State's activity upon treating and maintaining the health of children

Has the state resolved the issues of maintaining the health of children and receiving health services?

Summary of the audit results

According to the Constitution, each child is entitled to the protection of his or her health. The primary right and obligation to care for the child's health lies with the parent. The state's obligation is to create an environment that protects the health of the child, organise the promotion of health and ensure necessary health services for maintaining and improving the health of children. In order to perform this task, the state has prepared the National Health Plan 2009–2020 that includes objectives and actions for maintaining the health of children and treating children. Actions are carried out foremost by school nurses, family physicians and nurses, specialist doctors, and health promotion specialists and counselling specialists.

What did we audit?

The National Audit Office of Estonia analysed whether or not the health care administration of children ensures that children with health problems and illnesses are found at the right time, whether or not the information exchange between specialists and parents is functional, whether or not children receive necessary help in case of identifying health problems and illnesses, and whether or not the parties responsible for maintaining the health of children and treating children form a functional network. The National Audit Office of Estonia also investigated the availability of health services to children on the basis of residence, age and social background.

Why is this important to taxpayers?

The health and welfare of children are the foundation of a healthy society. Today's illnesses and health problems affecting children will be reflected in the future in the loss of years of life and work of the working-age population, thereby affecting the overall functioning and coping of the state. This also means greater expenses for the health insurance budget in the future when today's children have grown up. There were approx. 258,000 children in Estonia in 2015, constituting 20% of the population.

In 2016, the budget for specialist medical care for children, health care in school and promotional activities for the health of children is 26.9 million euros, plus expenses for family health care and counselling services for special educational needs. In 2015, maintaining the health and treating children cost 46.1 million euros out of the budget of the Estonian Health Insurance Fund, plus the cost of counselling services for special educational needs.

What did we find and conclude from the results of the audit?

In the opinion of the National Audit Office of Estonia, the current health care administration of children does not ensure the prevention, timely discovery, systematic observation and consistent treatment of health problems affecting children. In order to resolve the situation, substantive cooperation shall have to be established between specialists offering family health care and specialised medical care, school health care services, child protection services, counselling services for special educational needs and health promotion services.

Important observations:

Monitoring the health of children and provision of health services does not function in a coordinated manner. The applicable administration does not ensure a systematic cooperation between family physicians and specialists doctors, school nurses and health promotion and counselling specialists upon noticing and resolving health problems affecting children. Neither family physicians nor school nurses always recognise (mental) health problems at the right time, because their training is different and, as such, the child is not sent to see another specialist.

The analysis carried out by the National Audit Office of Estonia indicated that half of the children in whom the school nurse had noticed a health problem did not make it to the doctor. Many educational establishments also lack necessary counselling specialists that could promptly help the child when the problems occur. There is also no certainty that children will adhere to the necessary treatment scheme after receiving specialised medical care. The reason for this is that the state does not have a case management approach, i.e. the current system does not ensure further consistent work with children who were in need of care. As a result, many patients lose touch with health care until health deteriorates once more.

Less than 4% of 3–6-year-old pre-school children underwent medical examinations with the prescribed frequency. Although regular examination is the primary method for early discovery of health problems and illnesses, children underwent medical examinations irregularly, and it depended on the age of the child. 85–93% of children of up to 2 years old underwent a family physician's medical examination. 52% of 3–6-year-old pre-school children never underwent a medical examination over a period of three years. Children undergo medical examinations the least when they are school-age: 8–20% of children underwent examinations, depending on their age. The share of those refusing vaccinations has also increased, having been 1.9–3.5% in 2014, depending on the vaccine. One reason for this is that the Ministry of Social Affairs has not been able to effectively make parents aware of the necessity of medical examinations and vaccinations. Family physicians, whose work load is generally high, also do not have enough opportunities to make sure that all children undergo medical examinations as prescribed.

All children are not receiving similar school health care service, and there is no supervision over the content and quality of the service. Because a school-age child spends a large part of their day in school, both health promotion and prevention of illnesses should be a part of the school life for all children. The audit indicated that 14 schools lack the school health care service. The established requirement of one school nurse per 600 students was not met everywhere, i.e. approx. 34,000 school children did not receive the required service. It was also revealed that the situation varied from school to school. For example, school nurses carried out health education classes in 70% of city schools; the respective indicator in schools in the countryside was 30%. One reason for the differences are the uneven opportunities of school nurses to get an overview of both the health and the learning environment of children. The audit indicated that in Ida-Viru County, for example, 5% of schools did not have a reception room, while the respective indicator in Lääne-Viru, Rapla and Järva County was 29%.

One source reason for the lack and varying experiences of school nurses is also funding for the school health care service, which has increased slower than financing other health services in the period from 2006 to 2015. In addition, school health care service is also only paid for 11 months out of the year. At the same time, supervision over the school health care service has been limited to checking formal requirements without assessing the content and quality of the service (excl. immunisation).

Treatment of children suffering from chronic illnesses has not always been timely and consistent. According to the expert assessment, 71% of children suffering from behavioural disorders and 63% of children suffering from eating disorders did not receive timely help. With regard to children suffering from eating, activity and attention disorders, the average time between the health

problem occurring and noticing it is two years. The audit also indicated that after a child has been sent for treatment, the treatment is not always consistent. Among obese children, for example, over a period of four years, 30% of the target group received health service for two years, 8% for three years and 4% for all four years. Treating an obese child, however, presumes receiving regular health service. First illness among obese children has increased by 54% over a period from 2006 to 2014. The reason for this can be found both in the health behaviour of children and in the fact that services are not offered in a coordinated manner and the child does not reach all the necessary specialists at the right time.

