine health services with several other categories into a single number for student support services. The Office of Education Accountability stated it has requested that KDE collect more detailed data. Program Review staff also urge KDE to maintain separate information on the different categories within student support services.

School District Budgets and School Health Services

School districts usually bear most of the cost of school health services, even with the assistance of outside funding. Most districts share costs with local health departments.

School districts usually bear most of the cost of school health services, such as employing or contracting nurses or other licensed health professionals, primarily from their general funds. For some students with disabilities, federal dollars are available to offset a small part of the cost of providing services under the Individuals with Disabilities Education Act. A few districts receive grants to assist with school health services. Most districts share costs with local health departments; for some districts, health departments cover more than half the cost.

Program Review staff asked all 174 school districts for budget information in order to evaluate spending on school health services. Of these, 114 school districts responded. Only 72 of these

responses provided adequate information to analyze both their budgets and funding sources. The 72 districts represent 51 percent of the state's enrollment. Staff obtained total district budget data from the Office of Education Accountability.

Of 72 districts providing information for fiscal year 2009, the median school district budgeted $36.49 for health services out of $9,193 per pupil.

Because of the wide variation in the size of school health budgets and the sources of funding, staff chose the median rather than average to represent the budget values per pupil. For the 72 districts, the median total budget per pupil was $9,193, meaning that half the districts spent more and half spent less. The median school health budget per pupil was $36.49. In other words, if $9,193 was spent for various programs and services, $36.49 of that total would be spent for health services. This represents 0.4 percent of the total per-pupil budget.

Program Review staff divided the state into six regions as shown in Figure 3.A. For the 72 districts, Table 4.1 displays the different regions' median school health budget per pupil and the median percentage of total district budgets used for school health services.

Program Review staff were unable to match school district budget data directly to health department spending, but there appears to be some correlation. The eastern and south central regions showed lower district spending and higher health department spending, while the north central and northern regions showed higher district spending and lower health department spending. Health departments are discussed in greater detail later in this chapter.

Table 4.1
Median School Health Budget Per Pupil and Percentage of Median Total District Budget for Districts With Complete Information
Fiscal Year 2009

Region	Median School Health Budget Per Pupil	Percent of Median Total District Budget
Bluegrass	$31.20	0.34%
Eastern	31.53	0.35
North Central	55.94	0.57
Northern	47.91	0.51
South Central	30.47	0.35
Western	41.69	0.44
Overall	$36.49	0.40%

Note: Number of districts with complete information: 72.
Source: Program Review information request to school districts.

Funding for School Health Services

Most school districts pay for health services out of local school tax funds and state education funds. Other sources include limited Medicaid, federal disability funds, and grants. State education funding is based on attendance, so school health services might increase attendance and offset some of their cost.

Most school districts pay for their health services out of their general funds, which consist primarily of local school tax funds and state education funds. Other sources include limited Medicaid, federal disability funds, and grants.

State education funding is based on attendance. If school health services increased attendance, it would offset some of the cost. There are reasons to believe that a comprehensive approach to school health might increase attendance, but Program Review staff did not find any statistically significant demonstration of increased attendance resulting from school health services in Kentucky. One district did report slight increases in attendance after adding school nurses. Another district reported improved dropout and graduation rates. Staff urge KDE and the districts to monitor changes in school health services to see if there is an effect on attendance.

School District Health Services Funding Sources

School districts reported that the majority of funding for health services came from their general funds. Districts reported much smaller contributions from federal funding and from other resources.

The 72 districts with complete information spent a total of $21 million on school health in fiscal year 2009. The majority of funding, 82 percent, came from the districts' general funds. Federal funding provided 8 percent, and other sources supplied 10 percent of school health funding for these school districts.

Insurance and Medicaid

Only a small portion of school district health costs is covered by federal disability funding and Medicaid.

Only a small portion of health services for students with disabilities is covered by IDEA, either directly through Part B or through Medicaid reimbursement for those services. Most of the health services provided in schools are for students with less severe disabilities under Section 504 of the Rehabilitation Act of 1973 or with no disability but with some health service needs. Schools may not bill these services to Medicaid. Private insurance is an option in principle, but limitations of coverage and some federal restrictions mean that insurance reimbursement is virtually nonexistent.

Federal disability, education, and Medicaid laws together severely limit the ability of school districts to bill Medicaid and private insurance.

IDEA and Section 504 require public schools to provide a free appropriate public education to students with disabilities. They differ because IDEA was partially funded by Congress, and Section 504 was not.

Congress recognized the financial burden placed on the schools by IDEA and enacted an explicit exception requiring Medicaid to pay

for eligible services rendered under an individualized education program, even if no other payors are billed. The student has to be eligible for Medicaid, and the services have to be written into the IEP and covered under the Medicaid state plan. If a student with an IEP receives other services that are not specified in the IEP, those services are not reimbursable under this exception but would be treated as general school health services. The Kentucky School Boards Association reported that 131 districts use its Medicaid billing service for IEP health services.

Under federal disability and education laws, school districts are allowed to bill insurance, including Medicaid, for health services provided to students under Section 504 and IDEA as long as there is no cost to the family. Several limitations outside these laws, however, prevent school districts from billing for these services.

- Insurers generally do not cover services provided by registered or licensed practical nurses when they are not practicing under a physician.
- Even if insurers did cover nursing services in the schools, most policies have deductibles, coinsurance, or copayments that the family incurs. School districts are not allowed to bill any insurance that requires the family to pay out of pocket (US. Dept. of Education. Office 13).
- Although Medicaid does not require children to pay out of pocket, Medicaid's "free care rule" prohibits billing for services that are provided free to other students. Because Section 504 services are provided free to most non-Medicaid students, this rule effectively prevents school districts from billing Medicaid for such services.

School districts face the additional hurdle that in order to bill Medicaid or insurance, they must maintain detailed medical records that meet the requirements of the payors. Several districts reported that they did not have enough staff time to maintain such records.

Health Department Funding

School districts have turned increasingly to health departments to share the cost of school health. Health departments may bill Medicaid for school health services because of a federal exemption. Kentucky Medicaid also pays health departments an enhanced rate, which applies more federal dollars for a relatively small state match.

Medicaid. Over the past several years, more school districts have arranged with health departments to provide school health services because they can provide services for school districts at a much lower cost than the district otherwise would face. There are two reasons for this difference.

Through Title V of the Social Security Act, Maternal and Child Health Services Block Grants provide funds to extend care for

mothers and children. Title V agencies are exempt from Medicaid's free care rule (US. Dept. of Health. Health). Kentucky channels Title V funds through local health departments, permitting them to bill Medicaid for services, including school health services.

In addition, Kentucky Medicaid reimburses health departments at an enhanced rate, the rate used by Medicare. This permits more federal dollars to be applied for a relatively small state match. Depending on the number of students eligible for Medicaid, this can cover a substantial portion of health services, including services for some non-Medicaid-eligible students.

The Department for Public Health provided Medicaid billing information from health department school sites for fiscal years 2008 and 2009. This information did not include some billing from school-based primary care health centers. Table 4.2 shows a significant increase in the amount billed to Medicaid for school health services statewide. Some of the increase resulted from services to new school districts and some from an increase in the number of nurses provided to school districts already served.

Table 4.2
Health Department School Health Medicaid Services

Fiscal Year	Number of Services	Dollar Amount	Percent of Dollar Change
2008	472,000	$22,010,000	
2009	608,000	28,898,000	31%

Note: Numbers of services and dollar amounts rounded to the nearest thousand.
Source: Kentucky Department for Public Health.

Students with chronic conditions accounted for 9 percent of the amount health departments billed to Medicaid. Of this, diabetes care accounted for 67 percent. Asthma care accounted for 32 percent. Care for severe allergy and epilepsy together accounted for 2 percent.

Based on the diagnosis code, the Department for Public Health provided the number of services and amounts billed for students who had diabetes, asthma, severe allergy, or epilepsy in FY 2009. Some of the services might have been for some other purpose, such as injury, so the numbers might overestimate the cost of services for these chronic conditions. A few students had multiple chronic conditions, so the dollar amounts for the separate conditions add to more than the statewide total. Table 4.3 shows the services and dollar amounts billed to Medicaid for each condition. Care for chronic conditions accounted for 9 percent of total Medicaid billing in that school year.

Table 4.3
Health Department Medicaid Services for Students
With Chronic Health Conditions in Fiscal Year 2009

Condition	Number of Services	Dollar Amount	Percent of Total Medicaid Dollars	Percent of Dollars for Chronic Conditions
Diabetes	23,800	$1,687,200	6%	67%
Asthma	15,400	813,400	3	32
Severe allergy	8	400	<1	<1
Epilepsy	900	54,000	<1	2
Total (unduplicated)	40,100	$2,534,300	9%	100%

Note: Numbers of services and dollar amounts rounded to the nearest hundred, except number of services for severe allergy. Numbers in all columns add to more than the unduplicated totals because of rounding and because services for students having more than one condition were counted in more than one row.
Source: Kentucky Department for Public Health.

Students with diabetes accounted for two-thirds of the expenses for chronic health conditions. These students usually need multiple services each day, including several blood glucose measurements and two or three insulin doses.

Even though there are many more students with asthma than with any other chronic condition, asthma usually does not require frequent or even daily health services. Many students with asthma can carry and self-administer their medications.

The very small number of services provided for students with severe allergy is not surprising because those students do not need any routine health services. The services provided to them during FY 2009 probably represented other unrelated care or administration of epinephrine. It also is possible that some students with severe allergy did not have an anaphylaxis-related diagnosis code.

The portion attributed to students with epilepsy is small, probably because most routine care may be performed by UAP. Nurses might have administered diazepam or provided other services as needed. In addition, some students with epilepsy would receive services under IDEA that would not be billed through the health departments.

Health departments reported that private insurers typically do not cover their services. The state employee insurance program used to do so. It appears that no other states currently require private insurance coverage. States face several barriers to mandating such coverage.

Insurance. Health departments reported that they are subject to the same private insurance coverage limitations as the school districts. Because health department nurses do not practice under the direct supervision of a physician, insurers generally do not cover their services. Through the 2008-2009 school year, the state employee insurance program paid for school health services, but that

coverage has ended. Several health departments expressed the opinion that private insurance should cover health services in schools.

An article in the *American Journal of Nursing* stated that the executive director of the National Association of School Nurses "believes that the services provided in school should be reimbursable by insurance companies" (Nelson 27). In a note to Program Review staff, the executive director stated that she was unaware of any states that had established such a requirement; however, she asserted that it "can be accomplished through insurance regulation at the state level. Why should the state taxpayers be responsible for the entire cost of school day medical care for children who do have insurance?" (Garcia). Staff made additional inquiries but found no states requiring private insurers to cover school health services.

States face barriers to such coverage. These include federal laws that limit state regulation of insurance, federal disability laws, and difficulty defining who may be a provider.

One federal law prevents states from regulating self-insured health plans, which cover 57 percent of workers nationally. The new health care reform law will require states to pay for the additional cost of state mandates in some, but not all, health plans.

First, two federal laws place limitations on the states. As a result of these laws, states cannot regulate the insurance of most workers; for some portion of the remaining market, states will have to cover the additional cost of mandates.

- The Employee Retirement Income Security Act of 1974 prevents states from exercising control over self-insured employee health plans. Many large corporations, such as Toyota and United Parcel Service, have self-insured plans. In 2009, 57 percent of workers nationwide were covered by self-insured plans, a percentage that has grown steadily since 1999 (Kaiser 156-157).
- The new Patient Protection and Affordable Care Act requires states to create health insurance exchanges for the individual and small group markets by 2014. The Act specifies the basic coverage mandates for health plans, and if a state mandates coverage beyond this basic level, the state must reimburse insurers or individuals insured under exchange plans for the additional cost. This requirement does not apply to health plans outside the exchanges.

Coverage for students with disabilities must be at no cost to the family. The options to meet this condition may be undesirable.

Second, federal disability laws require that schools provide health services at no cost to the families of students with disabilities. Two mechanisms might be used to satisfy this requirement.

- "First dollar coverage" means that insurers would reimburse providers of the mandated service without cost sharing with the

insured persons. There would be no deductible, copayments, or coinsurance. This is the most expensive approach.

- "Insurance as payment in full" means that the provider would receive only the insurer's reimbursement for the mandated service. There would be no copayment or coinsurance; if the plan had a deductible, the charge would be applied to the deductible, and the provider would receive no reimbursement until the deductible was satisfied. Insurers typically do not permit such an arrangement; to use this approach, the state would have to mandate certain provisions of contracts between insurers and providers. Kentucky and other states typically have avoided this kind of mandate.

The "any willing provider" law would have to be changed to include nurses in school settings.

At the state level, requiring insurers to cover services by nurses in the school setting might involve modifying Kentucky's "any willing provider" law to include registered nurses and perhaps licensed practical nurses in school settings (KRS 304.17A-005 and 304.17A-270). This also might be seen as mandating contract provisions.

It might be possible to obtain partial private insurance coverage and to permit reimbursement for students with disabilities. However, the General Assembly would have to consider whether it is worthwhile to do so.

With statutory changes, it might be possible to obtain partial private insurance coverage of school health services and to permit reimbursement for students with disabilities when coverage is available. However, the General Assembly would have to consider the barriers and the costs and determine whether it is worthwhile to make such changes.

Health Department Budgets

Health department school health budgets consist primarily of Medicaid reimbursements. School districts usually pay some of the cost. Some health departments contribute from local taxes.

Health department school health budgets consist primarily of Medicaid reimbursements. In most cases, the school districts pay some of the cost of the health departments' services. Some health departments contribute from their local tax revenues.

All 56 health departments responded to a Program Review staff information request asking them whether they provided health services at school sites. Of these, 42 provided some school health services. Staff followed up with these providers, requesting information about billing and budget for school health services. Of the 42, 26 responded but only 16 provided complete information for FY 2009. Following is a summary of the funding structure for FY 2009 for those 16 health departments.

- The average percentage of health department school nursing funds that came from Medicaid was 77 percent, including one health department that did not bill Medicaid. Excluding that health department, the average percentage from Medicaid was 82 percent.

- The average percentage of health department school nursing funds that was paid by the school districts was 18 percent, including three health departments that provided health services to schools at no charge. Excluding those three, the average percentage paid by school districts was 22 percent.
- Most of the remaining funds consisted of health department tax revenues and private insurance payments.
  - Only four health departments reported using tax revenue. Among these four, tax revenue accounted for an average of 12 percent of total funds.
  - Only five health departments reported billing private insurance. Among these five, private insurance accounted for an average of 2 percent of total funds.

Health departments' use of Medicaid varies across the state, depending heavily on the number of districts served and the number of nurses and types of services provided. Greater billing is associated with a better ratio of students to nurses except in northern Kentucky, where the billing data probably includes only a portion of the services. Health departments in the Passport region cannot bill Medicaid.

Health departments in some parts of the state have used Medicaid as a resource more than others. Table 4.4 shows the dollars billed per pupil, based on the total enrollment in that region. The amount per pupil depends heavily on the types of services provided and the number of health department nurses in schools. Northern Kentucky health departments have school nurse arrangements with only a few school districts but have several school-based health centers that did not bill through this system. Health departments in the north central region, which consists entirely of Passport Medicaid managed care counties, cannot bill Medicaid. Figure 3.A shows the regions defined by Program Review staff for comparison.

Comparing this table with Table 3.8, there appears to be a correlation between health department Medicaid billing and the number of students per nurse. Except for the northern Kentucky region, more billing is associated with a better ratio of students to nurses. Again, the northern Kentucky billing data probably do not include all the health department school health services in that region.

Table 4.4
Health Department Medicaid
Billing Per Pupil by Region

Region	Dollars Per Pupil
Bluegrass	$24
Eastern	103
North Central	<1
Northern	3
South Central	84
Western	58

Source: Program Review staff analysis of data from the Department for Public Health.

School health services provided by health departments in the Passport region have declined. Compared with the rest of Kentucky, there are at least twice as many schools and students per nurse in the Passport region.

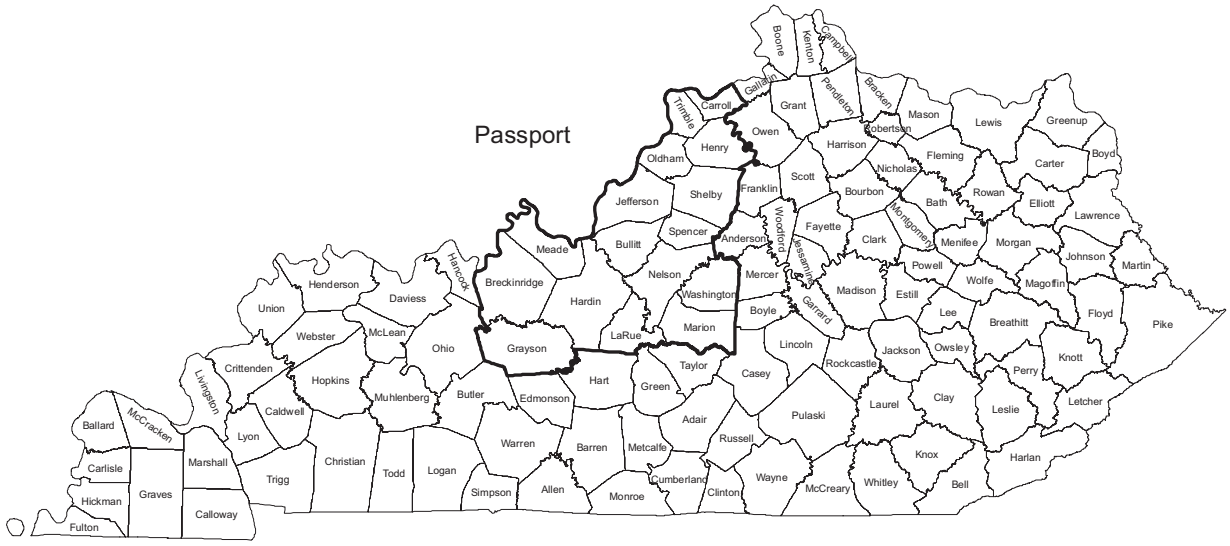
Passport and Health Departments. Because health departments in the Passport region are unable to bill Medicaid for school health services, there has been a reduction in those services. The Lincoln Trail District Health Department, for example, provides limited services using its own funds to share costs with two school districts; it used to serve five school districts. Local school districts also have to bear a greater share of the costs than in other regions. Table 4.5 compares the number of schools and students per nurse in the Passport region and the rest of Kentucky. The number of schools and students per nurse in the Passport region is more than twice that in the rest of Kentucky. Figure 4.A shows the Passport region.

Table 4.5
Student and School to Full-time Equivalent Nurse Ratios for Passport and Rest of Kentucky

Area	Schools Per FTE Nurse	Students Per FTE Nurse
Kentucky outside Passport	1.6	787
Passport	4.1	2,483
Passport excluding Jefferson County	3.7	2,090

Note: School districts responding: 168.
Source: Program Review information request to school districts.

Figure 4.A
Passport Medicaid Managed Care Region



Source: Program Review staff.

Health department and school district officials in the Passport region argued that coverage for school health is inequitable. The issues, however, are complex. Managed care operates under a capitated system that is not easily amenable to covering school health.

School district and health department officials pointed out that Medicaid reimburses health departments to provide school health services in all other parts of the state. Health department and school district officials in the Passport region expressed the opinion that such a difference is not equitable. An official from a school district in the Passport region stated: "[Health departments] used to provide services in schools [on a] routine basis, … don't want to be as involved any more. More children with greater needs now." Another school district representative requested "Legislation… to require Medicaid to allow billing for health services in the Passport Region…." Similar comments were made by officials in other school districts in the region.

Under the Medicaid managed care waiver, overall costs within the Passport region must not exceed the amount that traditional Medicaid would have paid. The Department for Medicaid services stated: "The type of services discussed in [the Program Review] report are included in Passport's capitation rate. How and where those services are delivered is determined by Passport" (Jagnow). Medicaid reimbursed school health services in the region before Passport was created, so the cost of these services should be included in the budget calculation. However, the rate paid by Medicaid for such services elsewhere in the state increased after Passport was created.

As a managed care organization, Passport receives funding from the Department for Medicaid Services based on the number of Medicaid recipients in the region. Passport providers in turn receive an amount per Medicaid patient in order to serve as the patient's primary medical provider. Passport assigns each patient to a specific provider as a medical home, which means the patient must receive primary care services through that provider.

The medical home model makes it difficult to cover school health services. Health departments cannot be medical home providers; and even if they could, it would not be feasible to assign all students and their families to them.

Passport gave health departments grants in 2008 and 2009, including $250,000 each year for school and home health services combined. About $10.8 million per year for school health services alone would roughly match Medicaid reimbursements in the rest of the state.

Passport officials stated that it gave health departments in the region grants totaling $1 million in each calendar year 2008 and 2009. Each year, $250,000 of the grants was set aside for school health and home health services combined. These grants were shared by five health departments. Passport officials did not indicate how much was spent on school health services alone.

For comparison, the amount Medicaid reimbursed health departments for school health outside the Passport region was approximately $29 million in FY 2009. A conservative estimate of the amount Medicaid would pay for school health in the Passport region is $10.8 million per year.[1]

Passport and the health departments have discussed the issue but have not resolved it.

