Department of Legislative Services

Maryland General Assembly
2016 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

Senate Bill 71 (Senators Young and Nathan-Pulliam)

Education, Health, and Environmental Affairs Ways and Means

Public and Nonpublic Schools - Student Diabetes Management Program

This bill requires the Maryland State Department of Education (MSDE) and the Department of Health and Mental Hygiene (DHMH), in consultation with other experts and stakeholders, to establish guidelines for the training of volunteer school employees to become trained diabetes care providers. Each local board of education must require each public school within its jurisdiction to establish a Student Diabetes Management Program that includes training for employee volunteers to provide diabetes care services to students. The bill requires a school nurse or trained diabetes care provider to be available during school hours and, when possible, at school-sponsored activities, including field trips and extracurricular activities.

The bill takes effect July 1, 2016.

Fiscal Summary

State Effect: General fund expenditures increase by $29,200 in FY 2017 for DHMH to hire a half-time diabetes control consultant to develop guidelines for the training of school employees to become trained diabetes care providers. MSDE can assist DHMH with developing the guidelines using existing resources. Revenues are not affected.

(in dollars)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Revenues	$0	$0	$0	$0	$0
GF Expenditure	29,200	0	0	0	0
Net Effect	($29,200)	$0	$0	$0	$0

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: Local school system expenditures may increase to ensure that a school nurse (who must be a registered nurse (RN) as described below) or trained diabetes care provider will be on-site and available to provide diabetes care services to a student with a Diabetes

Medical Management Plan during school hours and, when possible, at school-sponsored activities, including field trips and extracurricular activities. Local school system expenditures also increase to provide training to volunteers on specified diabetes care tasks. The amount cannot be determined but may be significant for some local school systems depending on the number of volunteers who are recruited. **This bill imposes a mandate on a unit of local government.**

Small Business Effect: None.

Analysis

Bill Summary: A "trained diabetes care provider" means an employee trained in the recognition of the symptoms of diabetes and the administration of health care services needed by an individual with diabetes.

A "Diabetes Medical Management Plan" means a plan developed by a student's physician that describes the health care services needed by the student for the treatment of the student's diabetes at school.

A nonpublic school *may* establish a Student Diabetes Management Program and conduct or contract for a course for the training of employees to become trained diabetes care providers.

The guidelines established by MSDE and DHMH must include instruction on the recognition and treatment of hypoglycemia and hyperglycemia; the appropriate actions to take when blood glucose levels are outside target ranges; understanding physician instructions regarding diabetes medication drug dosage, frequency, and manner of administration; performing finger-stick blood glucose checking, ketone checking, and results recordation; understanding the function and protocol for the use of continuous glucose monitors; and administering glucagon and insulin in accordance with a student's Diabetes Medical Management Plan and results recordation. A training course for employees of a nonpublic school that establishes a Student Diabetes Management Program may include instruction on the same items.

The Student Diabetes Management Program established in each public school must recruit employees who are interested in becoming trained diabetes care providers; provide training for employee volunteers before the commencement of a school year or when required by the enrollment of a student with a Diabetes Medical Management Plan; designate locations within the school where a student may privately perform diabetes care tasks; require the school nurse or a trained diabetes care provider to be on-site and available to provide diabetes care services during school hours and, when possible, at school-sponsored

activities, including field trips and extracurricular activities; establish a system of communication between school administrators and the faculty, school nurse, trained diabetes care providers, parents or guardians of students, and students; facilitate the access of authorized school personnel to student Diabetes Medical Management Plans; and establish procedures for diabetes-related emergencies. Similarly, a program estabished in a nonpublic school *may* contain these elements.

A school may not compel any employee to participate in a Student Diabetes Management Program. A participating trained diabetes care provider at a public school must agree to perform diabetes care tasks for which training has been provided, including checking and recording blood glucose levels and ketone levels, or assisting a student with the tasks; administering glucagon and other emergency treatments as prescribed; administering insulin or assisting a student in the administration of insulin through the insulin delivery system the student uses; and providing oral diabetes medications. Similarly, a participating trained diabetes care provider at a nonpublic school *is encouraged* to perform diabetes care task for which training has been provided.

A trained diabetes care provider who provides diabetes care services to an individual in accordance with the bill is not civilly liable for any act or omission in the course of providing diabetes care services if the provider is acting in good faith, the diabetes care services are provided in a reasonably prudent manner, and the services are provided without fee or other compensation. The provision of diabetes care services by a trained diabetes care provider under provisions of the bill may not be construed as performing acts of practical nursing or registered nursing.