Receiving health services and hospitalisation varied based on the place of residence of children. The analysis carried out by the National Audit Office of Estonia indicated that hospitalisation due to chronic illnesses varied based on the place of residence of children. For example, children living in the countryside were hospitalised due to type I diabetes twice as often as children living in the city. Hospital treatment in case of asthma in Ida-Viru County (1.55 children per 1000 children) was nearly double than that in Lääne, Saare, Hiiu or Pärnu County (0.83 children per 1000 children). Although in Ida-Viru County intensive industrial activity may be a contributing factor to illnesses of the respiratory organs, receiving health services varied based on the place of residence of the child also with regard to other illnesses. For example, obese children living in the city received services approximately 4.22 times and children living the countryside 3.11 times per one child, i.e. children living in the city received 26.5% more health services associated with obesity. One reason for this may be varied participation in medical examinations. Medical examinations were attended the least by children living in Ida-Viru County (23 children per 1000 children). However, the Estonian average was noticeably higher (34 children per 1000 children).

Children who were hospitalised due to type I diabetes and asthma were more likely from families with low socioeconomic background. In 2014, 31.7% of all people receiving wage income in Estonia earned minimum wages or less. The ratio among parents of children hospitalised due to type I diabetes and asthma was higher, i.e. 39.6% and 40.7% respectively. In addition to income, receiving social benefits also characterises the socioeconomic situation of the family: among families with children hospitalised due to diabetes, the share of those receiving subsistence benefit was more than double (8%) than that of the Estonian average (3.4%). The share of those receiving subsistence benefit was also higher than the Estonian average among families with children hospitalised with a diagnosis of asthma (5.5%). The state has not analysed separately whether or not children from poorer families or families with low socioeconomic background have a greater need for health services.

Resolving the problem is impeded by the lack of the data on the health status of children. Although the state has the statistics of deaths and births and cases of first illnesses, it does not have an overview of the health status of children by different target and age groups. The National Institute for Health Development is collecting statistics of incidences where one person with the same case may be registered with more than one service provider or where receiving health services with the prevalent disease cases are registered as incident cases. Both the main diagnoses and accompanying diagnoses are registered on health records, which is why it is possible that accompanying illnesses might be registered multiple times. Both the Ministry of Social Affairs and the National Institute for Health Development confirm that health data currently being collected does not enable planning health services or preventive or promotional activities aimed at target groups. According to the Ministry of Social Affairs, developing a statistics module for the examinations of children in the health information system planned to be commissioned in 2017 is improving the situation.

What did we recommend?

Main recommendations of the National Audit Office of Estonia to the Minister of Health and Labour in cooperation with the chairman of the board of the Estonian Health Insurance Fund:

- Develop and implement an integrated service concept for monitoring the health of children and treating children, as part of which family physician service, school health care service, specialised

medical care, support services of counselling services for special educational needs and child protection are combined to form a functional and coordinated network.

■ Consider giving an additional task to the family physician that obligates the family physician to observe that the child receives all the necessary services and, if necessary, inform and advise the parent in doing so, at the same time ensuring that expenses accompanying the additional task incurred by the family physician are covered.

■ Analyse whether or not the current frequency of undergoing medical examinations is justified. Requirement for children undergoing medical examinations too frequently may be burdensome for the parents and the health care system and may not ensure cost-effective discovery of illnesses.

■ Improve awareness among parents of the necessity of medical examinations; among others, implement a notification system based on mobile and e-solutions for promoting undergoing medical examinations and involve a child protection specialist in determining the causes and resolving the problem in case of continuous failure to adhere to notifications.

■ Amend the organisation of financing school health care service so that the lack of school nurses decreases and the school heath care service is ensured for all children; ensure through training school nurses and updating school health care manuals that the content of the service is similar irrespective of the place of residence of the child; and at the same time determine the content and regularity of the supervision of school health care service.

Response of the audited: Minister of Health and Labour and the chairman of the board of the Estonian Health Insurance Fund agreed with the recommendation to develop a concept of integrated services. The Minister of Health and Labour added that the concept also includes increasing the awareness of health among parents, for example offering a parental school. The chairman of the board of the Estonian Health Insurance Fund agreed that it is important to improve the awareness among parents and also promised to contribute to increasing thereof.

The Minister of Health and Labour believes that monitoring the provision of necessary health services to the child is the obligation of health care professionals. However, both the Minister of Health and Labour and the chairman of the board of the Estonian Health Insurance Fund pointed out the manual for medical examinations for children is being updated, the objective of which is to monitor the development of children and to ensure the help necessary to the child through early discovery of health and developmental disorders. In the course of this, the frequency of undergoing medical examinations is reviewed.

The Minister of Health and Labour promised to better integrate the school health care service with family health care. The chairman of the board of the Estonian Health Insurance Fund added that it is extremely important to ensure the availability of school health care service to all children, but this cannot be achieved simply with a price formation of the service.