Officials from Passport's parent company, University Health Care, Inc.; the Department for Public Health; the Department for Medicaid Services; and local health departments have met several times to discuss how to provide school health services. Passport officials developed a limited list of services, including some school health services, that health departments could provide in coordination with Passport's existing primary care and case management services. So far, no agreement has been reached.

Recommendation 4.1

Recommendation 4.1

The Department for Medicaid Services; Department for Public Health; local health departments; and University Health Care, Inc. should continue to seek an equitable method to cover school health services for students enrolled in Medicaid in the Passport region. If they are unable to reach an agreement, the General Assembly may wish to consider whether it can establish a solution within or outside the Medicaid managed care waiver.

Outside Passport, health departments ask districts to pay different amounts for school health services. It is possible that some health departments have a surplus from school health programs.

Health Department Costs and School District Payments. Outside Passport, several school districts were aware that different health departments ask districts to pay different amounts for school health services. An official of the Department for Public Health acknowledged the possibility that some health departments might run surpluses in their school health programs, especially when school districts contract to pay health departments in addition to Medicaid.

A surplus in school health programs would be consistent with the intent of enhanced Medicaid reimbursement to support other health department programs.

According to a former Medicaid official, the reimbursement arrangement with health departments was intended to help support all their services, not just those billed to Medicaid. It would be

[1] Dividing the $28.896 million non-Passport reimbursement by the total enrollment in schools outside the region (488,678), gives a per-pupil reimbursement of $59.13. This underestimates the per-pupil Medicaid reimbursement because health departments do not serve all schools outside Passport and because some Medicaid funds were not included. Applied to the 182,498 enrollment in the region, the comparable figure is $10.791 million. Any possible health department surpluses in school health programs would have been due to school district payments and so would not be relevant here.

consistent with that intent for health departments to have a surplus in some programs in order to offset losses in others.

A few district officials considered it unfair that districts pay different amounts for school health. KDE and the Department for Public Health should advise districts about the factors that affect health department costs, in order to facilitate negotiations for services.

A few district officials expressed the opinion that it was unfair for some districts to pay little or nothing while others had to pay half or more of the cost of health department nurses. Districts need to be aware that their contributions will depend on the number of students eligible for Medicaid, the types of services provided, and a health department's overall budget needs. Program Review staff urge KDE and the Department for Public Health to advise the districts about the factors that affect health department decisions, in order to facilitate negotiations for services.

Other Health Service Arrangements

At least one school district has a different approach to using health department resources. The district employs the nurses and the health department contracts with the district for the nurses, places them in the schools, and bills Medicaid. The district pays the nurses' salaries, but the health department pays the district a negotiated amount on the contract. The nurses work under both public health and district protocols.

It is possible that some alternative arrangements for school health are not billing Medicaid properly. KDE and Medicaid should advise school districts to review billing procedures for these arrangements to ensure they conform to state and federal rules.

Some school districts also have arrangements with universities, hospitals, and home health providers. Some districts said that these providers billed Medicaid for their services. The reimbursement rules for these providers would differ from those that apply to health departments, particularly for services to students with disabilities. Not-for-profit Medicaid providers may operate in schools under KRS 216B.176. For-profit providers would face additional restrictions.

In either case, school districts must ensure that services to students with disabilities are free to the family. However, in order to bill Medicaid, the providers also must bill someone for services to non-Medicaid-eligible students. Perhaps the school district could agree to pay for services to non-Medicaid-eligible students. Program Review staff did not verify whether such an arrangement would meet all applicable rules.

If services are billed improperly, the provider and the school might face repayment or other sanctions. Program Review staff urge KDE and the Department for Medicaid Services to advise the school districts on the rules for billing Medicaid and urge the school districts to confirm that the billing by their providers is

acceptable to the state and federal Medicaid programs and satisfies federal disability laws.

Family Resource and Youth Services Center Grants

Family resource and youth services centers in the past have helped fund school nurses. They are allowed to continue existing arrangements but may not fund new school nurses.

Some school districts have made arrangements with their family resource and youth services centers to pay a portion of the costs of school nurses. According to a Division of Family Resource and Youth Services Centers official, the centers were allowed to support the salary of school district nurses during the first couple of years of the program. Since then, the division has not allowed the centers to fund any new school district nurses, although the existing arrangements were allowed to continue. The division reported that centers are allowed to support nurses employed by health departments or other providers.

In FY 2008, the division reported that it spent $772,000 for licensed providers in the schools. This was about half the amount spent in the same category in 2001, reportedly because of the change in rules, reduced funding for the centers, and increases in other center costs.

Some school district officials wondered whether centers could hire nurses as center coordinators. The division stated that the centers' role is to coordinate between schools and outside services, not to provide services directly. Also, center coordinators probably would have little time to practice nursing while fulfilling their primary duties.

Cost-saving School Health Models

Minimal Model

There must be at least one nurse or physician who can assess and plan for students' care; train, delegate, and supervise UAP; and perform health service tasks if needed. A registered nurse is the most economical choice.

The legal requirements for school health services imply a minimum of one nurse or physician who can assess and plan for students' care; train, delegate, and supervise UAP; and perform any health service task that is imprudent to delegate.[2] Because licensed practical nurses may not delegate in the schools, registered nurses represent the most economical choice. The nurse must be available at least by phone for supervision at all times and for direct nursing services when needed.

[2] Parents and guardians may fill in if they are willing, but school districts may not depend solely on them.

According to 2008-2009 KDE salary data, the average salary of school district registered nurses was $33,100 plus benefits.[3] This is significantly less than a typical registered nurse's salary; the Bureau of Labor Statistics reported a median salary of more than $62,000 in 2008 (US. Dept. of Labor). Some districts reported having difficulty finding nurses to work in the schools.

Licensed practical nurses may reduce costs when extra nurses are needed. Part-time nurses may be useful for tasks that occur at scheduled times. Unlicensed personnel who are properly trained and delegated may represent the least costly option when used appropriately.

As the number of students needing health services increases, the number of nurses must increase. If there are enough students to require additional nurses, licensed practical nurses may reduce costs. Licensed practical nurses under the supervision of registered nurses may perform tasks requiring a nurse. In the 2008-2009 school year, they had an average salary of $22,100 plus benefits in Kentucky school districts.[4]

Part-time registered nurses and licensed practical nurses are an option, particularly for performing direct nursing tasks that are clustered at certain times, such as administering insulin at lunch periods. Some districts used home health nurses to provide scheduled or one-on-one services for students.

Dedicated UAP, who perform health service tasks as their primary jobs, are used in a few districts. Sometimes these UAP are certified medical assistants or have other specialized training. In the 2008-2009 school year, dedicated UAP averaged $17,200 plus benefits in Kentucky school districts.

UAP may perform delegated tasks in addition to their regular jobs. As long as they can perform their regular jobs adequately, there is no increase in cost to the district. When used appropriately, they represent the least-cost option.

Health Department Options

Health departments are able to share costs with school districts, often at less than half the amount the district would pay on its own. Districts that need more than one nurse might find this a cost-effective option.

Health departments have been a growing resource for school health services in Kentucky. The primary impetus is the ability of health departments to bill Medicaid for school health services. Health departments usually share the cost with school districts, often at less than half the amount the district would have to pay for each

[3] This figure is based on KDE job class code 7262 Registered Nurse only. Most registered nurses were in job class code 7263 School Nurse, but that class also included licensed practical nurses, so it was not possible to obtain an average salary from the larger group.

[4] This figure is based on KDE job class code 7272 Health Services Technician. Most licensed practical nurses were in job class code 7263 School Nurse, but that class also included registered nurses, so it was not possible to obtain an average salary from the larger group.

nurse. The amount of the cost covered by the health department will depend on the number of students eligible for Medicaid and the number of billable services those students need. Districts that need only one nurse probably will have to hire the nurse directly. Most of the duties of a single school nurse will not be billable, so the health department would not be able to offset much of the cost.

A district that needs more than one nurse, however, might find that the health department offers a cost-effective option. Some health departments provide all the nurses for a school district and accept responsibility for assessment, planning, delegation, and supervision. Other health departments require a school district to hire its own nurse for those functions.

Some health departments have both registered nurses and licensed practical nurses available for school health services. The cost to the district generally is greater for registered nurses. One health department provided licensed practical nurses for 75 percent of the cost of registered nurses.

Delegation by health department nurses to UAP might not result in net cost savings. Alternatively, a school district might cut costs by having one nurse and depending heavily on UAP, but best practice calls for health services to be provided by nurses when possible.

When health departments provide nurses, delegation to UAP might not result in net cost savings. Many tasks performed by a UAP might be billable if performed by a nurse. Most of the districts visited by Program Review staff that had health department nurses used UAP in limited ways, mostly for emergency care and as backups when nurses were not immediately available.

This represents a trade-off that districts must consider. The bottom-line cost of using health department nurses might be greater than using the minimum number of district nurses and depending heavily on UAP. However, best practice is for health service tasks to be performed by nurses if possible.

Volunteer Options

Volunteer nurses and physicians might be permitted under Kentucky law. National recommendations permit their use. Florida offers an incentive program for volunteers.

Paid Versus Volunteer Nurses and Physicians. Although no school districts reported using volunteer nurses or physicians, Kentucky law appears to allow schools to use them. A position statement of the National Association of School Nurses approves the cautious use of licensed volunteers to assist, but not to replace, school nurses (“Position Statement: The”).

Florida has a program that encourages health practitioners to provide services without charge, in exchange for having their biennial license renewal fee waived and credit given for a portion

of their continuing education requirement. The volunteer practitioners must agree to provide a certain number of hours each school year (Fla. Stat. 381.00583).

Volunteer UAP who are not regular school employees are an option. Minnesota and Washington State permit volunteer UAP. In Kentucky, 16 percent of school districts supported this option.

Volunteer UAP. A position statement of the National Association of School Nurses approves the cautious use of unlicensed volunteers to assist a school nurse ("Position Statement: The"). Minnesota allows volunteers who are not school employees to be UAP but recommends that schools pay them a nominal amount so that technically they may be considered school employees (State of Minnesota 41-42). Such a practice might be legal under existing Kentucky law. Washington State law specifies that parents or guardians may designate outside volunteers to assist students with diabetes, and the school district and the volunteers are protected from liability (RCW 28A.210.330 and 28A.210.350).

Program Review staff asked districts whether they thought persons other than school staff, such as community volunteers, should be allowed to be UAP. Of the 168 districts that responded, 16 percent supported this approach.

Funding in Other States

Some states dedicate funds for nurses in schools, while others may combine state dollars with other available funds in order to increase the number of nurses in schools.

Some states dedicate funds for nurses in schools. West Virginia and Louisiana, among others, permit school systems to apply to their respective state's education department for additional nurse funding (W. Va. Code 18-5-22; La. Rev. Stat. 17:28). South Carolina and Virginia offer state funds through a grant program for nursing services in schools (S.C. Code 59-10-210; Va. Code 22.1-274.01). Virginia's program combines state funds and donations to provide matching grants to local school boards for nursing services. Tennessee, on the other hand, makes funds available through the state's department of health to provide nurses in schools with priority given to counties that are poverty stricken, have high levels of unemployment, and are medically underserved (Tenn. Code 68-1-1201 to 68-1-1206). Since 2000, Georgia has included school nurses in the state budget (Georgia; Diamond).

South Carolina has a process to permit school district nurses to bill Medicaid through the state health department's Title V exemption. The Centers for Medicare and Medicaid Services has questioned the arrangement, but if it is found permissible, Kentucky might consider a similar approach.

Officials with KDE and the Department for Public Health mentioned South Carolina as a state that permits school district nurses to bill Medicaid. The state's website explained that there is a federally approved process permitting school districts to contract with the state's Department of Health and Environmental Control as Title V health care providers. School districts then bill Medicaid through the state health department. State law permits the schools

to keep the reimbursement (State of South Carolina). According to a South Carolina official, however, the Centers for Medicare and Medicaid Services has questioned the arrangement because the schools actually receive no Title V funds. If the federal review finds the program permissible, then Kentucky might consider a similar approach.

Insurance Coverage for Chronic Health Conditions

Some insurance providers and Medicaid do not automatically cover a second prescription for medication and equipment needed for chronic health conditions. Medicaid requires prior authorization for most spare items and for some diabetes supplies.

Most insurers and Medicaid provide coverage for diabetes, asthma, severe allergy, and epilepsy. A concern raised by several nurses and parents is that some insurance policies, as well as Medicaid, do not automatically cover a second prescription for medication or equipment needed at school. Medicaid stated that two epinephrine kits are allowed per month and that spares of other items are available with prior authorization. When families are unable to afford a second insulin kit, glucagon kit, asthma inhaler, epinephrine kit, or diazepam supply, the students or families must carry the medication and equipment from home to school and back. If the necessary items were forgotten or lost in the process, they would be unavailable in a life-threatening emergency.

Another concern was Medicaid's monthly limit on blood glucose testing supplies and limited coverage of insulin pens. Treatment plans for diabetes have become more intense in recent years, meaning that many more blood glucose tests per day are required than in the past. Program Review staff were told that Medicaid's limit on the number of test strips is based on older treatment plans and is not sufficient for today's intensive treatment plans. A greater number requires prior authorization. In addition, insulin pens are prefilled with insulin and permit the student or provider to dial in a dose rather than drawing it into a syringe from a vial. Medicaid covers insulin pens for patients ages 15 and younger and requires prior authorization for older children and adults.

Program Review staff encourage KDE, the Department for Public Health, and other stakeholders to discuss expanded coverage with the insurers. Staff also urge the Department for Medicaid Services to consider whether coverage could be provided without prior authorization for students who need items at school.

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Appendix A

How This Study Was Conducted

At its January 9, 2009, meeting, the Program Review and Investigations Committee directed staff to review the role that schools play in caring for students with potentially life-threatening chronic conditions such as diabetes.

To conduct this study, Program Review staff reviewed school health literature; interviewed officials in the Kentucky Department of Education (KDE), Kentucky Board of Education, Board of Nursing, Board of Medical Licensure, Department for Public Health, Department for Medicaid Services, Department for Family Resource Centers and Volunteer Services, and Division of Protection and Advocacy; interviewed physicians and nurses; conducted focus groups of school personnel and parents; met with advocacy groups such as the American Diabetes Association, Juvenile Diabetes Research Foundation, American Lung Association, Kentucky Families with Food Allergies, and Epilepsy Foundation of Kentuckiana; conducted site visits of schools, school districts, and health departments; sent formal information requests to all 174 public school districts; and anonymously surveyed local school personnel.

Program Review staff also analyzed health department Medicaid billing information provided by the Department for Public Health. Data on nurses and health assistants employed by school districts was provided by the Legislative Research Commission's Office of Education Accountability.

Estimates of the Prevalence of Chronic Conditions

Program Review staff used publicly available information to estimate the prevalence of diabetes, asthma, and epilepsy in Kentucky. There was no reliable information on the prevalence of anaphylactic allergies.

Staff did not attempt to determine how many students are 18 years old or older. For the purposes of these estimates, staff assumed public school students are from 5 to 17 years old. Staff applied prevalence rates to KDE enrollment data from the 2007-2008 school year and to US Census population estimates for 2007.

Diabetes

Program Review staff used published estimates that there is one case of type 1 diabetes per 400 to 600 children (American Diabetes. "Diabetes"). Staff applied these two rates to the overall population estimate and school enrollment data.

Asthma and Epilepsy

For asthma and epilepsy, Program Review staff used the results of the 2007 National Survey of Children's Health (Child). The survey reported prevalence for age groups 6 to 11 and 12 to 17. Because the Program Review study included students from age 5 to 17, staff applied the rate for the 6 to 11 group to the population estimate for ages 5 to 11, assuming that the rate for 5-year-old children would be similar. Staff then applied the rate for the 12 to 17 group to the population estimate for that age range. Finally, staff calculated the overall prevalence for the 5 to 17 age range and applied that to the school enrollment data.

Epilepsy. For epilepsy, staff included a prevalence rate from a review of previous studies. The review indicated that prevalence generally was reported to be between 4 and 5 cases of epilepsy per 1,000 children (Cowan). Staff used the low end of the range to calculate the lower number of children likely to have epilepsy.

Staff used the National Survey of Children's Health to calculate the higher number of children likely to have epilepsy. Because the prevalence of epilepsy is much lower than that of asthma, the survey reported epilepsy at the national level only, and the rates that were reported were rounded. Applying rounded rates to a population might have introduced significant errors. Therefore, staff first recalculated the prevalence rates for the survey's age groups by dividing each group's estimated number of children having epilepsy by the corresponding national population estimate (6 to 11 and 12 to 17). Then staff proceeded as described above.

Methods To Identify Gaps and Lapses in Care

Some study questions were difficult to answer. These questions related to the number and types of gaps and lapses in school health care.

Some policy and procedure questions were appropriate to ask school districts, so Program Review staff sent information requests to all 174 school districts asking questions about aspects of school health services. The responses provided a sense of the official positions of the districts but did not give a full picture of the actual practices in the schools. In particular, it seemed unlikely that districts would officially acknowledge questionable or ill-advised practices.

Program Review staff considered, but were unable to conduct, a targeted field audit of school health services because student records are protected by the Family Educational Rights and Privacy Act. Under the Act, access by state audit agencies, such as the Program Review and Investigations Committee, has always been limited. State audit agencies were not permitted to access student records for program evaluations but were permitted to do so for strictly defined audits (US. Dept. of Education. Family Policy). Changes to federal regulations effective in January 2009 led to questions about whether a state audit agency would still be permitted to review student records for audit purposes. Staff researched the issue and contacted the United States Department of Education. Although a federal staff member gave oral assurances that state audit agencies should have access to student records for the purpose of a bona fide audit, written guidance was not received in time for this study (Cieplak).

The same concerns also prevented Program Review staff from surveying parents. Although it might have been possible to obtain the addresses of all parents, the cost of mailing surveys would have been prohibitive. Program Review staff discussed with the Kentucky Department of Education the possibility of obtaining a list of parents whose children had one of the chronic health conditions in the study. The conclusion was that even if the information system had been able to generate such a list, it might have been a privacy violation for the department to disclose that information.

Instead, Program Review staff conducted focus groups of parents arranged by the American Diabetes Association, the American Lung Association, Kentucky Families with Food Allergies, and the Epilepsy Foundation of Kentuckiana. These results necessarily are anecdotal and subject to error. Therefore, rather than attempting to show a number of times that gaps or lapses occurred, this report simply lists the incident types that were reported often enough to suggest that they are not isolated instances. Staff also asked school nurses and school staff members in an anonymous survey to report whether they were aware of certain gaps in student health care and practices that do not meet best practice guidelines. The percentages of school nurses and other staff reporting such gaps and practices are shown in this report.

School Health Services Information Requests

Program Review staff designed three online information requests to collect information from school districts about the following topics:

- Licensed health professionals (typically nurses)
- Unlicensed assistive personnel (school employees delegated to perform health service tasks)
- Health services provided in the schools

All 174 school districts received e-mail requests to fill out the questionnaires. The numbers of districts responding are listed in the following table. Some districts did not respond to all three questionnaires.

School Health Services Information Request Responses

Questionnaire	Districts
Licensed health professionals	169
Unlicensed assistive personnel	168
Health services provided	168
Districts completing at least one questionnaire	173

Source: Program Review staff information requests to districts.

For each questionnaire, after the initial invitation and e-mail reminder, Legislative Research Commission staff contacted the nonresponding districts by e-mail and phone to solicit their participation. Consistency checks were performed where possible, and staff contacted districts for clarifications and corrections. Staff entered information for districts that chose to respond by phone or on paper.

Licensed Health Professionals

After reviewing the first wave of responses, staff noted that many respondents did not understand the questions about school-based health centers. The item was modified to include an explanation and the districts that had responded previously were notified to reconsider their answers. Even with the new explanation, staff considered this item unreliable, and it was not used for the report. Staff also determined that a question related to early learners was improperly worded and conceptually irrelevant, so it was dropped from the questionnaire. Responses to a question about hiring to fill vacancies were inconsistent and not verified by staff, so they were not used in this report.

One item asked districts to indicate how many schools had various levels of coverage by licensed professionals. Staff compared the number of schools listed with the number given in the "Superintendent's Annual Attendance Report: Enrollment by District, School, and Grade." Recognizing that many districts have multiple schools or programs that operate in the same building or on the same campus, staff accepted smaller numbers when a district had alternative schools, treatment programs, technical programs, and other schools in the same building or on the same campus. Staff also inquired if the reported head counts and full-time equivalents (FTEs) were not internally consistent and corrected these inconsistencies.

Some districts listed licensed health professionals other than physicians and nurses. Staff examined these and determined that they were not licensed health professionals and reduced the head count and FTE accordingly. One district reported a registered nurse as "other," and staff moved the head count and FTE to the appropriate category.

Two districts were known to have nurses dedicated to serve individual students one on one. The total head count for these districts was 22 and the FTE was 21.25. These numbers were removed from Tables 3.7, 3.8, and 4.5; from the estimate of students per FTE nurse; and from the results shown in Appendix E.

Unlicensed Assistive Personnel

The counts of personnel for one district were questioned; after obtaining additional information, staff reduced their numbers. Because the district did not provide a breakdown by job category, their number was placed in "Other."