The parent or guardian of a student who needs diabetes care at a public school must submit a Diabetes Medical Management Plan to the school. Within 30 days after a student's plan is submitted, the plan must be reviewed in a meeting of the parent or guardian, the student, the school nurse, the student's classroom teacher, all trained diabetes care providers who may be required to provide care to the student, and any other necessary individuals. If a student's plan states that the student may perform specified diabetes care tasks independently, the student may perform the authorized tasks wherever the student considers necessary, possess and carry any necessary supplies and equipment, and possess a cellular phone to ask for assistance. Similarly, the parent or guardian of a student who needs diabetes care at a nonpublic school *may* submit a Diabetes Medical Management Plan to the school, which the nonpublic school *may* review in a meeting.

Current Law: With the assistance of the local health department, each local board of education must provide adequate school health services, instruction in health education, and a healthful school environment. MSDE and DHMH must jointly develop public standards and guidelines for school health programs and offer assistance to the local boards of education and local health departments in their implementation.

MSDE and DHMH must jointly establish guidelines for public schools regarding emergency medical care for students with special health needs. The guidelines must include procedures for the emergency administration of medication and the proper follow-up emergency procedures; a description of parental or caregiver responsibilities; a description of school responsibilities; a description of student responsibilities that are age and condition appropriate; and any other issue that is relevant to the emergency medical care of students with special health needs. MSDE and DHMH must provide technical assistance to schools to implement the guidelines established, train school personnel at the local level, and develop a process to monitor the implementation of the guidelines.

In accordance with the Maryland Nurse Practice Act, and the regulations adopted under the Act, a nurse *may* delegate the responsibility to perform a nursing task to an unlicensed individual, a certified nursing assistant, or a medication technician. However, the delegating nurse retains the accountability for the nursing task. A nursing task delegated by the nurse must be (1) within the area of responsibility of the nurse delegating the act; (2) such that, in the judgment of the nurse, it can be properly and safely performed without jeopardizing the client welfare; and (3) a task that a reasonable and prudent nurse would find is within the scope of sound nursing judgment.

According to the Maryland Code of Regulations, (COMAR 13A.05.05.08), a local board of education, in conjunction with the local health department, must formulate written policies ensuring the provision of school health services to students with special health needs. A student with special health needs that may require particular attention during the school day must have a statement of those health needs and a nursing care plan for emergency and routine care prepared by the designated school health services professional. The designated school health services professional must make appropriate school personnel aware of the students in the school who have special health needs that may require intervention during the school day. The principal, in consultation with the designated school health services professional, must identify school personnel who must receive in-service training in providing the recommended services for students with special health needs. A designated school health services professional may serve on all levels of the pupil services team and the admissions, review, and dismissal committees and participate, when appropriate in the health services component of the Individualized Education Plan, the Individualized Family Service Plan, or the Transitional Plan or any combination of these. A local board of education, in conjunction with the local health department, must formulate written policies regarding storage and administration of medication during school hours and during school-sponsored activities.

Background:

Diabetes Statistics

According to the Centers for Disease Control and Prevention, as of 2012, approximately 208,000 individuals under 20 years of age, or 0.25% of the U.S. population in the age group, had diagnosed type 1 or type 2 diabetes. A study of the same age group during 2008-2009 estimated that 18,436 individuals annually were diagnosed with type 1 diabetes, and 5,089 individuals annually were newly diagnosed with type 2 diabetes. The study found that nonHispanic white children and adolescents had the highest rate of new cases of type 1 diabetes. Conversely, the study found higher rates of new cases of type 2 diabetes among U.S. minority populations.

Type 1 diabetes is an autoimmune disease in which the body's immune system destroys the insulin-producing cells of the pancreas. According to the Centers for Disease Control and Prevention, although disease onset can occur at any age, the peak age for diagnosis is in the mid-teens. People with type 1 diabetes must have insulin delivered by injection or a pump to manage blood glucose levels. However, insulin is not a cure. Although blood glucose control can reduce the risk, type 1 diabetes can still lead to kidney failure, blindness, nerve damage, amputation, heart attack, or stroke. In addition, a potential complication of insulin treatment is hypoglycemia, or low blood glucose, which can result in seizure, unconsciousness, or even death.

Type 2 diabetes is the most common type of diabetes, accounting for 90% to 95% of diagnosed cases of diabetes in adults. Type 2 diabetes usually begins with insulin resistance, a disorder in which cells do not use insulin properly, but also involves varying degrees of dysfunction of the insulin-producing cells. Anyone can develop type 2 diabetes; however, greater risk is associated with older age, obesity, family history of diabetes, women who have had gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity.

Current State Guidelines Regarding the Management of Students with Diabetes in Schools

Under guidelines developed by MSDE and DHMH regarding the management of students with diabetes in schools, when an individual with diabetes enters school or a student is diagnosed with diabetes, the school nurse performs an appraisal and assessment and, in conjunction with the student's family and health care providers, develops an individualized care plan for the student. The care plan must address routine and emergency care, including the administration of medication during school hours and school-sponsored activities, and outline what will be done if the school nurse is not available. The school nurse determines whether and to whom any responsibility may be delegated for monitoring blood glucose testing or administering any treatment or medication.