Program Review staff inquired if head counts were not internally consistent. For one district, the head count for total unlicensed personnel differed by two from the breakdown of personnel by job category. This inconsistency was permitted to remain so that the response from the district could be used. It is noted in Appendix F. All other districts' head counts were internally consistent.

Health Services Provided

The question about self-administration asked whether districts allowed self-administration of nasal midazolam. This should not have been an option, and the answers were not used in the report.

One county reported all students with individualized education programs (IEPs) who had chronic health conditions. The district indicated it was not possible to determine which students had IEPs strictly because of one of the conditions. The district did provide a number of students who had an IEP under the "other health impaired" category, meaning health, rather than educational disability, was the primary reason for the IEP. Program Review staff retained the number of IEPs for epilepsy because that is the most likely condition to result in educational impairment. Staff then determined the relative proportion of IEPs for type 1 diabetes, asthma, and severe allergy reported by other districts. Staff distributed the number of students with IEPs in the "other health impaired" category among the three conditions according to those proportions. This should have resulted in an overestimate for all conditions but an estimate much closer to the actual numbers.

Staff consulted with some other districts that appeared to have high IEP numbers. In some cases, districts supplied corrected numbers, and staff made the corresponding changes.

Surveys of School Employees and Nurses

Program Review staff generated separate but similar survey instruments for school personnel in general, school nurses, and school transportation staff. The surveys were anonymous. No identifying information was collected. Demographic information included only the respondent's region within the state and the grade levels of students with whom the respondent worked.

The Office of Education Accountability provided Program Review staff with the names and school districts of persons holding selected certified and classified jobs as of the 2008-2009 school year. Staff then constructed possible e-mail addresses for each person based on the standard format for school district e-mail addresses. These potential addresses were compared with actual e-mail addresses in the Commonwealth Office of Technology's global address list. Addresses that matched were used to send e-mail invitations to school employees to participate in the corresponding survey.

The invitations indicated the job group in which the recipients were placed and asked them not to respond if the information was incorrect. The first question on each survey was intended to screen in only those who worked in a public school in the past school year. Recipients who completed the final demographic question were defined as having completed the survey.

Regions were selected to divide the state into sections and to ensure that no health department districts were split across regions. The north central region corresponded to the Passport Medicaid managed care region except that Carroll County, which is in Passport, fell in the northern Kentucky region. The table shows the 2008-2009 public school enrollment in each region. Figure 3.A on page 58 shows the counties in each region.

Public School Enrollment by Survey Region 2008-2009

Region	Enrollment
Bluegrass	112,658
Eastern	133,368
North Central	180,484
Northern	68,847
South Central	78,843
Western	96,976
Total	671,176

Source: Commonwealth. Dept. "Superintendent's."

School Personnel Survey

The general school personnel population was divided into 10 groups that were invited and tracked separately. Their responses were combined for most analyses. The overall response rate was 20 percent.

School Personnel Survey Response Rates by Group

Group	Number Invited	Number Responded	Percent Responded
Food Service	2,458	241	10%
Health Services Assistants	92	57	62
Instructors	9,611	1778	18
Other Staff	11,096	1810	16
Principals	1,407	436	31
Teachers—Elementary	13,625	2849	21
Teachers—High	7,458	1535	21
Teachers—Middle	4,837	1014	21
Teachers—Other	148	21	14
Teachers—Special	5,470	1506	28
Total	56,202	11,247	20%

Source: Program Review staff surveys of school personnel.

If a respondent indicated there were no students with any of the conditions in the past year, then any answers to questions about services during the past year were ignored.

Two questions asked respondents to rate school nurses on the information they provided to school personnel and on the care they provided to students. These questions did not have an explicit choice to indicate there was no school nurse. Review of comments on the surveys showed that many respondents rated nurses as "Poor" on one or both questions when there was no nurse or the nurse was available only as needed. To remove this bias, the answers were included in the analysis only when respondents indicated there was a nurse available full time or part time.

Analysis of responses indicated that answers were very inconsistent for questions related to delegation as unlicensed assistive personnel. For analyses, only those who gave consistent answers were included. That is, respondents had to indicate that they had been delegated to perform health service tasks for a particular condition, how long ago they had been delegated, and how often they had been delegated. Otherwise, the answers for that condition were ignored.

A question that asked for willingness to administer glucagon erroneously stated that its purpose is to lower blood glucose; its actual purpose is to raise blood glucose. It is possible that this introduced some bias into the answers, if respondents decided they would not be willing to administer glucagon in order to lower blood glucose. However, it seems more likely that respondents did not notice the error, assumed it was correct, or assumed it was typographical. Six respondents out of more than 11,000 commented that glucagon has the opposite effect.

School Nurse Survey

School district nurses were identified by the Office of Education Accountability according to the following job codes:

- 0130 School health coordinator (certified)
- 1070 School nurse (certified)
- 7261 Advanced registered nurse practitioner (classified)
- 7262 Registered nurse (classified)
- 7263 School nurse (classified)
- 7271 Local school health coordinator (classified)
- 7272 Health services technician (classified, licensed practical nurse)

Requests were sent to local health departments for lists of nurses who worked in the schools. Generally, the health departments provided lists as of the 2009-2010 school year. Program Review staff looked up the nurses in the global address list to obtain e-mail addresses.

The school nurse population was divided into school district nurses and health department nurses, who were invited and tracked as a separate group. Because several nurses transferred from school district to health department employment between the 2008-2009 and 2009-2010 school years, at least 58 names appeared on both lists. These nurses were instructed to respond to the invitation that matched their employment during the 2008-2009 school year and to respond to

the survey only once. The responses for the two groups were combined for most analyses. It was not possible to determine the group in which the nurses with duplicate addresses responded.

Five respondents who were in a district position providing no direct care were excluded. The overall response rate was 53 percent with exclusions and known duplicates removed.

School Nurse Survey Response Rates by Group

Group	Number Invited	Number Responded	Percent Responded
School District Nurses	257	144	56%
Health Department Nurses	352	149	42
Total	551	293	53%

Note: At least 58 nurses were on both lists because they transferred from school district to health department employment between the 2008-2009 and 2009-2010 school years. The total invited was reduced to give an unduplicated number.
Source: Program Review staff survey of school nurses.

School Transportation Staff Survey

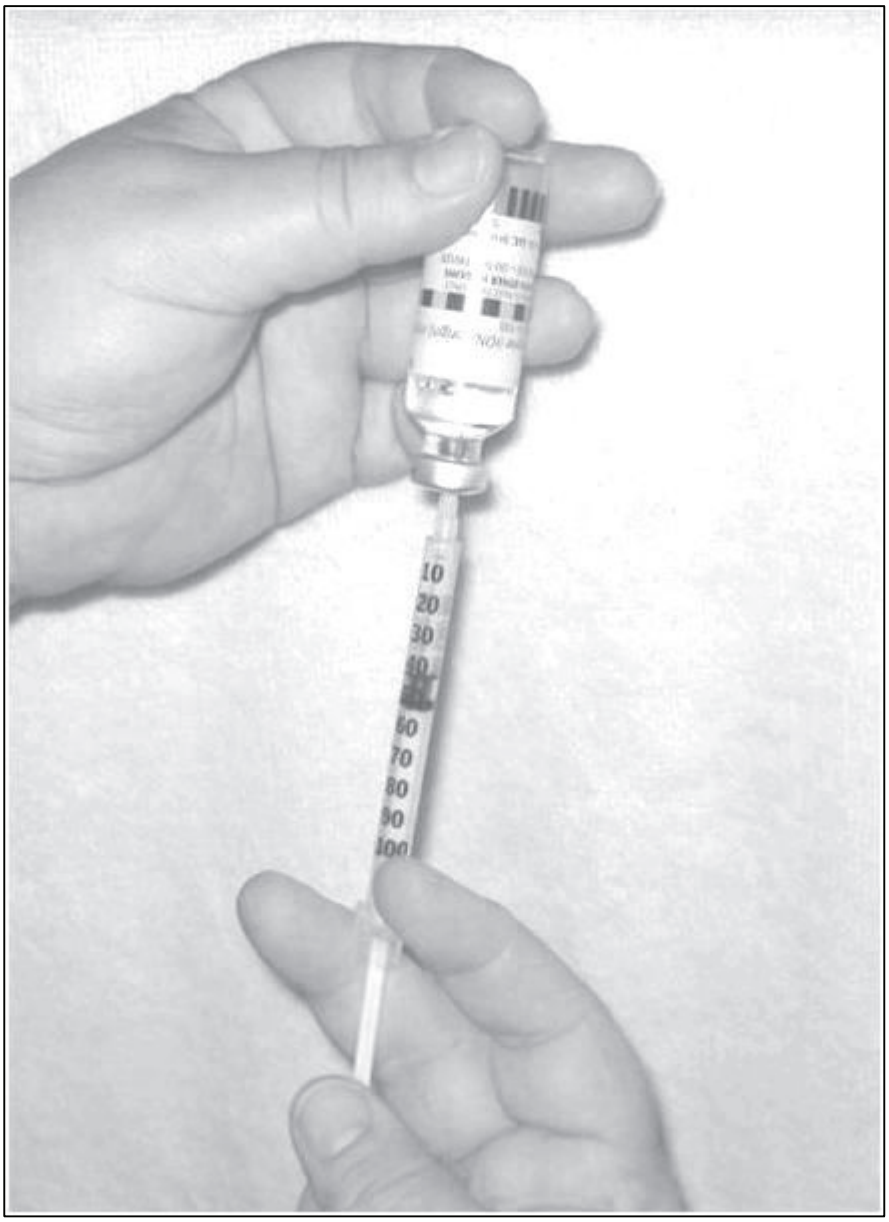
E-mail invitations were sent to 1,775 bus drivers and bus monitors, who were tracked as a single group. The number of respondents was 122 for a response rate of 7 percent, which was too low to consider representative. Responses to this survey were not used in the report.

Appendix B

Illustrations of Treatments for Chronic Health Conditions

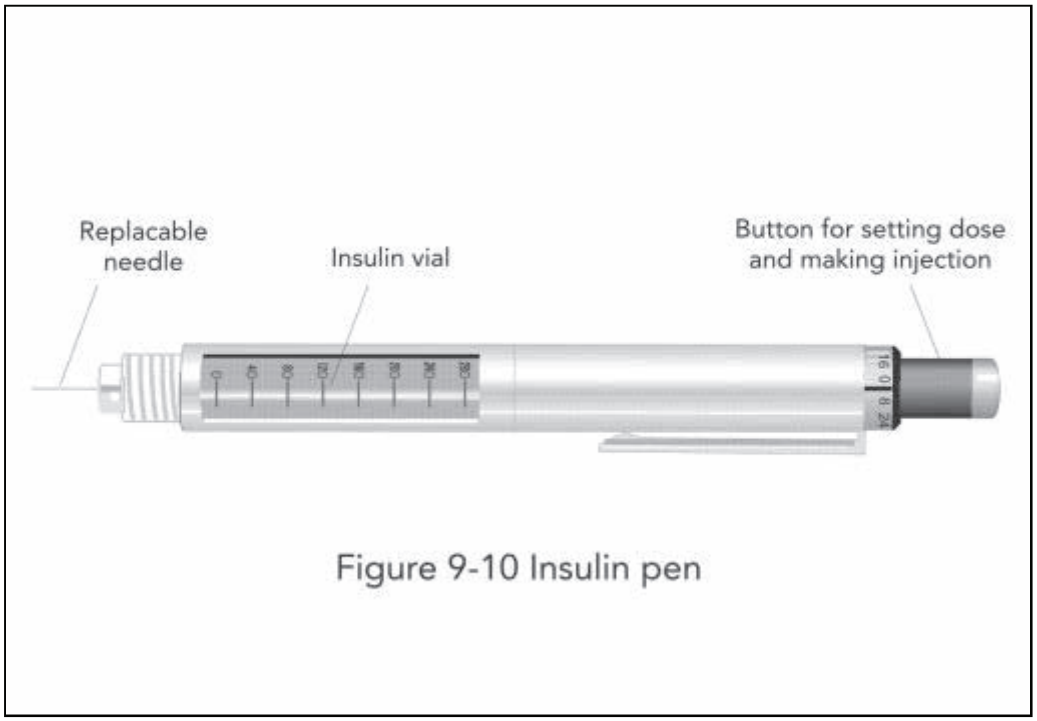
Diabetes

Traditional Insulin With Vial and Syringe



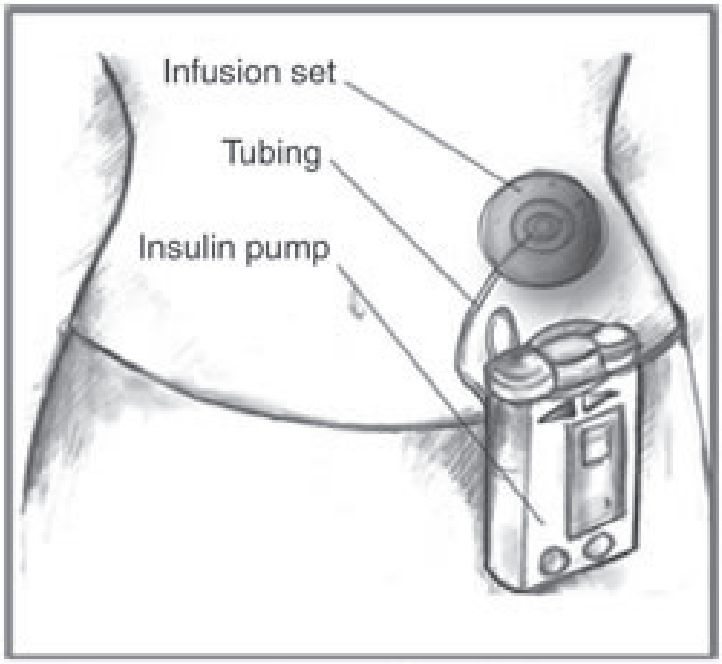
Source: <http://i.ehow.com/images/GlobalPhoto/Articles/5152128/263300_Full.jpg> (accessed Nov. 18, 2009).

Insulin Pen



Source: <http://www.medtek.ki.se/medicaldevices/album/Ch%209%20Parenteral%20administration%20of%20drugs/slides/F%209-10%20Insulin%20pen.jpg> (accessed May 27, 2010).

Insulin Pump



Source: <http://diabetes.niddk.nih.gov/DM/pubs/insulin/> (accessed May 27, 2010).

Counting Carbohydrates and Calculating Insulin Dose

INSULIN CALCULATION INSTRUCTIONS (Reviewed 08/08)

DEFINITIONS:

Goal Blood Sugar: = Target blood sugar (mg/dl)

Correction Factor: = 1 unit of insulin for every _____ mg/dl (points) that the blood sugar is above or below _____ (Target Blood Sugar).

Insulin to Carbohydrate Ratio: = 1 unit of insulin for every _____ grams of carbohydrates eaten

1. **TO CALCULATE INSULIN FOR CORRECTION FACTOR:**
   Use the following formula:
   Blood sugar value, ***minus*** Goal Blood Sugar = _____, ***divided by*** Correction Factor.

   The result is the **# of units of insulin for blood sugar correction.** *This can be a **NEGATIVE number!**

2. **TO CALCULATE INSULIN FOR FOOD**: **(insulin to carbohydrate ratio)**
   a. Determine total number of grams of carbohydrates eaten.
   b. Use doctor's order for Carbohydrate ratio: 1 unit of insulin for every _____ gm of carbohydrate eaten.
   c. Use the following formula:
      Divide # of grams of carbohydrates eaten by carbohydrate ratio.

      The result is the **# of units of insulin needed for food.**

3. **TO CALCULATE TOTAL UNITS OF INSULIN**
   # of units insulin needed for food
   + # of units insulin needed for Blood Sugar (*This can be a negative number.)
   = Total # of units of insulin

***If the # of units of insulin needed for blood sugar is negative, then the TOTAL # of units of insulin will be SMALLER than the # of units of insulin needed for food.**

EXAMPLES:
Blood sugar goal: __150__ mg/dl
Correction factor or Insulin Sensitivity: __100__
Carbohydrate ratio: __1:20__

1. Blood sugar is 220 and 40 gm of carbs are eaten.

   220 – 150 = 70 ÷ 100 = __.7__ units

   40 gm of carbs ÷ 20 = __2__ units

   .7 + 2 = __2.7__ units
   Round up to **3 units** total insulin needed

2. Blood sugar is 129 and 60 gms of carbs are eaten.

   129 – 150 = -21 ÷ 100 = __-.21__ units

   60 gm of carbs ÷ 20 = __3__ units

   -.21 + 3 = __2.79__ units
   Round up to **3 units** total insulin needed

Adopted from Leon County School Board 6/04

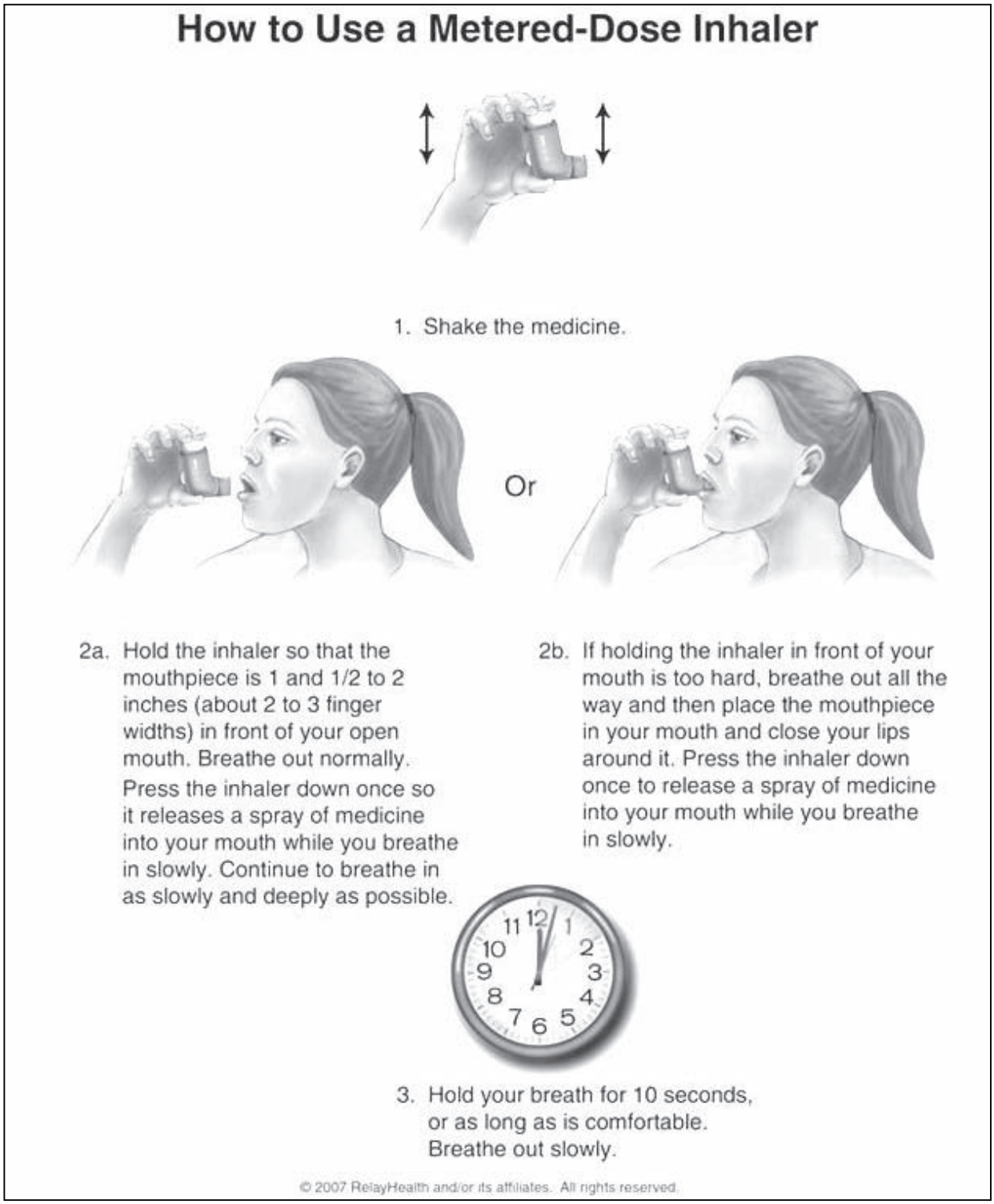
Source: <http://www.doh.state.fl.us/Family/School/attachments/Documents/InsulinCalc_rev8-08.pdf> (accessed June 1, 2010).

Glucagon Kit

Source: <http://www.pennmedicine.org/health_info/images/19196.jpg> (accessed May 27, 2010).

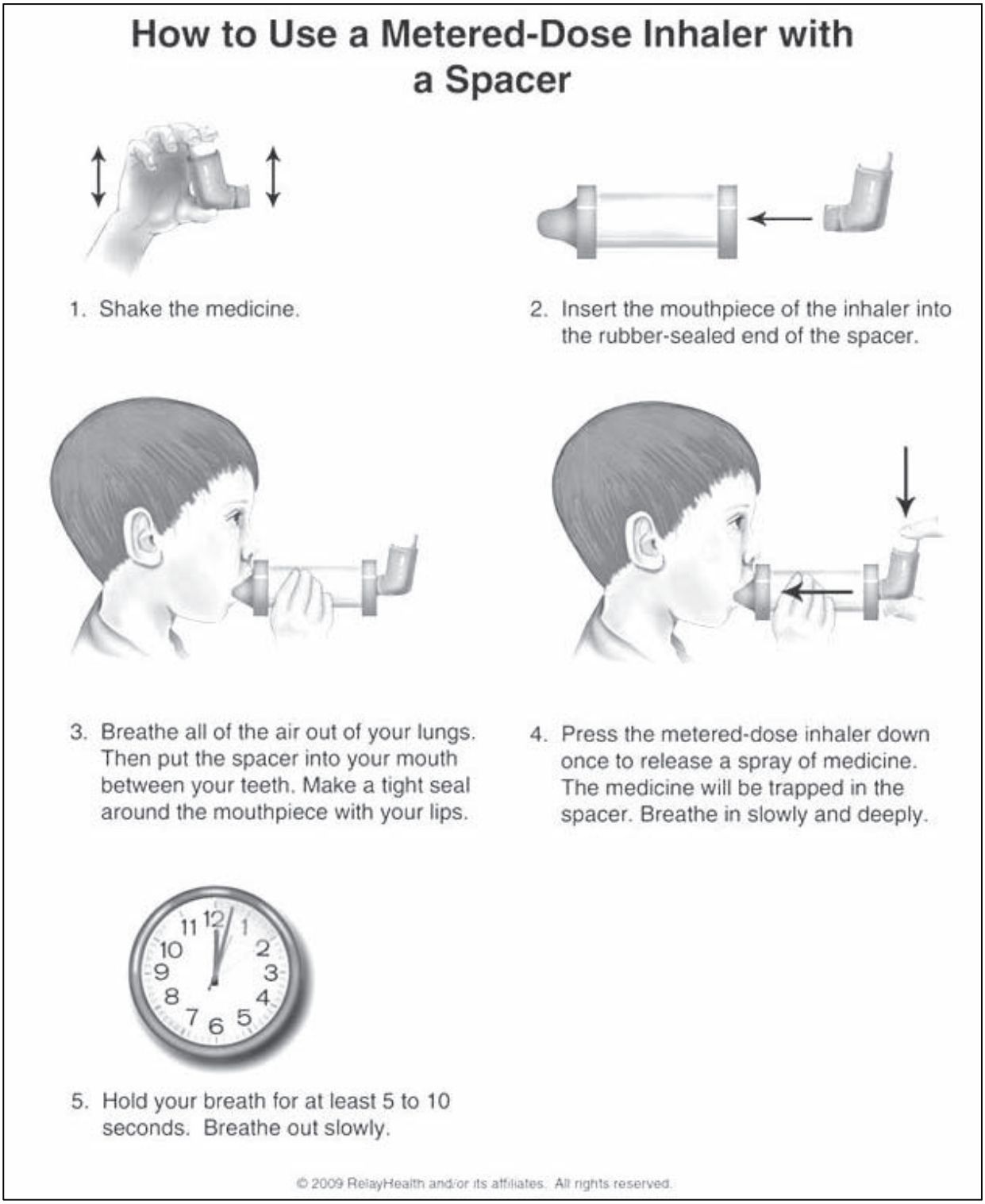
Asthma

Asthma Inhaler



Source: <http://media.summitmedicalgroup.com/media/db/relayhealth-images/mdinhale.jpg> (accessed May 27, 2010).

Asthma Inhaler With Spacer



Source: <http://media.summitmedicalgroup.com/media/db/relayhealth-images/mdaeroch.jpg> (accessed May 27, 2010).

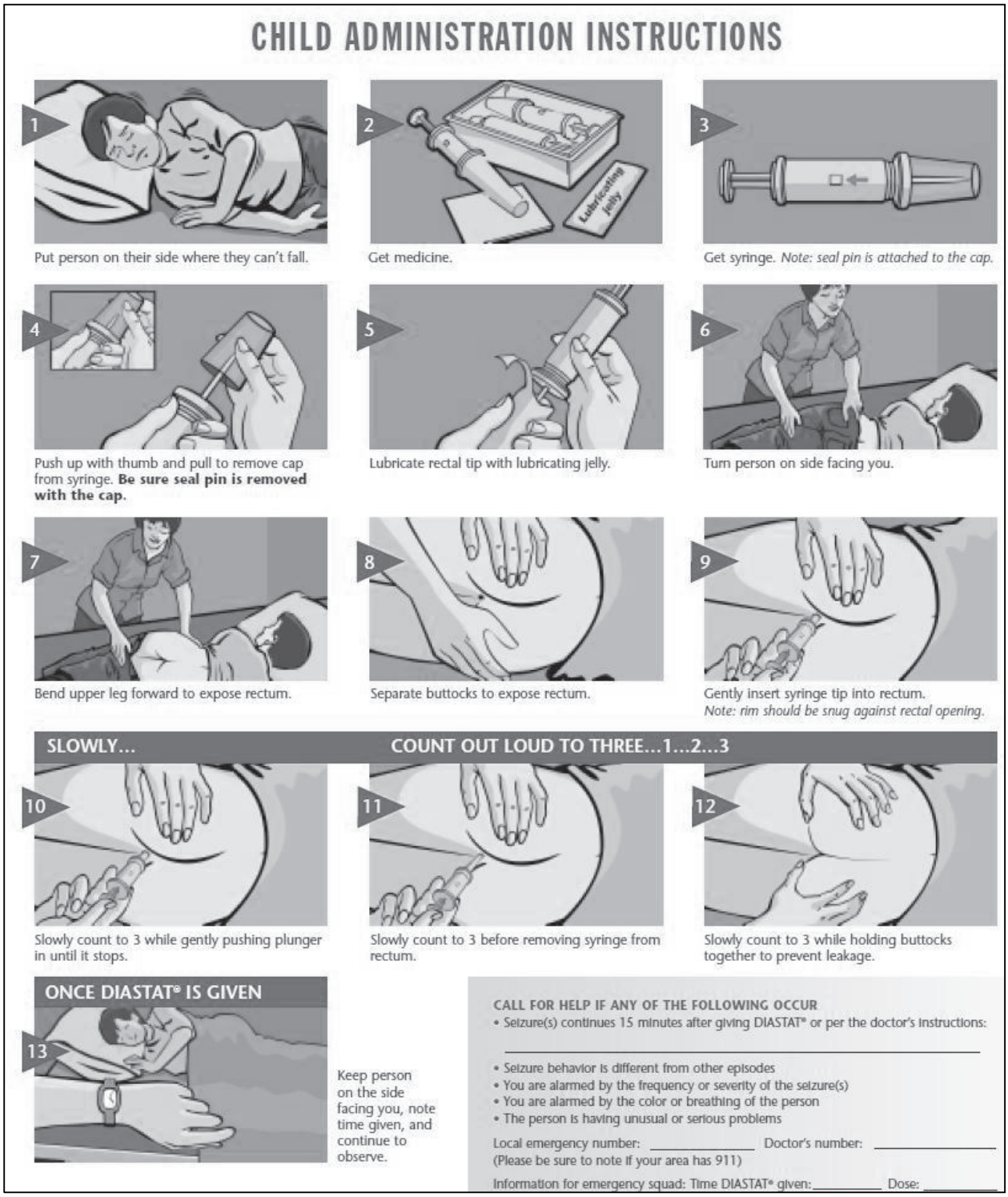
Severe Allergy

Epinephrine Kit

Source: <http://i.ehow.com/images/GlobalPhoto/Articles/4801583/IMG5113-main_Full.jpg> (accessed May 27, 2010).

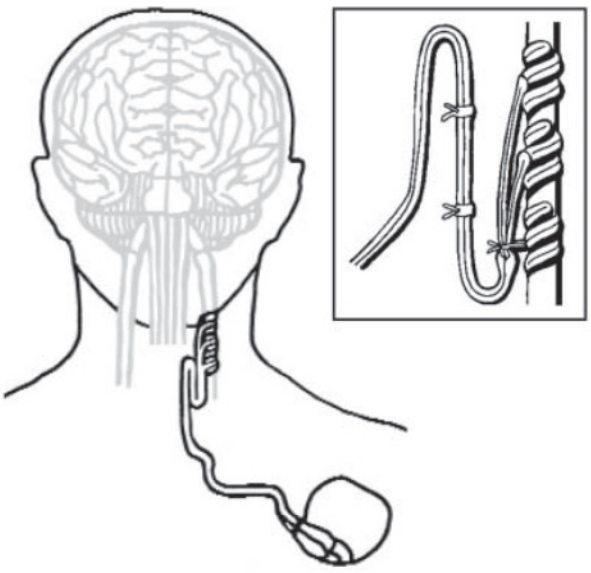
Epilepsy

Rectal Diazepam



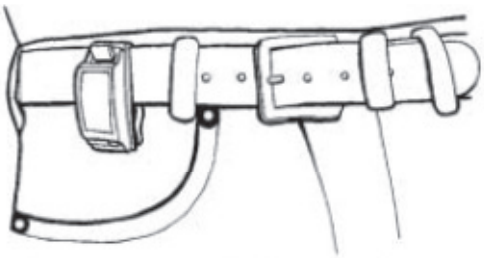
Source: <http://diastat.com/pdf/Ped%20admin.pdf> (accessed May 27, 2010).

Vagus Nerve Stimulator



This diagram shows how the implanted pulse generator, lower right, is linked by electrodes to the left vagus nerve in the neck. The enlarged section of the diagram (upper right) shows how the ends of the flexible silicone leads are wound around the nerve.

This special VNS Therapy™ System magnet is worn on the wrist.



The magnet can also be clipped to a belt, like a pager.

Source: Epilepsy Foundation. "VNS Therapy for Epilepsy." 2008. <http://www.epilepsyfoundation.org/beyond/VNS%20Therapy.pdf> (accessed April 15, 2011)

Appendix C

Health Department Agreements With School Districts

Program Review staff asked local health departments for their agreements with school districts. All 56 departments responded. The table below shows the school districts served and the types of agreement for each health department.

Health Department	School Districts Served	Type of Agreement
Allen County	None (Allen County in negotiation)	NA
Anderson County	Anderson County	Contract
Ashland-Boyd County	Boyd County, Ashland Independent, Fairview Independent	Contract
Barren River District	Metcalfe and Logan Counties, Bowling Green Independent, Caverna Independent, Glasgow Independent, Russellville Independent (Barren and Butler Counties in negotiation)	Contract
Bourbon County	None	NA
Boyle County	None	NA
Bracken County	Bracken County	Contract
Breathitt County	None	NA
Breckinridge County	None	NA
Buffalo Trace District	Mason County	Contract
Bullitt County	None	NA
Christian County	Christian County	Agreement
Clark County	Clark County	Contract
Cumberland Valley District	Bell County, Middlesboro Independent, and Pineville Independent (Contracts) Clay, Harlan, Jackson, and Rockcastle Counties (MOA)	Contract and MOA
Estill	None	NA
Lexington-Fayette County	Fayette County	Contract
Fleming County	None	NA
Floyd County	Floyd County	Agreement
Franklin County	Franklin County (Contract) Frankfort Independent (MOA)	Contract, MOA
Garrard County	None	NA
Gateway District	Bath, Menifee, Morgan, and Rowan Counties	Agreement
Green River District	Daviess, Hancock, Henderson, Ohio, McLean, and Webster Counties; Owensboro Independent	Contract
Greenup County	None	NA
Hopkins County	Hopkins County, Dawson Springs Independent	Contract
Jessamine County	None	NA
Johnson County	Johnson County, Paintsville Independent	Agreement
Kentucky River District	Knott, Letcher, Owsley, Perry, and Wolfe Counties	Agreement

Health Department	School Districts Served	Type of Agreement
Knox County	Knox County, Barbourville Independent	MOA
Lake Cumberland District	Adair, Casey, Clinton, Cumberland, Green, McCreary, Pulaski, Russell, Taylor, and Wayne Counties; Campbellsville Independent, Science Hill Independent, Somerset Independent	Contract
Laurel County	Laurel County, East Bernstadt Independent	MOA
Lawrence County	Lawrence County	MOU
Lewis County	Lewis County	Contract
Lincoln County	Lincoln County (Nurses are employed by Board of Education and contracted to health department for placement in schools)	Contract
Lincoln Trail District	Hardin, Marion, and Meade Counties	Contract
Little Sandy District	Carter and Elliott Counties	Oral
Louisville Metro	None	NA
Madison County	Madison County and Berea Independent	Agreement
Magoffin County	Magoffin County	Contract
Marshall County	Marshall County	Contract
Martin County	Martin County	Agreement
Mercer County	Burgin Independent	Contract
Monroe County	Monroe County	Contract
Montgomery County	Montgomery County	MOA
Muhlenberg County	Muhlenberg County	Contract
North Central District	Shelby and Spencer Counties (Contracts) Trimble County (Oral)	Contract and oral
Northern KY District	Boone County, Ludlow Independent, Newport Independent, and Walton-Verona Independent	MOA
Oldham County	None	NA
Pennyrile District	Caldwell, Crittenden, Livingston, and Lyon Counties	Agreement
Pike County	Pike County and Pikeville Independent	Agreement
Powell County	Powell County	Contract
Purchase District	Ballard, Calloway, Carlisle, Fulton, Hickman, and McCracken Counties; Mayfield Independent and Paducah Independent	Contract
Three Rivers	Gallatin, Owen, and Pendleton Counties	Contract
Todd County	Todd County	Contract
Wedco District	Harrison County	Contract
Whitley County	Whitley County, Corbin Independent, and Williamsburg Independent	MOA
Woodford County	None	NA

Note: When a health department provides services for a school district, it might not serve every school. "Agreement" means there is a written agreement that states that it is not a contract or the agreement makes performance conditional on other factors. "MOA" is a memorandum of agreement. "MOU" is a memorandum of understanding.
Source: Program Review staff compilation of information from health departments.

Appendix D

Kentucky Laws and Regulations Related to School Health Services

Statute	Description
KRS 156.029	Establishes membership and functions of Kentucky Board of Education
KRS 156.160	Demonstrates areas in which the Kentucky Board of Education may promulgate regulations
KRS 156.496	Discusses design, components, and grant program for family resource and youth services centers
KRS 156.4977	Explains grants for family resource and youth services centers including a supplemental grant program to provide health services
KRS 156.501	Establishes roles for the Kentucky Department of Education and the Department for Public Health in the area of student health services
KRS 156.502	Defines health services, states who may provide them, and allows for liability protection
KRS 158.6451	Establishes goals for Kentucky's schools
KRS 158.830 to 158.836	Allow for self-administration of asthma and anaphylaxis medications
KRS 158.838	Allows emergency administration of glucagon and diazepam rectal gel
KRS 159.070	States that parents are permitted to enroll student in the school nearest their home
KRS 160.330	Establishes a waiver of fees for pupils who qualify for free and reduced price lunches
KRS 160.345	Requires adoption of school-based decision making councils and defines responsibilities
KRS 211.287	Requires funding from Department for Public Health for student health services
KRS 211.736	Creates the Kentucky Diabetes Research Board
KRS 211.737	Creates the Kentucky Diabetes Research Trust Fund
KRS 216B.176	Permits nonprofit Medicaid primary care providers to contract with school districts to create satellite clinics in public schools.
KRS 314.011	Discusses delegation and scope of practice for nurses
KRS 314.470	Establishes the Nurse Licensure Compact
KRS 438.050	Prohibits smoking on school premises except by adult employees in designated areas
KRS 605.115	Permits access to Medicaid funding by local school districts to serve eligible students with disabilities

Source: Program Review staff.

Regulation	Description
16 KAR 2:060	Notes requirements for school nurse certification by the Education Professional Standards Board
16 KAR 4:010	Sets qualifications for professional school positions including school health coordinator
201 KAR 20:400	Defines delegation process for nursing tasks
702 KAR 3:285	Establishes requirements for school districts to be Medicaid providers
704 KAR 4:020	Addresses some aspects of school health services
704 KAR 7:120	Presents information related to home/hospital instruction
707 KAR 1:002 to 707 KAR 1:380	Establish regulations for special education
902 KAR 8:170	Details financial management requirements for local health departments
907 KAR 1:715	Discusses Medicaid payments for school-based health services

Source: Program Review staff.

Appendix E

Information Request to Districts: Licensed Health Professionals

Program Review staff asked all school districts to fill out an online questionnaire about licensed health professionals. The instructions and questions are reproduced below along with responses. For head counts and full-time equivalent counts, dedicated one-on-one nurses were removed.

Percentages may not add to 100 in some tables because of rounding. Other reasons are listed in table notes.

Information Request and Responses

Request for Information About Licensed Health Professionals

The Program Review and Investigations Committee of the Kentucky General Assembly has requested its staff to report on the health services provided by schools to students with certain chronic health conditions: diabetes, asthma, severe (anaphylactic) allergy, and epilepsy.

The objective of this information request is to learn about the numbers and kinds of licensed health professionals who provided health services to students and about the ways districts organized and managed those professionals during the past school year (2008-2009).

The information you provide will be used in a staff report along with information from other school districts.

This information is being requested under KRS 6.900-6.935…..

You will need information from multiple sources and you will be asked to send some documents. The e-mail invitation lists the types of information and documents you will need.

If you want to e-mail your policy and procedure documents, be sure that you are at a computer that can send e-mail and that you have the electronic documents available to attach.

You may quit and return to the information request later….

1. Does your district have a comprehensive health services needs assessment or plan?

	Districts	
	Percent	**Count**
Yes	23%	38
No	78	131

Note: Number of respondents: 169.

2. Please submit a copy of your district health services needs assessment or plan.

[Questions 3 and 4, regarding school based health centers, were not used in this report because even with the instructions it was clear that many districts responded incorrectly.]

When counting licensed health professionals in the next section, school-based health center staff may be included but only those who were available to provide day-to-day direct services for students in the schools. Examples include medication administration, blood glucose monitoring, peak flow measurement, and seizure management.

Do not include staff who performed only preventive care tasks such as immunizations, screenings, physical exams, or health education.

A licensed health professional is any registered nurse, licensed practical nurse, nurse practitioner, or physician, regardless of the job title.

Consider only those who were routinely available for day-to-day direct services to students in the schools during the school day. Examples include medication administration, blood glucose monitoring, peak flow measurement, and seizure management.

Do not include physical, occupational, or speech therapists; dentists; mental health providers; visiting or mobile health service providers; off-site providers or supervisors; professionals who performed only preventive care tasks such as immunizations, screenings, physical exams, or health education; or those serving only school staff.

5. At the end of the past school year, did any licensed health professionals provide day-to-day direct health services for students in any of your district's schools?
Please review the explanation of licensed health professionals before answering.

	Districts	
	Percent	**Count**
Yes	92%	156
No	8	13

Note: Number of respondents: 169

6. Indicate how many schools in your district had the following coverage at the end of the past school year.
Enter a number of schools or 0 in each box.
The total should equal the number of schools listed on the Superintendent's Annual Attendance Report for your district, including special schools and programs.

	School Count	**District Count**
A licensed health professional was at the school on a full-time basis	473	156
A licensed health professional was at the school on a part-time schedule	375	156
A licensed health professional was on call or at the school as needed	196	156
No licensed health professional was available	163	156

Note: Number responding "Yes" to question 5 was 156.

[Question 7 was disabled after it was determined to be irrelevant.]

8. At the end of the past school year, what was the head count of licensed health professionals who provided day-to-day direct health services to students in the schools?
On any line, if there were none, enter 0.

	Head Count	District Count
RN count	559	156
LPN count	123	156
ARNP count	25	156
Physician count	1	156
Other count (specify below)	0	156

Note: Number responding "Yes" to question 5 was 156.

9. At the end of the past school year, what was the full-time equivalent of the same licensed health professionals?
On any line, if there were none, enter 0. Fractions like 1.5 are allowed.

	Total FTE	District Count
RN FTE	539.40	156
LPN FTE	119.76	156
ARNP FTE	18.40	156
Physician FTE	0.10	156
Other FTE (specify below)	0.00	156

Note: Number responding "Yes" to question 5 was 156.

10. If you indicated "other" licensed health professional above, specify the type of professional here:

11. For the licensed health professionals counted on the previous page, what was the head count provided by each of the following?
Total head count here should equal the previous total head count.
"School district" includes anyone hired by the district or by an individual school or FRYSC.
On any line, if there were none, enter 0.

	Head Count	District Count
School district count	304	156
Health department count	368	156
Other agency count (explain below)	36	156
Volunteer count	0	156

Note: Number responding "Yes" to question 5 was 156.

12. For the same licensed health professionals, what was the full-time equivalent provided by each of the following?
Total FTE here should equal the previous total FTE.
"School district" includes anyone hired by the district or by an individual school or FRYSC.
On any line, if there were none, enter 0. Fractions like 1.5 are allowed.

	Total FTE	District Count
School district FTE	295.11	156
Health department FTE	360.05	156
Other agency FTE (explain below)	22.50	156
Volunteer FTE	0.00	156

Note: Number responding "Yes" to question 5 was 156.