The Maryland State Management of Diabetes at School/Order Form, or other orders addressing all of the same elements, must be completed by an authorized prescriber and submitted to the school by a parent or guardian before a student may receive medication or have an invasive medical procedure, such as blood glucose testing, performed in school.

According to DHMH, diabetes care management protocols exist within school health services programs operating in all of Maryland's 24 school systems. Additional diabetes care is provided in school-based health centers operating in 14 school system. In Maryland, school health services programs are mandated and are the responsibility of the local boards of education with assistance from the local health departments. A variety of school health service delivery models have been developed to assure the health needs of children are met in the school setting. These models may include, but are not limited to:

- RNs only;
- both RNs and Licensed Practical Nurses (LPNs);
- both RNs and Certified Nursing Assistant (CNAs); and
- RNs, LPNs, and CNAs.

However, due to a 2004 declaratory ruling of the Maryland Board of Nursing, regardless of the service delivery model, the RN is always the leader of the school health nursing team. The RN, the expert in nursing and health, makes the decisions about how care is provided and who provides the care to the child in the school system. Only the school RN has the authority to use the title school nurse. All other health staff must be referred by their title such as LPN, CNA, or Health Assistant/Health Technician.

Montgomery County Public School System's Current Diabetes Management Procedures

Montgomery County Public School System (MCPS) advises that during the 2014-2015 school year MCPS had more than 300 students with diabetes who attended more than 120 schools (out of 203 total MCPS schools). Over 75% of these students had orders for glucagon to be administered by intramuscular injection for a life-threating episode of hypoglycemia (*i.e.*, extremely low blood sugar) resulting in unresponsiveness and/or diabetic seizures. Almost 70% of these students had an insulin order. Of these students, nearly 50 young children in prekindergarten through grade five are unable to calculate their insulin dosage and thus require daily assistance by a RN from the school health services (SHS). Many of these students have complex and unstable medical needs and are considered "brittle" diabetics, requiring the ongoing assessment and intervention by an SHS school community health nurse.

According to MCPS, under its current model, a RN may delegate certain tasks, as appropriate and as provided for in the Nurse Practice Act, to a CNAs/Certified Medication Technician. Under this model, SHS staff members, in collaboration with parents and MCPS staff members, address the needs of diabetic students throughout the school day. If medically indicated by the school nurse, MCPS has provided an agency nurse (usually the nurse is an LPN) to accompany a student on a field trip.

State Expenditures: General fund expenditures increase by $29,200 in fiscal 2017, which accounts for a 90-day start-up delay after the bill's July 1, 2016 effective date. DHMH has determined that 1.5 contractual positions are needed to implement this bill. However, the Department of Legislative Services advises that only a half-time contractual position is needed. This estimate reflects the cost of hiring one half-time contractual diabetes specialist to develop, in consultation with other experts and stakeholders, guidelines for the training of school employees to become trained diabetes care providers. It includes a salary, fringe benefits, one-time start-up costs, and operating expenses.

Contractual Position	.5
Salary and Fringe Benefits	$24,611
Operating Expenses	4,589
Total FY 2017 State Expenditures	**$29,200**

This estimate reflects a July 1, 2017 termination date for the half-time contractual position due to the assumption that the required guidelines for training diabetes care providers can be developed in nine months. However, if additional time is required, DHMH general fund expenditures increase accordingly.

Local Expenditures: Local school system expenditures may increase to ensure that a school nurse (who must be a RN) or trained diabetes care provider will be on-site and available to provide diabetes care services to a student with a Diabetes Medical Management Plan during school hours and, when possible, at school-sponsored activities, including field trips and extracurricular activities. Due to the different models of SHSs, a RN (the only nurse that can be officially called a school nurse) may not be on-site during all school hours and at all school-sponsored activities.

Local school system expenditures also increase to provide training to volunteers on specified diabetes care tasks. Local school system expenditures may include hiring substitutes or providing teacher stipends to allow teachers to attend training and hiring additional RNs to provide training. Costs for this training cannot be reliably estimated and will vary by school system. For example, Wicomico County estimates annual costs of $3,600, Carroll County estimates annual costs of $16,000, Harford County estimates annual costs of $113,600, Montgomery County estimates annual costs of $200,000, and Baltimore City estimates annual costs of $1.6 million.

Additional Comments: If a nonpublic school chooses to develop a Student Diabetes Management Program, then its expenditures may increase.

Additional Information

Prior Introductions: SB 672 of 2015 passed the Senate, but no further action was taken. Its cross file HB 992 received a hearing in the House Ways and Means Committee, but no further action was taken.

Cross File: None.

Information Source(s): Centers for Disease Control and Prevention; Maryland State Department of Education; Department of Health and Mental Hygiene; Carroll, Montgomery, and Wicomico counties; Department of Legislative Services

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