13. If you included any licensed health professionals as "Other agency" in the previous questions, list the agencies below.

14. At the end of the past school year, who provided direct supervision for the licensed health professionals counted on the last two pages?
Select all that apply.

	Districts	
	Percent	Count
School district	70%	109
Individual school	14	22
Health department	56	87
Other supervisors (specify affiliation)	8	13

Note: Number responding "Yes" to question 5 was 156. Percentages add to more than 100 and counts to more than the number of respondents because respondents could select more than one option.

15. What policies and protocols did these licensed health professionals follow?
Select all that apply.

	Districts	
	Percent	Count
KDE Health Services Reference Guide	81%	127
KDE Infinite Campus Data Standards	54	85
Local board of education policies and protocols	79	123
Public Health Practice Reference	56	88
Other health department policies and protocols	49	77
Other policies and protocols (specify)	14	22

Note: Number responding "Yes" to question 5 was 156. Percentages add to more than 100 and counts to more than the number of respondents because respondents could select more than one option.

16. (Optional) Briefly add any information that would help Legislative Research Commission staff understand how your district obtained, allocated, and managed licensed health professionals in the schools.

17. Describe or submit a copy of your district's procedure for providing coverage when a licensed health professional was on vacation, sick, at training, or otherwise unable to be on the job.

[Question 18 was asked only when Question 5 was "No."]

18. You indicated that in the past school year, your district had no licensed health professionals routinely available for day-to-day direct services to students in the schools during the school day. Briefly describe how your district provided needed health services to students who had chronic health conditions such as diabetes, asthma, severe allergy, or epilepsy.

[Question 19, regarding vacant positions, was answered inconsistently and was not validated, so the results were not used in this report.]

20. As of the end of the past school year, would you say the number of licensed health professionals who were routinely available for day-to-day direct services to students in the schools during the school day, plus any vacant positions listed above, was

	Districts	
	Percent	**Count**
more than adequate	11%	19
adequate	47	80
less than adequate	41	70

	Total FTE
(enter the number of additional FTEs needed)	375.5

Note: Number of respondents: 169.

21. Indicate whether there are any changes in the current school year in the following: Check all that apply or "No changes."

	Districts	
	Percent	**Count**
Number of school-based health centers	5%	9
School coverage by licensed health professionals	20	33
Number or type of licensed health professionals	26	44
Agencies providing licensed health professionals	14	23
Management and supervision of licensed health professionals	8	14
Other changes	8	13
No changes	56	95

Note: Number of respondents: 169. Percentages add to more than 100 and counts to more than the number of respondents because respondents could select more than one option.

22. (Optional) Provide clarifications or comments on any of the questions in this information request.

23. (Optional) Briefly describe any obstacles or barriers to providing health services for students in your district. Consider medical, practical, and legal issues.

24. (Optional) Briefly describe any suggestions for ways to improve student health services.

25. (Optional) Provide any other comments you might have on school health services, particularly for students with diabetes, asthma, severe (anaphylactic) allergy, and epilepsy.

26. Is the information request complete and ready to submit?

27. Please provide a contact name in case there are questions about your district's responses.

Appendix F

Information Request to Districts: Unlicensed Assistive Personnel

Program Review staff asked all school districts to fill out an online questionnaire about unlicensed assistive personnel. The instructions and questions are reproduced below along with responses.

This questionnaire had a complex skip pattern, and so the number of respondents will differ between sections. Percentages may not add to 100 in some tables because of rounding. Other reasons are listed in table notes.

Information Request and Responses

Request for Information About Unlicensed Assistive Personnel

The Program Review and Investigations Committee of the Kentucky General Assembly has requested its staff to report on the health services provided by schools to students with certain chronic health conditions: diabetes, asthma, severe (anaphylactic) allergy, and epilepsy. The objective of this information request is to learn about the numbers and kinds of unlicensed assistive personnel who were available to perform health service tasks for students and about the ways districts organized and managed those personnel during the past school year (2008- 2009).

The information you provide will be used in a staff report along with information from other school districts.

This information is being requested under KRS 6.900-6.935. …

You will need information from multiple sources and you will be asked to send some documents. The e-mail invitation lists the types of information and documents you will need.

If you want to e-mail your policy and procedure documents, be sure that you are at a computer that can send e-mail and that you have the electronic documents available to attach.

You may quit and return to the information request later…

Unlicensed assistive personnel may be certified or classified school employees. They are delegated by nurses or physicians to perform certain health service tasks.

For this information request, include only delegation for medical or nursing tasks. Do not consider physical, occupational, or speech therapy tasks; mental health tasks; or educational tasks when determining who was a UAP.

For items 1-3, consider two types of UAP:

- Those whose primary work assignment involved health service tasks. Examples of health service jobs are
  - Health Services Assistant,
  - Medical Assistant,
  - Instructional Assistant if the primary work was health services, or
  - any other unlicensed position if the primary work was health services.
- Those delegated to perform health service tasks in addition to their regular job. School principals, counselors, teachers, instructional assistants, office staff, bus drivers, and any other school staff may be UAPs in addition to their regular job.

1. At the end of the past school year, were there any UAPs in your district available during the school day to perform health service tasks for students?

	Districts	
	Percent	**Count**
Yes	71%	120
No (describe below)	29	48

Note: Number of respondents: 168.

2, 13. At the end of the past school year, were there any other UAPs who were available to perform health service tasks for students outside the school day at any location or activity?
Include transportation to and from school; before- and after-school meetings or trips; athletic practices and events; and school-sponsored events such as plays, concerts, dances, proms, and others.

	Districts	
	Percent	**Count**
Yes, there were other UAPs	44%	74
No, there were no other UAPs	56	94

Note: Number of respondents: 168. Respondents who answered "No" to question 1 saw questions 2 and 3 and the other respondents saw questions 13 and 14. The responses were combined into one response set.

3, 14. What was the head count of the other UAPs mentioned above who were delegated to perform one or more tasks for students with any of the following health conditions?

- Diabetes
- Asthma,
- Severe (anaphylactic) allergy, or
- Epilepsy/seizures

If there were none, enter 0.
Click on the link below for more information about severe allergy.

	Head Count	**District Count**
Head count	2,797	74

Note: Number responding "Yes" to question 2 or 13 was 74. Respondents who answered "No" to question 1 saw questions 2 and 3 and the other respondents saw questions 13 and 14. The responses were combined into one response set.

4. At the end of the past school year, were any UAPs available during the school day to perform health service tasks for students, as their primary work assignment?

	Districts	
	Percent	**Count**
Yes	33%	40
No	67	80

Note: Number responding "Yes" to question 1 was 120.

5. At the end of the past school year, what was the head count and full-time equivalent of UAPs available during the school day to perform health service tasks for students, as their primary work assignment?

Fractions like 1.5 are allowed for FTE.

	Response Total	**District Count**
Head count	322	40
FTE	308	40

Note: Number responding "Yes" to question 4 was 40.

6. Of the UAPs counted in the previous question, what was the head count and full-time equivalent of those who were delegated to perform one or more tasks for students with any of the following health conditions?

- Diabetes
- Asthma,
- Severe (anaphylactic) allergy, or
- Epilepsy/seizures

If there were none, enter 0 in both boxes.
Click on the link below for more information about severe allergy.
For FTE, include all hours the UAP was available, not just the time spent on specific tasks.
Fractions like 1.5 are allowed for FTE.

	Response Total	**District Count**
Head count	286	40
FTE	274	40

Note: Number responding "Yes" to question 4 was 40.

7. Indicate the unfilled health service UAP positions in your district at the end of the past school year. Count only positions for which the primary work assignment involved health service tasks and there was an active hiring effort.

If there were none, enter 0 in both boxes. Fractions like 1.5 are allowed for FTE.
You may click below for additional information.

	Response Total	**District Count**
Unfilled positions (head count)	4	120
Unfilled full-time equivalent (FTE)	3	120

Note: Number responding "Yes" to question 1 was 120.

Unlicensed Assistive Personnel With Non-Health Jobs

Items 8-11 are about unlicensed assistive personnel who were delegated health service tasks in addition to their regular job. School principals, counselors, teachers, instructional assistants, office staff, bus drivers, and any other school staff may be UAPs in addition to their regular job.

8. At the end of the past school year, did your district have any UAPs available during the school day to perform health service tasks for students, in addition to their regular job?

	Districts	
	Percent	**Count**
Yes	91%	109
No	9	11

Note: Number responding "Yes" to question 1 was 120.

9. At the end of the past school year, what was the head count of UAPs who were available during the school day to perform health service tasks for students, in addition to their regular job?

	Head Count	**District Count**
Head count	10,513	109

Note: Number responding "Yes" to question 8 was 109.

10. Of the UAPs counted in the previous question, what was the head count of those who were delegated to perform one or more tasks for students with any of the following health conditions?

- Diabetes
- Asthma,
- Severe (anaphylactic) allergy, or
- Epilepsy/seizures

If there were none, enter 0.
Click on the link below for more information about severe allergy.

	Head Count	**District Count**
Head count	8,953	109

Note: Number responding "Yes" to question 8 was 109.

11. Indicate how many of the UAPs counted in the previous question held each of the following positions.

The total head count here should equal the head count from the previous question: UAPs who were available to perform health service tasks for students with diabetes, asthma, severe (anaphylactic) allergy, or epilepsy.
On any line, if there were none, enter 0.

	Head Count	District Count
Office manager, secretary, or clerical staff	1,188	109
Regular education teacher	2,825	109
Regular education instructional assistant*	632	109
Special education teacher	786	109
Special education instructional assistant*	957	109
School counselor	131	109
Principal or assistant principal	226	109
Food service and nutrition staff	123	109
Bus driver	1,359	109
Other	728	109

* Do not include instructional assistants whose primary job was performing health service tasks. Instead, make sure they are included in the count of UAPs whose primary job was health services. Use the "Prev" button if you need to add them to those answers.
Note: Number responding "Yes" to question 8 was 109. The total head count of 8,955 differs from the head count reported in question 10 because one district's counts differed by two. This difference was accepted in order to include the district's response.

12. As of the end of the past school year, would you say the number of UAPs available during the school day in your district, plus any vacant health services UAP positions listed earlier, was

	Districts	
	Percent	Count
more than adequate	8%	9
adequate	78	94
less than adequate	14	17

Note: Number responding "Yes" to question 1 was 120.

[Questions 13 and 14 are shown with questions 2 and 3, respectively.]

Licensed Health Professionals Who Delegated Tasks to UAPs

Physicians, nurse practitioners, and registered nurses may delegate health service tasks to UAPs. This page asks for information about these licensed health professionals.

15. As of the end of the past school year, did any physicians delegate health service tasks to UAPs in your district?

	Districts	
	Percent	**Count**
Yes	1%	1
No	99	124

Note: Number of respondents: 125. The number of respondents is greater than Questions 4-12 because some respondents who answered "No" to Question 1 answered "Yes" to Question 2, so they also answered Question 15.

16. As of the end of the past school year, what was the relationship between your district and the nurses or physicians who delegated health service tasks to UAPs?
Check all that apply.

	Districts	
	Percent	**Count**
Nurse/physician employed by the district	70%	88
Nurse/physician contracted through health department	40	50
Nurse/physician contracted through another agency	4	5
Volunteer nurse/physician	2	2
Student's family nurse/physician	4	5
Other nurse/physician relationship	2	3
If other, specify.		

Note: Number of respondents: 125. The number of respondents is greater than Questions 4-12 because some respondents who answered "No" to Question 1 answered "Yes" to Question 2, so they also answered Question 16. Percentages add to more than 100 and counts to more than the number of respondents because respondents could select more than one option.

17. Please describe or submit a copy of your district's procedure for training UAPs for the health service tasks delegated to them.

18. There should be a written form documenting the tasks for which each UAP has been trained and delegated. Please submit a blank copy of the form your district uses.

19. Please describe or submit a copy of your district's procedure for following up with unlicensed assistive personnel to verify that they are performing their delegated health service tasks appropriately.

20. Please describe or submit a copy of your district's procedure for providing coverage when a UAP was on vacation, sick, at training, or otherwise unable to be on the job.

21. Indicate whether there are any significant changes in the current school year in the following: Check all that apply or "No significant changes."

	Districts	
	Percent	Count
Number of UAPs whose primary job is health services	4%	6
Number of UAPs delegated to perform health service tasks in addition to their regular job	7	12
Number of UAPs delegated to perform tasks related to diabetes, asthma, severe allergy, or epilepsy	6	10
Policies, procedures, or forms related to UAPs	1	2
Other significant changes related to UAPs	5	9
No significant changes	83	139
Briefly describe any changes		

Note: Number of respondents: 168. Percentages add to more than 100 and counts to more than the number of respondents because respondents could select more than one option.

22. In the district's opinion, should schools be able to train and delegate health service tasks to unlicensed non-employees, such as community volunteers?

	Districts	
	Percent	Count
Yes	16%	27
No	84	141

Note: Number of respondents: 168.

23. (Optional) Provide clarifications or comments on any of the questions in this information request.

24. (Optional) Briefly describe any obstacles or barriers to using UAPs to provide health services for students in your district. Consider medical, practical, and legal issues.

25. (Optional) Provide any other comments you might have on the use of UAPs, particularly for students with diabetes, asthma, severe (anaphylactic) allergy, and epilepsy.

26. Is the information request complete and ready to submit?

27. Please provide a contact name in case there are questions about your district's responses.

Appendix G

Information Request to Districts: Health Services Provided

Program Review staff asked all school districts to fill out an online questionnaire about licensed health professionals. The instructions and questions are reproduced below along with responses.

Percentages may not add to 100 in some tables because of rounding. Other reasons are listed in table notes.

Information Request and Responses

Request for Information About Health Services Provided

The Program Review and Investigations Committee of the Kentucky General Assembly has requested its staff to report on the health services provided by schools to students with certain chronic health conditions: diabetes, asthma, severe (anaphylactic) allergy, and epilepsy.

The objective of this information request is to learn about the needs of students with these health conditions and how they were met during the past school year (2008-2009).

The information you provide will be used in a staff report along with information from other school districts.

This information is being requested under KRS 6.900-6.935….

Diabetes refers to type 1 only unless otherwise indicated.

Only students with prescriptions for epinephrine, such as EpiPen, are considered to have a severe (anaphylactic) allergy.

You will need information from multiple sources and you will be asked to describe some procedures. The e-mail invitation lists the types of information and procedures you will need.

You may quit and return to the information request later….

1. At the end of the past school year, how many students in your district had the following health conditions?
If a student had more than one condition, count that student on each applicable line.
If there were none for a condition, enter 0.

	Total Students	District Count
Type 1 diabetes	1,640	168
Type 2 diabetes	368	168
Asthma	31,082	168
Severe (anaphylactic) allergy	4,510	168
Epilepsy	2,470	168

Note: Number of respondents: 168. *The questionnaire had a footnote for allergy everywhere it was mentioned. The footnote was: "*Only students with prescriptions for epinephrine, such as EpiPen, are considered to have a severe (anaphylactic) allergy." This appendix omits the asterisk and footnote from this point forward.

2. At the end of the past school year, how many students with the following health conditions had a 504 Plan primarily because of that health condition?
If a student had a 504 Plan covering more than one condition, count that student on each applicable line.
If there were none for a condition, enter 0.

	Total Students	District Count
Type 1 diabetes	427	168
Type 2 diabetes	29	168
Asthma	376	168
Severe (anaphylactic) allergy	358	168
Epilepsy	143	168

Note: Number of respondents: 168.

3. At the end of the past school year, how many students with the following health conditions had an Individual Education Program (IEP) primarily because of that health condition?
If a student had an IEP covering more than one condition, count that student on each applicable line.
If there were none for a condition, enter 0.

	Total Students	District Count
Type 1 diabetes	94	168
Type 2 diabetes	18	168
Asthma	163	168
Severe (anaphylactic) allergy	84	168
Epilepsy	341	168

Note: Number of respondents: 168.

4. At the end of the past school year, how many students with one of the following health conditions were in the home/hospital instruction program primarily because of that condition?
If a student had more than one condition, count that student on each applicable line.
If there were none for a condition, enter 0.

	Total Students	District Count
Type 1 diabetes	26	168
Type 2 diabetes	1	168
Asthma	35	168
Severe (anaphylactic) allergy	5	168
Epilepsy	37	168

Note: Number of respondents: 168.

5. Students sometimes have health conditions that are not readily apparent. What methods has your district used to try to learn about health conditions of students?

	Yes		No		District
	Percent	Count	Percent	Count	Count
Asked for health information from all families	100%	168	0%	0	168
Asked for updates from families of students with previously known health conditions	96	162	4	6	168
Relied on families to inform the district when health conditions changed	98	164	2	4	168
Used other means (describe below)	42	70	58	98	168

Note: Number of respondents: 168.

6. During the past school year, how many times did a school discover that a student had one of the following conditions by noticing distress or other symptoms?
If there were none for a condition, enter 0.

	Response Total	District Count
Type 1 diabetes	26	168
Type 2 diabetes	13	168
Asthma	322	168
Severe (anaphylactic) allergy	31	168
Epilepsy	50	168

Note: Number of respondents: 168.

7. Of the cases counted in the previous question, how many were new diagnoses, unknown even to the family?
If there were none for a condition, enter 0.

	Response Total	District Count
Type 1 diabetes	17	168
Type 2 diabetes	10	168
Asthma	135	168
Severe (anaphylactic) allergy	16	168
Epilepsy	36	168

Note: Number of respondents: 168.

Services for General Education Students

These [questions 8-10] are hypothetical questions about general education students (those without a 504 Plan or IEP). In each question, answer as if a new student enrolled in the past year with one of these conditions:

- Diabetes
- Asthma
- Severe (anaphylactic) allergy
- Epilepsy

8. As of the end of the past school year, indicate whether your district would have provided health services in the schools for each health condition without a 504 Plan or IEP.

	Yes		No		District
	Percent	Count	Percent	Count	Count
Diabetes	96%	162	4%	6	168
Asthma	98	165	2	3	168
Severe (anaphylactic) allergy	96	161	4	7	168
Epilepsy	96	162	4	6	168

Note: Number of respondents: 168.

9. Would the family, Medicaid, or other insurance have been expected to pay for services to general education students for these conditions?

	Yes		No		Services Would Not Be Provided		Response
	Percent	Count	Percent	Count	Percent	Count	Count
Payments to school, health department, or other provider	98%	165	2%	3	0%	0	168

Note: Number of respondents: 168.

10. Which of these would your district have used to provide information to school staff and school health service providers about the needs of general education students with these conditions?

	Yes		No		Services Would Not Be Provided		Response
	Percent	Count	Percent	Count	Percent	Count	Count
Doctor's orders on file	97%	163	3%	5	0%	0	168
Information in Infinite Campus	95	160	4	7	1	1	168
Emergency Action Plan	88	147	13	21	0	0	168
Individualized Health Care Plan	84	141	15	25	1	2	168
Other (describe below)	40	67	57	96	3	5	168

Note: Number of respondents: 168.

Questions 11-38 ask for the total number of times certain health service tasks were performed during the school day in the past school year and how the load was shared by different types of providers.

Although it is impossible to give exact numbers, please give your best estimate for each task. Count and Share of Tasks:

Provide an estimate of how many times this task was performed during the school day for students in the district's schools in the past school year.

Include tasks performed by licensed health professionals and by parents or guardians or persons they designated.* [*Do not count tasks performed by the students themselves.]

Please also estimate how these types of provider shared the work on this task.

11. Counting carbohydrates and calculating insulin dose (Enter 0 if there were none.)

12. Of the number listed above, what percentage was performed by each type of provider? The percentages must add to 100. If the number above is 0, skip this question.

Task	Times Performed	LHP Percent	UAP Percent	Parent Percent	District Count
11. Counting carbohydrates and calculating insulin dose	218,740	83%	NA	17%	168
13. Insulin administration via injection or pump	174,669	84	NA	16	168
15. Glucose monitoring	378,791	68	24	8	168
17. Glucagon administration	2,218	63	26	11	168
19. Low glucose intervention (May include providing glucose pills or candy or juice. Do not count glucagon administration here.)	94,511	70	25	5	168
21. High glucose intervention (May include providing water, allowing access to rest room, excusing from physical activity, or checking ketones.)	86,371	69	27	4	168
23. Asthma inhaler administration	513,863	62	30	9	168
25. Nebulizer administration	41,668	70	25	5	168
27. Peak flow meter measurement	5,097	75	24	<1	168
29. EpiPen or other epinephrine administration	1,444	72	23	5	168
31. Seizure management or charting	31,033	64	33	3	168
33. Diastat (rectal diazepam) administration	416	60	38	2	168
35. Vagus nerve stimulation (magnet) administration	980	36	55	9	168
37. Versed (nasal midazolam) administration	8	98	2	0	168

Note: Number of respondents: 168. LHP=licensed health professional; UAP=unlicensed assistive personnel. LHP, UAP, and parent percentages are raw averages of percentages reported by the districts. For analysis in the report, weighted averages were used in order to reflect the relative workloads more accurately. "Counting carbohydrates and calculating insulin dose" and "Insulin administration via injection or pump" may not be delegated to UAP, so the questionnaire did not permit a share to be entered for UAP.

[Note: Questions 11-38 appeared two on a page as shown above for Questions 11 and 12. The table was constructed from those pages using the wording for each task. Questions 13-38 are not reproduced here.]

Questions 39-47 ask about where and when your district would have provided health services and accommodations during the past school year.

These are hypothetical questions. Each question describes a student with certain health service needs for a specific health condition. Please answer based on how your district's policies and procedures would have applied to that situation.

These questions refer to health services or accommodations arranged by the district, using either district staff or staff of the health department or other agency.

Do not consider any health service tasks performed by parents or guardians or persons they designated or by students themselves.

39. Assume a student with type 1 diabetes needed insulin injections and assistance with blood glucose monitoring. Indicate whether the district would have provided health services and accommodations during the school day.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Districts	
	Percent	Count
Would have been provided at any school in the district	96%	162
Would have required the student to attend a designated school	1	2
District would not have provided services and accommodations	2	4

Note: Number of respondents: 168.

40. Assume a student with type 1 diabetes needed insulin injections and assistance with blood glucose monitoring. Indicate whether health services and accommodations would have been available in each setting listed.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Available in All Cases		Available in Some Cases		Not Available		District
	Percent	Count	Percent	Count	Percent	Count	Count
At before- or after-school activities	31%	52	48%	81	21%	35	168
On buses to or from school	38	64	22	37	40	67	168
On daytime field trips	66	111	25	42	9	15	168
On overnight field trips	40	68	32	53	28	47	168
At other school-sponsored events	27	46	50	84	23	38	168
At summer school programs	36	60	34	57	30	51	168

Note: Number of respondents: 168.

41. Assume a student with asthma needed assistance with an inhaler at scheduled and at unpredictable times. Indicate whether the district would have provided health services and accommodations during the school day.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Districts	
	Percent	Count
Would have been provided at any school in the district	98%	165
Would have required the student to attend a designated school	1	1
District would not have provided services and accommodations	1	2

Note: Number of respondents: 168.

42. Assume a student with asthma needed assistance with an inhaler at scheduled and at unpredictable times. Indicate whether health services and accommodations would have been available in each setting listed.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Available in All Cases		Available in Some Cases		Not Available		District
	Percent	Count	Percent	Count	Percent	Count	Count
At before- or after-school activities	51%	85	38%	64	11%	19	168
On buses to or from school	51	85	31	52	18	31	168
On daytime field trips	76	127	20	34	4	7	168
On overnight field trips	59	99	26	43	15	26	168
At other school-sponsored events	43	73	45	76	11	19	168
At summer school programs	49	83	31	52	20	33	168

Note: Number of respondents: 168.

43. Assume a student with severe (anaphylactic) peanut allergy needed assistance with an EpiPen. Indicate whether the district would have provided health services and accommodations during the school day.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Districts	
	Percent	Count
Would have been provided at any school in the district	98%	165
Would have required the student to attend a designated school	1	2
District would not have provided services and accommodations	1	1

Note: Number of respondents: 168.

44. Assume a student with severe (anaphylactic) peanut allergy attended a school in your district. Indicate the accommodations that would have been provided during the school day.
Check all that apply.

	Districts	
	Percent	Count
Nut-free table in cafeteria	59%	99
Separate table or location for other students to eat food containing nuts	48	80
Nut-free food choices available on cafeteria menu	85	143
Food service staff made aware of students with severe nut allergy	97	163
Other parents made aware of students with severe nut allergy	69	116
Nut-free classroom	61	103
Nut-free school	26	43
Other (describe)	7	12

Note: Number of respondents: 168. Percentages add to more than 100 and counts to more than the number of respondents because respondents could select more than one option.

45. Assume a student with severe (anaphylactic) peanut allergy needed assistance with an EpiPen. Indicate whether health services and accommodations would have been available in each setting listed.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Available in All Cases		Available in Some Cases		Not Available		District
	Percent	Count	Percent	Count	Percent	Count	Count
At before- or after-school activities	60%	100	29%	49	11%	19	168
On buses to or from school	57	96	26	43	17	29	168
On daytime field trips	80	134	17	29	3	5	168
On overnight field trips	63	106	25	42	12	20	168
At other school-sponsored events	46	78	42	71	11	19	168
At summer school programs	55	92	29	49	16	27	168

Note: Number of respondents: 168.

46. Assume a student with epilepsy had a prescription for Diastat (rectal diazepam), might stand up and wander during a complex partial seizure, and might have convulsive seizures. Indicate whether the district would have provided health services and accommodations.
Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Districts	
	Percent	Count
Would have been provided at any school in the district	98%	165
Would have required the student to attend a designated school	1	1
District would not have provided services and accommodations	1	2

Note: Number of respondents: 168.

47. Assume a student with epilepsy had a prescription for Diastat (rectal diazepam), might stand up and wander during a complex partial seizure, and might have convulsive seizures. Indicate whether health services and accommodations would have been available in each setting listed. Do not consider health service tasks performed by parents or guardians or persons they designated or by the student.

	Available in All Cases		Available in Some Cases		Not Available		District
	Percent	Count	Percent	Count	Percent	Count	Count
At before- or after-school activities	49%	83	38%	63	13%	22	168
On buses to or from school	55	93	24	41	20	34	168
On daytime field trips	76	127	18	30	7	11	168
On overnight field trips	54	90	30	50	17	28	168
At other school-sponsored events	39	66	43	73	17	29	168
At summer school programs	46	78	33	55	21	35	168

Note: Number of respondents: 168.

This page [questions 48-50] asks what health service tasks your district allowed parents and guardians, relatives approved by them, or other persons designated by them to perform during the past school year.

These are hypothetical questions. Please answer based on how your district's policies and procedures would have applied to that situation.

Assume that each person passed background checks and met any other general requirements for adults to volunteer in the schools and in the other settings listed.

48. Indicate whether your district would have permitted parents and guardians to perform health service tasks related to diabetes, asthma, severe (anaphylactic) allergy,* or epilepsy, in each setting in the past school year.

	All Tasks		Some Tasks		No Tasks		District
	Percent	Count	Percent	Count	Percent	Count	Count
At school during the school day	76%	128	17%	29	7%	11	168
At before- or after-school activities	81	136	14	23	5	9	168
On buses to or from school	61	102	14	24	25	42	168
On daytime field trips	76	128	19	32	5	8	168
On overnight field trips	77	130	17	29	5	9	168
At other school-sponsored events	78	131	17	28	5	9	168
At summer school programs	75	126	15	25	10	17	168

Note: Number of respondents: 168.

49. Indicate whether your district would have permitted relatives or other designated persons to perform health service tasks for students in the settings listed above during the past school year.

	Same as Parents		Additional Limitations		Not Allowed To Perform Any Tasks		District
	Percent	Count	Percent	Count	Percent	Count	Count
Relatives approved by parents/guardians	59%	99	32%	53	10%	16	168
Other persons designated by parents/guardians	48	81	36	61	15	26	168

Note: Number of respondents: 168.

50. (Optional) Provide additional information about the role of parents and guardians, relatives, and other designees if you wish.

The following [questions 51-53] are some medications or other interventions that students with diabetes or epilepsy may need. Districts might or might not choose to allow students to have the interventions with them in the classroom and elsewhere. Districts also might or might not choose to allow students to self-administer some of these interventions.

These are hypothetical questions. Please answer based on how your district's policies and procedures would have applied to that situation during the past school year.

51. For each of the following, indicate whether or not students in the district's schools would have been allowed to have it nearby during the past school year.

	Yes		No		District
	Percent	Count	Percent	Count	Count
Blood glucose monitoring kit	94%	158	6%	10	168
Insulin	86	144	14	24	168
Ketone test kit	87	146	13	22	168
Glucose source (pills, candy, or juice)	97	163	3	5	168
Diastat (rectal diazepam)	78	131	22	37	168
Vagus nerve stimulator magnet	70	117	30	51	168
Versed (nasal midazolam)	56	94	44	74	168

Note: Number of respondents: 168.

52. For each of the following, indicate whether or not students in the district's schools would have been allowed to administer it themselves during the past school year.
Assume the student's parent/guardian and physician also agreed to allow self-administration.

	Yes		No		District
	Percent	Count	Percent	Count	Count
Blood glucose monitoring kit	98%	164	2%	4	168
Insulin	95	159	5	9	168
Ketone test kit	90	151	10	17	168
Glucose source (pills, candy, or juice)	95	160	5	8	168
Vagus nerve stimulator magnet	52	88	48	80	168

Note: Number of respondents: 168. The question also asked about nasal midazolam, but this item was not analyzed because it is an emergency medication and self-administration is not meaningful.

53. (Optional) Further describe students' access to the above items if you wish.

54. Please describe your district's procedure for storing and providing access to student medications.

55. Please describe your district's procedure for health services and medication administration during a disaster situation.

Please ensure that your description addresses both evacuations and lockdowns and both of the following:

- Medication and health plan documents normally kept in the office
- Medication normally kept with the student

56. Please describe your district's procedure for carbohydrate counting, insulin dose calculation, and insulin administration.

57. Please describe your district's procedure for administration of glucagon.

58. Please describe your district's procedure for administration of asthma inhalers, including self-administration by students.

59. Please describe your district's procedure for preventing allergen exposure for students with severe (anaphylactic) allergy.*

60. Please describe your district's procedure for administration of EpiPens or similar prescribed epinephrine, including self-administration by students.

61. Please describe your district's procedure for administration of Diastat (diazepam rectal gel).

62. Changes that represent increased challenges in providing school health services.
If there were none, enter "None."

63. Changes that represent an improvement in providing school health services.
If there were none, enter "None."

64. Other significant changes.
If there were none, enter "None."

65. (Optional) Provide clarifications or comments on any of the questions in this information request.

66. Is the information request complete and ready to submit?

67. Please provide a contact name in case there are questions about your district's responses.

Appendix H

Survey of School Personnel

Program Review staff conducted a survey of school personnel other than nurses and transportation staff. The e-mail invitation asked personnel to respond only if they worked directly with students in the past school year (2008-2009). The instructions and questions from the survey are reproduced below along with responses.

Percentages may not add to 100 in some tables because of rounding. Other reasons are listed in table notes.

Survey and Responses

Anonymous Legislative Survey About
School Health Care for Students
With Diabetes, Asthma, Severe Allergy, and Epilepsy

The Program Review and Investigations Committee of the Kentucky General Assembly requested its staff to report on the health services provided by schools to students with these chronic health conditions.

Your information will help Kentucky legislators understand the issues affecting school health care for students with these chronic conditions. This is an anonymous survey asking for your personal observations and opinions. No identifying information will be collected. You will be asked which region of the state your school was in and the level of school (elementary, middle, high).

The statistics from this survey will be used in a staff report to the committee and may result in recommendations for ways to improve school health care.

1. Were you working in a public school in Kentucky in the past school year?

	Response Percent	Response Count
Yes, the same school as now	94.7%	10,647
Yes, a different school or more than one school	5.3	600
No	—	—

Note: Number responding 11,247. Respondents answering "No" were screened out.

When a question refers to the past school year, please answer based on the school where you worked at that time.

If you worked in multiple schools, combine your experience at all the schools.

In this survey, the following definitions are used. If you want to review them at any time, you may click on the link at the bottom of each page.

Diabetes. There are two major types of diabetes. For this survey, we are interested only in "type 1," also known as "insulin-dependent" diabetes. Students with this form of diabetes may have problems with high or low blood sugar (glucose). Both high and low blood sugar can be dangerous. To keep their sugar down, these students require injections of insulin or have an insulin pump. They have to check their sugar level from time to time and count the carbohydrates in their meals. Sometimes, if their blood sugar is too low, they might require an injection of glucagon to bring it up.

Asthma. Asthma is a condition that affects breathing and can result in dangerous "asthma attacks." Students with asthma usually have an inhaler with medication to treat asthma attacks. Some students need to use their inhaler at certain times, particularly before exercise. Others may need it only when an attack is starting.

Severe (anaphylactic) allergy. This is a potentially life-threatening allergy. It is different from normal allergies. The most common severe allergies are to peanuts, bee stings, and antibiotics. Students with these allergies need to avoid contact with the substance that causes the reaction. The treatment for a reaction is an injection of epinephrine, usually using a device called an EpiPen. Consider only students who have EpiPens or similar devices when answering questions about severe allergy.

Epilepsy. "Epilepsy" is a general term for having repeated seizures without another medical cause. Students with seizures take medications to reduce the number and severity. Most people think of a seizure as convulsions, but there are many other kinds of seizures. During a seizure, some part of the brain is having a surge of electrical activity. A seizure that lasts more than a few minutes can be dangerous. The most common treatment to stop a seizure is Diastat, a gel that has to be inserted into the rectum.

2. To the best of your knowledge, which conditions did any of the students in your school have in the past school year?
Check all that apply.

	Response Percent	Response Count
Diabetes	66%	7,390
Asthma	86	9,679
Severe allergy (needing an EpiPen)	64	7,164
Epilepsy	32	3,647

Note: Number responding 11,247. Response counts add to more than this number and percentages add to more than 100 because respondents could select more than one condition.

[Respondents who selected none of the conditions did not see questions 3-7. The response count for these questions is the same as the number who chose "Yes, the same school as now" in question 1, but that is coincidental.]

3. In the past school year, if you needed information about the health needs of a student with one of these conditions, indicate how you would rate the information, on average.
If you asked for and did not get information you needed, consider that "Poor."

	Very Good		Good		Fair		Poor		Did Not Need Information		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Information from the parent	28%	2,975	36%	3,781	17%	1,799	6%	647	14%	1,445	10,647
Information from the school nurse	54	4,208	27	2,049	7	542	3	207	9	726	7,732
Information from other school staff	25	2,665	37	3,903	16	1,683	5	553	17	1,843	10,647

Note: Number responding 10,647. Rating of school nurses was limited to responses indicating there was a school nurse full or part time.

4. In the past school year, if you knew about the care provided for a student with one of these conditions, indicate how you would rate the care on average.

	Very Good		Good		Fair		Poor		Did Not Know About Care		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Care provided by the parent	30%	3,154	35%	3,679	11%	1,137	3%	304	22%	2,373	10,647
Care provided by the school nurse	56	4,373	26	2,039	4	320	1	75	12	925	7,732
Care provided by other school staff	38	4,083	35	3,758	7	702	1	117	19	1,987	10,647
Self-care performed by the student	20	2,119	38	4,022	16	1,653	4	386	23	2,467	10,647

Note: Number responding 10,647. Rating of school nurses was limited to responses indicating there was a school nurse full or part time.

5. To the best of your knowledge, indicate how often in the past school year a student at your school with diabetes, asthma, severe allergy (needing an EpiPen), or epilepsy was unable to do the following because no one was there who could provide health services:
Select "Never" if you were not aware of any occurrences.

	Often		Sometimes		Never		Service or Activity Not Offered		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Attend school	4%	450	18%	1,905	76%	8,117	2%	175	10,647
Ride the bus to and from school	3	366	10	1,101	83	8,815	3	365	10,647
Go on daytime field trips	3	348	10	1,112	83	8,878	3	309	10,647
Attend before- or after-school programs and activities	3	311	11	1,133	81	8,659	5	544	10,647
Participate in athletics	3	328	18	1,937	70	7,488	8	894	10,647
Go on overnight field trips	2	168	7	737	57	6,059	35	3,683	10,647
Attend other school-sponsored events	2	263	10	1,078	81	8,648	6	658	10,647
Attend summer school	1	135	5	518	65	6,937	29	3,057	10,647

Note: Number responding 10,647.

6. To the best of your knowledge, indicate how often any of the following occurred during the past school year in your school.
Select "Never" if you are not aware of any occurrences.

	Often		Sometimes		Never		No Students Needing		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
A student on the phone with a parent counted carbs, calculated an insulin dose, and administered insulin while a school staff person (not a nurse) observed.	5%	558	12%	1,295	65%	6,883	18%	1,911	10,647
There were times that no nurse or trained staff person was on site to inject glucagon in case it was needed for a student with diabetes.	5	526	11	1,211	68	7,219	16	1,691	10,647
Medications needed by a student were not available because they were locked up and no one on site was able to get to them.	1	65	7	728	87	9,307	5	550	10,647
A substitute teacher was unaware that a student in class had diabetes, asthma, severe allergy (needing an EpiPen), or epilepsy.	8	859	30	3,153	58	6,124	5	511	10,647
A student with an inhaler or EpiPen was prevented from carrying the medication, even though the student was capable and had permission from the parents and doctor.	4	478	8	817	81	8,637	7	715	10,647
A school staff person (not a nurse) counted carbs or administered insulin for a student, without consulting a parent or nurse.	2	250	6	608	77	8,237	15	1,552	10,647
A student with diabetes, asthma, severe allergy (needing an EpiPen), or epilepsy had difficulty at school because the parent failed to provide adequate care at home.	4	380	29	3,057	61	6,547	6	663	10,647
A student with diabetes was sent to the office alone to take care of low or high blood sugar.	4	395	17	1,760	68	7,208	12	1,284	10,647
There were times that no nurse or trained staff person was on site to administer Diastat (rectal gel) in case it was needed for a student with epilepsy.	3	323	7	719	65	6,953	25	2,652	10,647

Note: Number responding 10,647.

7. A parent might ask a school employee to help provide care for a student. In the following, assume that a parent showed the school employee what to do, but the employee was not officially delegated by a nurse or physician.
To the best of your knowledge, indicate whether an employee of your school performed the task solely at the request of a parent during the past school year.
Select "Never" if you were not aware of any occurrences.
Select "N/A" if there were no students needing the health service task.

	Often		Sometimes		Never		No Students Needing		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Counted carbs, calculated an insulin dose, or injected insulin	2%	230	7%	739	76%	8,048	15%	1,630	10,647
Injected glucagon to lower blood sugar*	1	91	4	449	79	8,399	16	1,708	10,647
Performed other tasks for a student with diabetes, such as blood sugar checking	4	397	11	1,136	72	7,640	14	1,474	10,647
Administered an asthma inhaler	4	430	16	1,702	74	7,861	6	656	10,647
Injected an EpiPen	<1	54	6	600	83	8,799	11	1,194	10,647
Managed a student having a seizure	2	184	16	1,694	68	7,196	15	1,573	10,647
Administered Diastat (rectal gel) for a seizure	<1	31	2	225	76	8,084	22	2,307	10,647

Note: Number responding 10,647. *The glucagon item was worded incorrectly; glucagon raises blood glucose.

8. At any time during the past 5 years, up to the present, have you been trained and delegated in writing by a school nurse or physician to perform health service tasks for students with these conditions?
Check all that apply.

	Response Percent	Response Count
Diabetes	14%	1,529
Asthma	14	1,575
Severe allergy (needing an EpiPen)	17	1,857
Epilepsy	11	1,183

Note: Number responding: 11,247.

[Respondents selecting none of the conditions skipped questions 9-11. If a respondent answered positively for a condition in question 8 but answered negatively to question 9 or 10, the answer to question 8 was changed to negative for that condition. If a respondents answered negatively to a condition in question 8 but answered positively in questions 9 or 10, the answers for that condition in questions 9 and 10 were set to missing (as if skipped).]

Questions [9-11] on this page are about delegation to perform health service tasks in the schools.

9. Indicate how recently you were delegated to perform health service tasks for students with the following conditions.

	Current School Year		Past School Year		Prior to Past School Year		Response
	Percent	Count	Percent	Count	Percent	Count	Count
Diabetes	53%	807	20%	305	27%	417	1,529
Asthma	60	943	21	328	19	304	1,575
Severe allergy (needing an EpiPen)	56	1,037	22	414	22	406	1,857
Epilepsy	61	720	17	207	22	256	1,183

Note: Number of respondents corresponds to those counted as positive in question 8. Respondents indicating "Never" here were excluded from question 8, so the option is not shown.

10. How many times have you ever been delegated to perform health service tasks for students with the following conditions.

	Four Times or More		Two to Three Times		Once		Response
	Percent	Count	Percent	Count	Percent	Count	Count
Diabetes	40%	614	30%	456	30%	459	1,529
Asthma	44	692	23	359	33	524	1,575
Severe allergy (needing an EpiPen)	34	634	35	642	31	581	1,857
Epilepsy	36	428	36	429	28	326	1,183

Note: Number of respondents corresponds to those counted as positive in question 8. Respondents indicating "Never" here were excluded from question 8, so the option is not shown.

11. Kentucky law states that the school must have the consent of an employee to perform health service tasks, unless it is part of the employee's job description. In the past 5 years, up to the present:

	Yes		No		N/A (part of job duties)		Response
	Percent	Count	Percent	Count	Percent	Count	Count
Did a school official ever tell you that you must accept delegation?	21%	604	61%	1,733	17%	481	2,818

Note: Respondents indicating they had been delegated for one or more conditions were included.

Please answer the following questions [12-13] whether or not you were trained and delegated to perform any health services tasks.

12. In the past 5 years, how often have you actually performed health service tasks anywhere for anyone with the following conditions?
Count any times you helped yourself or someone at home, in the community, at another job, or at school.

	Often		Sometimes		Rarely		Never		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Diabetes	8%	922	9%	1,028	11%	1,235	72%	8,062	11,247
Asthma	7	778	12	1,400	15	1,684	66	7,385	11,247
Severe allergy (needing an EpiPen)	1	136	3	343	8	877	88	9,891	11,247
Epilepsy (seizures)	2	238	5	538	10	1,159	83	9,312	11,247

Note: Number responding 11,247.

13. Indicate how willing you personally would be to perform the following tasks, assuming you were given training:
For this question, assume that it is legal for a trained staff person to perform all these tasks.
If you already have been delegated for the task, indicate whether you would accept delegation again.

	Yes, I would be willing		Maybe I would do this		No, I would not do this		Response Count
	Percent	Count	Percent	Count	Percent	Count	
Checking blood sugar	47%	5,233	26%	2,932	27%	3,082	11,247
Counting carbs, calculating a dose, and injecting insulin	28	3,162	26	2,937	46	5,148	11,247
Injecting glucagon to raise blood sugar	29	3,237	25	2,829	46	5,181	11,247
Administering an asthma inhaler	57	6,386	26	2,972	17	1,889	11,247
Injecting an EpiPen	48	5,394	27	3,076	25	2,777	11,247
Managing a student having a seizure	44	4,997	33	3,668	23	2,582	11,247
Administering Diastat (rectal gel) to control a seizure	20	2,275	22	2,518	57	6,454	11,247

Note: Number responding 11,247.

14. During the past school year, what level of nurse coverage did your school have?
If the coverage varied, select the best description for your school as of the end of the school year.

	On site at all times		On site at scheduled times		Could come from another school		Available by phone		No nurse available		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Nurse availability	36%	4,094	36%	4,025	7%	773	6%	701	15%	1,654	11,247

Note: Number responding 11,247.

15. Please review the map and indicate the region of the school in which you worked in the past school year.
If you worked in more than one region, select the region in which you worked the most.

	Response Percent	Response Count
Western Kentucky	17%	1,962
North Central	25	2,769
South Central	12	1,363
Northern Kentucky	11	1,223
Bluegrass	17	1,967
Eastern Kentucky	17	1,963

Note: Number responding: 11,247. See Figure 3.A on page 58 for a map of the regions.

16. Which level of students did you work with?
Check all that apply.

	Response Percent	Response Count
Elementary	56%	6,315
Middle	25	2,761
High	27	3,007
Other (please specify)	4	424

Note: Number responding 11,247. Response counts add to more than this number and percentages add to more than 100 because respondents could select more than one grade level.

Appendix I

Survey of School Nurses

Program Review staff conducted a survey of school nurses. The e-mail invitation asked personnel to respond only if they worked directly with students in the past school year (2008-2009). The instructions and questions from the survey are reproduced below along with responses.

Percentages may not add to 100 in some tables because of rounding. Other reasons are listed in table notes.

Survey and Responses

Anonymous Legislative Survey About
School Health Care for Students
With Diabetes, Asthma, Severe Allergy, and Epilepsy

The Program Review and Investigations Committee of the Kentucky General Assembly requested its staff to report on the health services provided by schools to students with these chronic health conditions.

Your information will help Kentucky legislators understand the issues affecting school health care for students with these chronic conditions.

This is an anonymous survey asking for your personal observations and opinions. No identifying information will be collected. You will be asked which region of the state your school was in and the level of school (elementary, middle, high).

The statistics from this survey will be used in a staff report to the committee and may result in recommendations for ways to improve school health care.

1. Were you working as a nurse in a public school in Kentucky in the past school year?

	Response Percent	Response Count
Yes, the same school as now	76%	224
Yes, a different school or more than one school	24	69
No	—	—

Note: Number responding 293. All respondents answering "No" were screened out.

When a question refers to the past school year, please answer based on the school where you worked at that time.

If you worked in multiple schools, combine your experience at all the schools.

2. To the best of your knowledge, which conditions did any of the students in your school have in the past school year?
Check all that apply.

	Response Percent	Response Count
Diabetes	87%	255
Asthma	99	291
Severe allergy (needing an EpiPen)	93	272
Epilepsy	85	249

Note: Number responding 293. Response counts add to more than this number and percentages add to more than 100 because respondents could select more than one condition.

[Question 3, regarding unlicensed assistive personnel, was not accessible to any respondents because of an error in the skip pattern.]

4. In the past school year, if you needed information about the health needs of a student with one of these conditions, indicate how you would rate the information, on average.
If you asked for and did not get information you needed, consider that "Poor."

	Very Good		Good		Fair		Poor		Did Not Need Information		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Information from the parent	19%	56	45%	133	29%	86	6%	17	<1%	1	293
Information from the student's physician	15	45	43	125	32	95	8	24	1	4	293
Information from other school staff	20	60	51	148	19	55	5	15	5	15	293

Note: Number responding 293.

5. In the past school year, if you knew about the care provided for a student with one of these conditions, indicate how you would rate the care on average.

	Very Good		Good		Fair		Poor		Did Not Need Information		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Care provided by the parent	16%	46	56%	165	24%	69	2%	6	2%	7	293
Care provided by unlicensed assistive personnel	18	53	53	154	14	41	1	2	15	43	293
Self-care performed by the student	9	25	48	141	32	95	4	12	7	20	293

Note: Number responding 293.

6. To the best of your knowledge, indicate how often in the past school year a student at your school with diabetes, asthma, severe allergy (needing an EpiPen), or epilepsy was unable to do the following because no one was there who could provide health services:
Select "Never" if you were not aware of any occurrences.

	Often		Sometimes		Never		Service or Activity Not Offered		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Attend school	2%	5	8%	24	89%	262	1%	2	293
Ride the bus to and from school	3	8	11	32	85	250	1	3	293
Go on daytime field trips	3	9	13	38	83	244	1	2	293
Attend before- or after-school programs and activities	3	8	13	38	80	234	4	13	293
Participate in athletics	1	3	13	39	80	234	6	17	293
Go on overnight field trips	1	4	13	38	58	169	28	82	293
Attend other school-sponsored events	1	4	11	32	82	241	5	16	293
Attend summer school	2	5	4	13	66	194	28	81	293

Note: Number responding 293.

7. To the best of your knowledge, indicate how often any of the following occurred during the past school year in your school.
Select "Never" if you are not aware of any occurrences.

	Often		Sometimes		Never		No Students Needing This		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
A student on the phone with a parent counted carbs, calculated an insulin dose, and administered insulin while an unlicensed assistive person observed.	8%	22	20%	60	56%	164	16%	47	293
There were times that no nurse or unlicensed assistive person was on site to inject glucagon in case it was needed for a student with diabetes.	2	7	6	19	76	224	15	43	293
Medications needed by a student were not available because they were locked up and no one on site was able to get to them.	1	2	5	15	93	272	1	4	293
A substitute teacher was unaware that a student in class had diabetes, asthma, severe allergy (needing an EpiPen), or epilepsy.	6	17	44	129	49	145	1	2	293
A student with an inhaler or EpiPen was prevented from carrying the medication, even though the student was capable and had permission from the parents and doctor.	0	0	3	8	95	278	2	7	293
An unlicensed assistive person counted carbs or administered insulin for a student, without consulting a parent or nurse.	1	4	4	12	82	239	13	38	293
A student with diabetes, asthma, severe allergy (needing an EpiPen), or epilepsy had difficulty at school because the parent failed to provide adequate care at home.	12	34	59	173	29	85	<1	1	293
A student with diabetes was sent to the office alone to take care of low or high blood sugar.	7	21	37	107	44	130	12	35	293
There were times that no nurse or unlicensed assistive person was on site to administer Diastat (rectal gel) in case it was needed for a student with epilepsy.	2	6	5	15	78	228	15	44	293

Note: Number responding 293.

8. A parent might ask a school employee to help provide care for a student. In the following, assume that a parent showed the school employee what to do, but the employee was not officially delegated by a nurse or physician.
To the best of your knowledge, indicate whether an employee of your school performed the task solely at the request of a parent during the past school year.
Select "Never" if you were not aware of any occurrences.

	Often		Sometimes		Never		No Students Needing This		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Counted carbs, calculated an insulin dose, or injected insulin	1%	3	3%	8	84%	245	13%	37	293
Injected glucagon to lower blood sugar*	0	0	<1	1	87	254	13	38	293
Performed other tasks for a student with diabetes, such as blood sugar checking	3	9	8	22	77	227	12	35	293
Administered an asthma inhaler	3	9	15	43	81	238	1	3	293
Injected an EpiPen	0	0	1	3	96	282	3	8	293
Managed a student having a seizure	2	6	9	25	86	251	4	11	293
Administered Diastat (rectal gel) for a seizure	<1	1	1	2	88	257	11	33	293

Note: Number responding 293.
*The glucagon item was worded incorrectly. Glucagon raises blood glucose.

9. Indicate how recently you trained and delegated unlicensed staff to perform health service tasks for students with the following conditions.

	Current School Year		Past School Year		Prior to Past School Year		Never		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Diabetes	64%	188	9%	27	3%	9	24%	69	293
Asthma	71	209	8	22	1	3	20	59	293
Severe allergy (needing an EpiPen)	72	212	6	18	3	8	19	55	293
Epilepsy	66	194	8	23	2	5	24	71	293

Note: Number responding 293.

10. In your professional judgment, indicate whether there are conditions under which it would be acceptable to train and delegate unlicensed assistive personnel to perform the following tasks. According to current Kentucky statutes and Board of Nursing opinions, some of these tasks must be delegated when a nurse is not available, others are optional, and others may not be delegated. Please provide your own assessment, regardless of the statutes and board opinions.

	Acceptable in Some or All Cases		Not Acceptable		Response
	Percent	Count	Percent	Count	Count
Checking blood sugar	90%	264	10%	29	293
Assisting a student with high or low blood sugar	84	245	16	48	293
Counting carbs, calculating a dose, and injecting insulin	13	37	87	256	293
Injecting glucagon to raise blood sugar	68	198	32	95	293
Administering an asthma inhaler	96	280	4	13	293
Injecting an EpiPen	89	260	11	33	293
Managing a student having a seizure	86	252	14	41	293
Administering Diastat (rectal gel) to control a seizure	71	207	29	86	293

Note: Number responding 293.

11. How important are the following factors in making a decision whether to delegate tasks to UAPs?

	Very Important		Somewhat Important		Not Important		Response
	Percent	Count	Percent	Count	Percent	Count	Count
The student's health condition is stable	85%	248	14%	42	1%	3	293
The student's health plan and emergency plan are clear and detailed	94	276	5	16	<1	1	293
The parent has requested a UAP	50	147	32	95	17	51	293
The student's physician has requested a UAP	58	171	29	86	12	36	293
The UAP performs the task for one student only	42	122	37	108	22	63	293
The UAP performs the task often enough to retain skills	78	228	19	57	3	8	293
The UAP performs such tasks full-time	52	151	35	104	13	38	293
The UAP has additional training, such as a Certified Medical Assistant	43	127	36	105	21	61	293

Note: Number responding 293.

12. In your opinion, if unlicensed assistive personnel are available, what level of nurse coverage is necessary for a student with the following conditions?

	On Site at All Times		On Site at Scheduled Times		Can Come From Another Site		Available by Phone		No Nurse Needed		Response Count
	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	
Diabetes	66%	194	22%	63	8%	24	4%	11	<1%	1	293
Asthma	54	157	18	52	16	48	11	31	2	5	293
Severe allergy (needing an EpiPen)	58	170	16	48	16	47	8	22	2	6	293
Epilepsy	57	168	15	44	19	55	7	20	2	6	293

Note: Number responding 293.

13. During the past school year, what kind of health coverage were you responsible for? Select the closest description to your role and responsibilities.

	Response Percent	Response Count
One school full time	51%	149
One school part time	1	4
More than one school with scheduled hours at each	18	52
More than one school with scheduled hours at some and on call at others	15	45
No scheduled hours at school but on call or available by phone	2	7
District position with no direct care responsibility	—	—
Other (please describe)	12	36

Note: Number responding: 293. Nurses indicating district position were screened out. There were five such responses.

14. In the past school year, were backup supplies of emergency medications that were not prescribed for a specific student available at school, and were they used?

	Had and Used		Had but Did Not Use		Did Not Have		Response Count
	Percent	Count	Percent	Count	Percent	Count	
Glucagon	1%	4	26%	75	73%	214	293
Albuterol	25	73	7	21	68	199	293
EpiPen	1	4	38	110	61	179	293
Diastat	1	4	16	47	83	242	293

Note: Number responding 293.

15. Location of school in past school year

Please review the map and indicate the region of the school in which you worked in the past school year. If you worked in more than one region, select the region in which you worked the most.

	Response Percent	Response Count
Western Kentucky	19%	57
North Central	11	33
South Central	19	57
Northern Kentucky	12	36
Bluegrass	16	48
Eastern Kentucky	21	62

Note: Number responding 293. See Figure 3.A on page 58 for a map of the regions.

16. Which level of students did you work with?

Check all that apply.

	Response Percent	Response Count
Elementary	73%	213
Middle	49	143
High	40	117
Other (please specify)	17	51

Note: Number responding 293. Response counts add to more than 293 and percentages add to more than 100 because respondents could select more than one grade level.

Appendix J

Response From the Kentucky Department of Education

Notes from Program Review staff are in brackets [ ].

Recommendation 2.1
In consultation with appropriate experts and federal authorities, the Kentucky Department of Education and Department for Public Health should design a model relationship between school districts and local health departments that will permit the legitimate sharing of health information and educational records under federal education and health privacy laws, and they should ensure that school districts and local health departments establish relationships that conform to that model.

KDE Response:

- Clarification to the sharing of health information between school districts and contracted local health departments could be spelled out in the contract to provide health services.

Recommendation 3.2
The Kentucky Department of Education should require all school district agreements with outside health service providers to be in writing and to be submitted to the department. The department should require all districts to submit regularly updated descriptions of their health services policies; procedures; and models of care, including the types, numbers, and supervisors of all licensed and unlicensed personnel. The agreements and descriptions should be sufficient to determine whether districts meet their obligations to provide health services under state and federal laws. The department should provide guidance to districts on their obligations and monitor their compliance.

KDE Response:

- KDE agrees that KDE should educate school districts on writing contracting agreements for the provision of school health services. Monitoring these contracts for 174 districts would require additional staff and resources.
- KRS 156.502 does state the minimum requirements and defines school health services in (1) (a) as the provision of direct health care, including the administration of medication, the operation, maintenance or health care through the use of medical equipment; or the administration of clinical procedures. Most of these issues are currently addressed and elaborated in the KDE Health Services Reference Guide: http://www.education.ky.gov/KDE/Administrative+Resources/Coordinated+School+Health/Health+Services/HSRG+Table+of+Contents.htm.
- KDE is considering the amendment of 704 KAR 4:020, School health services, such that the school health services guidelines provided by KDE be utilized by all school districts in developing their district models of school health services. Incorporation of the guide and its future revisions into regulation would directly address many of the issues raised by the Program Review report.
- For KDE to directly monitor all school district health services models would require additional KDE staff and resources.

Recommendation 3.3
The Kentucky Board of Education and Department of Education should take the lead to ensure compliance with current and future statutes and regulations. They and the Kentucky Department for Public Health, Board of Nursing, and Board of Medical Licensure, in consultation with other stakeholders, should collectively review the issues identified in the Program Review and Investigations Committee report. Using their respective authorities, they should develop comprehensive school health regulations, advisory opinions, and advice for school districts, health departments, nurses, and physicians. These should be mutually consistent, should address statutory ambiguities, and should establish minimum requirements for school health services, with flexibility for justifiable variations among districts. If statutory changes would be helpful, the agencies should propose such changes to the General Assembly.

KDE Response:

- Since the Program Review Committee meeting in December of 2009, the Kentucky Department of Education, the Kentucky Board of Nursing and the Kentucky Department for Public Health have formed an advisory committee for the purposes of developing a strategic plan. Other state agencies and interested stakeholders will be invited later to discuss additional topics of interest.

[The following recommendation was removed in the draft that was approved by the Program Review and Investigations Committee.]

Recommendation 4.1
The General Assembly may wish to consider whether to require private insurers to cover school health services provided by registered nurses and licensed practical nurses. It may also wish to consider ways to permit school health providers to receive reimbursement without requiring families to pay out of pocket, so that the providers may bill for services to students with disabilities.

KDE Response:

- This recommendation would require a huge change in the current practice of health insurance companies throughout the state. However, an asthma study in Minnesota showed school nurses were able to reduce the number of emergency room visits for students previously known to have poorly controlled asthma. Increasing the number of school nurses to assist the students with chronic health conditions might reduce cost of emergency room visits now paid by the insurance companies.

[The following recommendation was reworded and renumbered as 4.1 in the draft that was approved by the Program Review and Investigations Committee. The final wording is included in brackets below the version to which KDE responded.]

Recommendation 4.2
The Department for Medicaid Services and University Health Care, Inc. should establish an equitable method to reimburse health departments for school health services in the Passport region. If they are unable to reach an agreement, the General Assembly may wish to consider whether to require such reimbursement.

[As worded in the approved report:
The Department for Medicaid Services, Department for Public Health, local health departments, and University Health Care, Inc., should continue to seek an equitable method to cover school health services for students enrolled in Medicaid in the Passport region. If they are unable to reach an agreement, the General Assembly may wish to consider whether it can establish a solution within or outside the Medicaid managed care waiver.]

KDE Response:

- The issue of reimbursement concerns school health services statewide as well. Currently there are health services provided by the local health department that may be billed to Medicaid but may not be billed when the same health service is performed by the local district school nurse. The Kentucky Medicaid laws should be revised so that regardless of who administers the health service, the health service may be billed to Medicaid. For example, South Carolina has revised their Medicaid billing practices to allow for all school district nurses to be able to bill for the same services that are currently only billable in Kentucky by local health department nurses. Allowing the local school district nurse to bill Medicaid for the same service that a local health department receives Medicaid reimbursement would provide funding for additional resources for the school district student health services program.

Appendix K

Response From the Department for Public Health

1. The need for school health services continues to grow at an incredible rate. New medical technology has expanded children's life expectance and they are now attending school with numerous medical conditions and needs. These children are Kentucky's future and we must address the complexity of their health care needs in order for them to obtain their education. We at DPH [Department for Public Health] have grown the past several years in developing our School Health Services program and continue in our planning efforts to meet the needs of this continual growth. The recommendations from this report have been a helpful learning tool that will enable us to expand and meet the changing and challenging needs of school health services.

2. Public Health operates health programs for the prevention, detection, care and treatment of diseases. The authority of core activities exists in statutes and regulations. Delivery of preventative services is primarily accomplished through local health departments in all 120 counties across the state. However, LHD's [local health departments] are agencies of local government, and governed by a Board of Health. They have a Medical Director who approves local protocols. Local health departments determine services according to local needs. School Health Services are considered as a local option service after the core services are assured. (Examples of these core services include Public Health surveillance, Communicable Disease Control, Environmental Health, Families and children risk reduction, Disaster Preparedness/Response, Prenatal Care, the WIC [Women, Infants, and Children] Program, and Family Planning).

3. PROTOCOLS
   a. In DPH's Public Health [Practice] Reference (PHPR) contains DPH guidance for preventative and core public health programs and services. Preventive and Health Promotion/Anticipatory Guidance, that follows national standards for pediatric preventative care, covers 21 pages. Screening and physical assessment information is covered in the Physical Assessment Section containing 17 pages. The School Health Services section of the PHPR includes Coordinated School Health, and recommends the KDE [Kentucky Department of Education] and the National Association of School Nurses guidelines/protocols be utilized for health services not included in the PHPR. This promotes consistency across the schools regardless of who hires the school health nurses and avoids duplication. Also, included are a list of resources for model protocols for care in the school setting, guidelines for LHD's developing a satellite clinic in the school setting, and recommendations of issues to be clarified in contracts with local school districts. DPH can make recommendations to the LHD on contracts, but has no authority to require specific language in local LHD contract with the school district.
   b. KDE Health Services Reference Guide for school health services is recommended by DPH and accessible to all school nurses. It is included in the New School Nurse Orientation, recommended in the PHPR, and used for technical assistance to the field.

DPH has aligned the PHPR protocols on preventative services so there is an agreement between the KDE Health Services Reference Guide protocols and the PHPR.

4. DPH has a Quality Assurance model for monitoring their programs, including school health services. The Quality Assurance teams use the PHPR as the standard when doing site visits and clinical reviews. Following an exit interview with the key staff, a written report is prepared by the team and LHD responds with a quality improvement plan to address identified issues in a timely manner. These plans are also given to the lead of the individual programs.

5. Four improvements made resulting with positive outcomes that have occurred with our school health program including:
   a. The pre-requisite training for DPH School Health Nurses. All our school nurses must complete the Well Child/EPSDT (Early, Periodic, Screening, and Diagnostic and Treatment) training program. The training consists of 23 online modules and then attendance of a 3 day didactic and practicum held by the U of L [University of Louisville] Department of Pediatrics. This includes complete Pediatric Assessment training for 0-21 years of age. The course focuses on national standards for well child care, disease prevention, immunizations, anticipatory guidance and health promotion. The nurse must complete 25 required physicals examinations in 5 different age groups with a preceptor before the training is complete. Changes made to our well child/EPSDT training program using the online modules and the 3 day practicum has allowed us to train 174 nurses in a year, compared to 84 nurses the previous year. There is a requirement for the LHD nurse to have a one day update (6 contact hours) in well child every three years to keep their certification. This if offered free to LHD nurses and provide by the UK [University of Kentucky] General Pediatric Department.
   b. Collaboration of the New School Nurse Orientation with KSNA [Kentucky School Nurses Association], DPH, KDE, and KBN [Kentucky Board of Nursing]. School nurses receive this orientation no matter who they are employed by. In July 2008 there were 142 nurses in attendance and in July 2009, 75 nurses attended. Due to financial constraints associated with travel we have had our TRAIN [TrainingFinder Real-time Affiliate Integrated Network] department come in and videoed the two day orientation and these web based modules will be place on TRAIN (including handouts) and accessible to any school nurse. Train is the nation's premier learning resource for professionals who protect the public's health with affiliated state sites. The implementation of this training method will allow accessibility for any school nurse hired and will decrease the travel expenses associated with the training. An annual face to face summer orientation will continued to be offered.
   c. Collaboration with KDE, along with KY Board of Nursing in the development of the medication administration modules for training of unlicensed school personnel. This again will help unify all agencies in the state and safeguard our children who receive their medication during school hours. After the first year of training this training will also be placed on TRAIN for an optional method of training for all schools and local health departments.
   d. Through the DPH contract with U of L Department of Pediatrics we offer an annual one day workshop on related School Health Issues. This offering is open to ALL school

nurses (regardless of their employer), is free to the participant and the nurse receives continuing education credits. Travel is the only cost incurred by the participant. This offering has also been videoed, placed on TRAIN and available for those unable to attend. Updates on topics presented have included asthma, diabetes, allergies, obesity, immunizations, substance abuse, mental health, as well as emergencies including seizures, anaphylaxis and medication reactions/interactions.

In conclusion, States across the country struggle to deal with similar school health issues as Kentucky. We are not alone in our journey for excellence in School Health Services. We at DPH appreciated the information, the time spent and recommendations resulting from the LRC report. We will attempt to utilize this information in analyzing the complexity of school health services.

Appendix L

Response From the Kentucky Board of Nursing

The Kentucky Board of Nursing submitted a response at the June 10, 2010, Program Review and Investigations Committee meeting that expanded on its response at the December 10, 2009, meeting. The June response is reproduced verbatim below. The board also presented a response to specific items at the July 8, 2010, committee meeting; that response also is reproduced below. Following the two statements is a reply from Program Review staff on p. 197.

Statement of June 10, 2010

Thank you for the opportunity to address the committee. My name is Nathan Goldman and I am the General Counsel for the Board of Nursing. With me is Sharon Mercer, the Board's Practice Consultant. As I'm sure you are aware, the Board of Nursing is the state agency charged with the responsibility to regulate nurses and nursing practice for the protection of the public. We were grateful to be included in this study.

The health of Kentucky's school children is a matter of the utmost importance to us all. School children deserve and should receive the highest quality care. That is one reason the Board put together its own task force to study the issue of health care for school children. One outcome of that task force corresponds with the study before you today. The Department of Education added a requirement that unlicensed personnel must complete a Board of Nursing approved training course before administering medications. The Board worked with the Department of Education and the Department for Public Health to develop a course that will be offered this fall. This requirement represents a giant leap forward in the health of our school children.

The Board of Nursing is continuing to study the issue, particularly as it relates to delegation of nursing tasks to unlicensed school staff. As the LRC study points out, there are some serious issues surrounding this matter. Two issues in particular deserve mention: delegation of injectible medication, particularly insulin, and the use of LPNs in schools. The current education statute does not allow an LPN to delegate to unlicensed personnel. This is supported by the nursing statutes. LPNs are not licensed for independent practice, but function under the direction of an RN or physician. As concerns injectibles, the current research does not support their delegation by a nurse. In particular, the process of injecting insulin is a complicated one. In the current draft of the study is a diagram called "Insulin calculation instructions" to illustrate the complexity of this process. The Board will continue to monitor this issue and will work with the Department of Education, the Department for Public Health, and any other interested party to improve the health of our school children.

Thank you.

Statement of July 8, 2010

Thank you for the opportunity to address the committee and answer any questions the members may have. The Kentucky Board of Nursing (KBN) is the state agency charged with the responsibility to regulate nurses and nursing practice for the protection of the public. It is to that end that the Board of Nursing has been very actively involved over the last three (3) years in the review and study of health care for children in the school setting.

In reviewing the School Health Policy Issues for Consideration in Table 2.3 and recommendation 2.2, page 38 and 39 of the LRC report, I would like to comment on a few of them.

- In the fifth issue listed on page 38, "…and should the statute specify how to change delegating providers." I am unsure why this is an issue. If a nurse who has trained and been delegating to an UAP, communicates the training that has occurred and that the UAP has successfully passed the necessary exams to another nurse who will be supervising and delegating to that UAP, then the delegating nurse has changed. This could easily be put into policy, procedure, etc. if the school districts desire it. A change in statute is not necessary

- In the seventh issue listed on page 38 related to replacement of specific treatments with general descriptions. The Board of Nursing Administrative Regulations would still apply to nurses wishing to delegate.

  Any new medical procedures/treatments that nurses are asked to provide must always be viewed with the safety of the person being treated. Outcomes, side effects, adverse reaction, ability of the individual to react appropriately and safely to the adverse reaction, national standards of practice and many other issues would have to be reviewed in deciding if an act was within the nurse's scope of practice. The Board has issued guidelines to assist a nurse in deciding if an act is within their scope of practice. The Board has also issued a decision tree for use by nursing in deciding if an act can be delegated. I will be happy to provide a copy of both of these documents.

KRS 314.011(6)(c) and (9)(c) statutorily places medication administration as a nursing function. Nursing also is given the authority to delegate acts to unlicensed assistive personnel. It is therefore imperative that the Board of Nursing always weigh the delegation of medication against the safety and wellbeing of consumers of healthcare, in this case students in the school setting.

Sharon Eli Mercer, MSN, RN
Nursing Practice Consultant
Kentucky Board of Nursing

Reply From Program Review Staff

Delegation by Licensed Practical Nurses

Nursing laws and regulations permit licensed practical nurses to delegate nursing tasks in other settings. However, the relevant education statute, KRS 156.502, does not. This is the issue that the General Assembly might wish to consider, and staff hope that the board will advise the General Assembly about it.

Change of Delegating Provider

The board pointed out that nursing laws and regulations permit a second nurse to assume responsibility for unlicensed assistive personnel if the original delegating nurse leaves, without training the personnel again. However, the wording of the relevant education statute, KRS 156.502, appears to require the provider who delegates also to train the unlicensed personnel; and it would supersede nursing laws and regulations in the school setting. Whether this is problematic when nurses leave during a school year is open to question; but it could become an issue between school years, when the delegation must be renewed. The wording of the statute is a technicality that the General Assembly might wish to address, and staff hope that the board will advise the General Assembly about it.

Appendix M

Response From the Kentucky School Boards Association

The Kentucky School Boards Association (KSBA) presented a response to the Program Review staff report at the July 8, 2010, committee meeting. Slides from the presentation that address the report are reproduced below. Slides were omitted related to Medicaid reimbursement for services under the Individuals with Disabilities Education Act (IDEA). The Act is mentioned in the report, and most students with diabetes, asthma, severe allergy, or epilepsy do not receive these services. Also omitted were slides that reviewed special education law. Chapter 2 of the report covers the same material.

Following the KSBA response is a reply from Program Review staff on page 206.

Excerpts From the KSBA Response

Policy and Procedures Service

- KSBA has been providing policy and procedures service to local school districts since 1983.
- Policy staff members, all with experience in the field of Kentucky public education, work with board teams in maintaining and updating administrative policies and procedures.
- A policy is a broad statement of direction that sets a course of action and provides guidance for students, employees, community members and the Board itself. State and federal laws often require school districts to adopt written policies.
- Policies are invaluable for setting direction and providing oversight of behalf of the community.
- 173 school districts subscribe to this service.
- Most boards have adopted policy in more than 300 areas, not including IDEA and Section 504 policy and procedures.

Procedures Service

- The Administrative Procedure Services is subscription-based and assists superintendents in producing a comprehensive set of administrative procedures tailored to the district's policies and local needs.
- 141 school districts subscribe to the procedures service.
- Both policies and procedures primarily target education and educational administration areas.

Health Policy

- Local school districts address health policy primarily in the policy areas listed below
  - Student Welfare and Wellness (09.2)
  - Health Care Examinations (09.211)
  - Contagious Diseases and Parasites (09.213)
  - Student Health and Safety (09.22)
  - Emergency Medical Treatment (09.224)
  - Student Medication (09.2241)

Health Policy and Procedure

- **Self-Administration (Policy):** As long as the parent/guardian and physician files a completed authorization form each year as required by law, a student under treatment for asthma shall be permitted to self-administer medication. (KRS 158.834) (90.6 percent participating)
- **Self Administration (Procedure):** Students may be authorized to carry on their person and independently take their own medication provided the parent/guardian has written approval on file with school personnel. Such approval shall assure school personnel that the child has been properly instructed in self-administering the medication. If prescription medication is involved, written authorization of the student's physician/health care provider also is required. (100 percent participating)

Health Policy

- **Self-carrying (Policy):** Under procedures developed by the Superintendent, a student may be permitted to carry medication that has been prescribed or ordered by a physician to stay on or with the pupil due to a pressing medical needs. This is not limited to asthma medication or EpiPens, thus any student with proper documentation may carry need emergency medications (90.6%).

Health Policy

- **Glucagon and Diazepam Rectal Gel (policy):** In accordance with KRS 158.838, the District shall train and have available employees to administer glucagon or diazepam rectal gel to students as required by law (99.4 percent).
- **Glucagon and Diazepam Rectal Gel (procedure):** At least one school employee who is a licensed medical professional, or has been appropriately trained, shall be on duty at each school to administer glucagon or diazepam rectal gel to students with diabetes or seizure disorders (99.2 percent).

Health Policy

- **Training (policy):** In keeping with applicable legal requirements, only licensed medical professionals or school employees who have been appropriately trained and authorized to do so shall provide health services to students. (96.5 percent).
- **Training (procedure):** School personnel authorized to give medications must be trained in accordance with KRS 156.502 and 704 KAR 4:020 (100 percent).

Health Policy

- **Delegation:** Employees to whom health service responsibilities have been delegated must be approved in writing by delegating physician or nurse. The approval form shall state the employee consents to perform the health service when the employee does not have the administration of health services in his/her contract or job description as a job responsibility, possesses sufficient training and skills demonstrated competency to safely and effectively perform the health service responsibilities shall be valid only for the current school year (95 percent) (KRS 156.502).

Health Policy

- **Administration of Medications (procedure):** Medication should be given at home when possible. Medication that must be given at school should brought to school by the parent/guardian whenever possible. Medication that is sent to school with the student should be transported in the original container placed in a sealed envelope and given to designated school personnel immediately upon arrival. Unless otherwise approved to self-medicate, students are to be supervised by an authorized individual when taking medication. The person supervising the administration of medication must keep a written record. (100 percent)

Special Education Services

- A subscription service that provides school districts with up to date information on IDEA, Section 504, student records confidentiality and ADA [Americans with Disabilities Act] information.
- Included in the service is unlimited telephone consultation with an experienced attorney on issues listed above.
- The latest court cases and OCR [US Office of Civil Rights] opinions.
- Monitoring and representation at critical special education meetings.
- All 174 districts subscribe to this service

Special Education Services

- Other services include
  - On-site training
  - Development of Special Education and Section 504 procedures, including necessary updates
  - Development of user-friendly manuals, including updates, in areas such as student discipline, ARC [Admissions and Release Committee] Chair responsibilities, etc.
  - Training for local district staff, school board members and board attorneys

IDEA Procedures and 504 Procedures

- IDEA and Section 504 of the The Rehabilitation Act provide that specialized health services for students must be determined by the appropriate IEP [individualized education program] or 504 Team.
- Federal law requires that the plan must be individually tailored to meet the needs of the particular student.
- This is why KSBA recommends that such situations be handled through appropriate teams, rather than having blanket policies that set out such service requirements.

IDEA Procedures and 504 Procedures

- KSBA's general recommended policy on services for students with disabilities, provides that district staff shall comply with the district's IDEA and Section 504 procedures.
  - IDEA Procedures
    - KSBA provides a model set of procedures to implement IDEA in public school districts.
  - Section 504
    - KSBA provides a model set of procedures to implement Section 504 in public school districts.

Recommendations and Conclusions

- KSBA commends Program Review Committee members and staff for the development of this report.
- Local school districts' primary goal is to ensure that each and every child has the best opportunity to learn.
- Local school districts continually work with our partner agencies to develop better methods for providing these services.

Conclusions

- LRC Finding:
  - Many schools have inadequate health services staffing and there have been cases of inappropriate care or limitation on care. Surveys indicated more appropriate care and fewer limitations with school nurses.
    - KSBA believes that school districts are working hard to implement the laws and regulations surrounding school health. While there may be some limitations, those are a reflection of funding levels for school health services. In order to best address this recommendation, school districts need more funding for school nurses and more flexibility to provide adequate services.
- LRC Finding:
  - Unlicensed school staff supplement nurses, but there is disagreement on the extent that they should provide care.
    - As stated in the report, The Kentucky Board of Nursing has an advisory opinion that advises nurses not to delegate the administration of injections to unlicensed personnel. This opinion serves as a constant reminder to nurses who could fear losing their license. While this does not have the force of law, it does discourage licensed nurses from giving the delegation because of medical licensure concerns.

Legal Framework of School Health Care

- LRC Finding:
  - Federal education privacy law and federal health information privacy law can inhibit this access.[1]
- KSBA Response:
  - FERPA [Family Educational Rights and Privacy Act] allows access to information on a need to know basis if the health worker is providing a service for the district. However, health workers must be under the control of the school district as to how they access and use the education record information.
  - KSBA would also agree that better coordination is needed, and we are willing to work with all stakeholder groups involved to improve the process.

[1] KSBA was referring to the section of the staff report on sharing education records with health department nurses and sharing health department medical records with school staff.

Legal Framework Recommendations 2.2

- LRC Finding:
  - The General Assembly may wish to consider establishing or clarifying school health policy in the following areas, within the limits of federal disability laws:[2]
    - Minimum staffing requirements for health services
      - Without adequate funding, minimum nurse to student ratios would be costly and burdensome to districts. If legislation addressing this area were proposed, we would recommend that the General Assembly must appropriate adequate funding to implement such staffing requirements.
    - The discretion districts should have when students with permission to carry medications misuse them.
      - School districts have latitude to punish for disciplinary infractions.
    - The meaning of "any necessary arrangement" in KRS 156.502.
      - School districts need maximum flexibility to take into consideration the unique situations of these students. Clarifying this language could create more confusion and inadvertently increase costs to local school districts.
    - Whether districts must provide health services at all school-related programs and activities.
      - Parents are active participants in a student's health and education. If a parent knowingly chooses to allow a student to a attend a school sponsored activity, they are responsible for the child's needs. Currently, under IDEA and 504, school districts must provide school health services to participants.
    - Whether KRS 156.502 should permit certain delegation actions and specify how to change delegating providers.
      - While all participants in this study recognize that a nurse or licensed health professional is the best person to administer medications, this may not always be possible. With that in mind, KSBA recommends that school districts should be given maximum flexibility to provide students with the necessary services.

[2] Program Review staff adjusted indentation in this section to clarify that all items are under the recommendation.

Health Department School Services:

- LRC Recommendation 3.1
  - The Department for Public Health should advise local health departments on ways to assist school districts to meet their obligations under state and federal laws and on liability risk management. If necessary, the department should request that the General Assembly grant liability protection so that health departments may better serve school health needs.
    - Health departments currently require school districts to pay for any student health service for which Medicaid does not reimburse the health departments, such as IEP services. Also, any such agreements must be consistent with Federal student records confidentiality law.
- In some schools, parents recruited and trained school staff to provide care for their children, a practice that might be illegal.[3]
  - Per current Federal and state law, districts may not require a parent to perform health service tasks and may not deny student attendance or participation because of a lack of health services.

Minimum School Health Model

- **Recommendation 3.2:** The Kentucky Department of Education should require all school district agreements with outside health service providers to be in writing and to be submitted to the department. The department should require all districts to submit regularly updated descriptions of their health services policies; procedures; and models of care, including the types, numbers, and supervisors of all licensed and unlicensed personnel.
  - If the Kentucky Department of Education were to be given this responsibility it would mean adequate qualified staff and funding would be necessary to implement this recommendation.

[3] Program Review staff adjusted indentation in this section because the finding about recruiting and training school staff was not related to Recommendation 3.1.

Financing of School Health

- LRC Finding:
  - Because of federal disability laws and the Medicaid "free care rule," schools may not bill Medicaid or most insurers for student care.
    - KSBA Response:
      - This finding is somewhat misleading. School districts may bill for health services for IDEA eligible students.
  - Districts may look at options for providing adequate care at the lowest cost, including use of UAP [unlicensed assistive personnel] and sharing costs with health departments.[4]
    - KSBA Response:
      - This is true and if school districts must pay the bill, they should retain flexibility to make choices within the bounds of the law.

Reply From Program Review Staff

Policy and Procedures Services

Staff reviewed the KSBA model policies and procedures related to school health. KSBA and Program Review staff have some differences in perspective. The report describes some of the issues related to the policies and procedures offered by KSBA.

Staff believe that the policy and procedure services are valuable, but by themselves they are inadequate to ensure that school health services are delivered properly. Surveys and interviews made it clear that there were many instances in which schools did not follow policies and procedures and that some district officials did not seem to be aware of them.

Staff point out that KSBA's 100 percent figure on the adoption of some of its procedures presumably is 100 percent of 141 districts, not 174. This actually represents 81 percent of all districts. Also, KSBA has assumed that all subscribing districts will adopt updates to the model policies and procedures.

Special Education Services, IDEA, and Section 504

KSBA has commendable information for districts regarding Section 504 procedures. Program Review staff did not examine the association's IDEA information because it is not relevant for most of the students covered by the report and because KDE also has extensive guidance on that topic.

The KSBA description of the rules for these services is consistent with the description in Chapter 2 of the report. However, information from the districts and other sources indicated that in many instances, the rules for these services were not followed. This appeared to be especially

[4] Program Review staff adjusted indentation in this section to distinguish the second finding from the KSBA response.

true regarding the districts' responsibility to seek out and properly evaluate students who might have disabilities.

Legal Framework Regarding Sharing Information

KSBA is correct that contracts could be written to permit health department nurses to access educational records when needed. However, Program Review staff are not aware of any contracts that meet that standard.

More importantly, there is not an obvious way to permit school staff to access health department medical information about students. This limitation is based on the Health Insurance Portability and Accountability Act, not on FERPA.

Recommendation 2.2

None of the issues listed in the recommendation has a clear answer, especially for students who are not covered by federal disability laws. These are policy decisions that the General Assembly may wish to consider or may leave to regulatory agencies, school districts, and the courts.

KSBA and Program Review staff have different perspectives on the phrase, "any necessary arrangement," in KRS 156.502. As written, the phrase might require schools to provide all possible services, even physicians' services; if so, it would exceed any federal standard and would place an onerous burden on school districts. The question is not about limiting the districts' options; rather, it is whether the General Assembly wishes to consider clarifying the extent of districts' responsibilities.

KSBA is correct that federal disability laws require school districts to provide health services at all school-related programs and activities, but only for students who have Section 504 plans or IEPs. For students who do **not** have Section 504 plans or IEPs, the question is whether or not the phrases "school setting" in KRS 156.502(2) and "program participation" in KRS 156.502(3) include school-related activities. In either case, the General Assembly might wish to clarify the districts' responsibilities, either limiting or extending them.

Recommendation 3.1

It is not correct that all health departments require school districts to pay for student health services that are not reimbursed by Medicaid. Some health departments cover some of the costs using their own local tax revenues. In some cases, the enhanced Medicaid reimbursement may permit health departments to pay for some services to non-Medicaid-eligible students.

Parent-trained School Personnel

In its slide on Health Department School Services, KSBA mentioned that some parents recruit and train school personnel to provide health services for their children. KRS 156.502 does not mention parent-trained school personnel as health service providers in the school setting, so the practice might be illegal. For students with Section 504 plans or IEPs, KSBA is correct that the

practice should not be necessary. Similarly, it should not be necessary for any student during the school day under KRS 156.502. However, parents have recruited and trained school personnel in some instances for either of two reasons: because schools have not fulfilled their obligation to provide health services or because some parents prefer to select and train the health services provider themselves.

The question becomes more complex if KRS 156.502 does not cover school-related activities. If not, then for students without Section 504 plans or IEPs, what determines whether parents may recruit and train school personnel to provide health services for their children at these activities? There might be liability and employment contract issues to resolve.

In summary, is it or should it be legal for parents to recruit and train school personnel if they wish, during the school day and at school-related activities, especially if KRS 156.502 does not cover the latter?

Financing of School Health

The report as a whole and the discussion of billing in Chapter 4 made it clear that schools do bill Medicaid for IEP services but that IEP services generally were not within the scope of the report. Most students with diabetes, asthma, severe allergy, or epilepsy do not have IEPs, and the report found that schools cannot bill Medicaid for those students. However, staff has clarified the wording of the related conclusion in Chapter 1.