



European Union

European Regional  
Development Fund



## **Teachers Handbook**

### **Healthcare logistics in vocational education**

Tallinn Health College, Estonia  
Kersti Mähar  
Piret Tamme

Salpaus Further Education, Lahti Finland  
Ahonen, Antti  
Hovilainen-Kilpinen, Tuula  
Makkonen, Katja  
Pulkkinen, Jari

## Table of Contents

INTRODUCTION .....	3
1 AIMS AND OBJECTIVES .....	3
2 ENTRY CRITERIA AND EVALUATION METHODS.....	4
3 LEARNING OUTCOMES AND COMPETENCIES .....	4
4 COURSE DESCRIPTION.....	6
4.1 Course schedule in Finland:.....	6
4.2 Course schedule in Estonia.....	8
5 ASSESSMENT AND GRADING CRITERIA.....	11
5.1 Assesment and grading criteria in Finland.....	12
5.1.1 Warehousing in health care (5 ECTS) .....	12
5.1.2 The basics of health care in logistics (5 ETCS):.....	14
5.2 Assessment and criteria in Estonia:.....	17
6 TRAINING PLAN, STUDENT WORKLOAD.....	18
7 RECOMMENDED LITERATURE, MATERIALS AND WEBSITES.....	18
8 ASSIGNMENTS, LECTURE MATERIALS.....	<b>Error! Bookmark not defined.</b>
9 EXPERIENCES.....	18

## INTRODUCTION

This Teachers handbook is prepared in co-operation with Erasmus+ KA2 HELP project to guide students learning pathways and teachers work. At vocational level the participants are Salpaus Further Education from Lahti Finland and Tallinn Health College from Tallinn, Estonia. The teachers involved in this educational level are lectures from nursing and warehouse logistics. Teachers background of educations varies also. Nursing teachers are Master of Nursing Science and logistic teachers have qualification from University of Applied Sciences and teachers' pedagogic studies. Also, some practitioners are involved.

It is important to notice that curricula, competence needs and assessments of those are quite different and varies among the Finnish and Estonian National Agencies of Education. That's why in this teacher's handbook for Finnish and Estonian, education differs intermittently. However, the teachers work, and methods are still the same.

The main terminology, that is promised in project application, in this vocational optional module are ethics, patient safety, service design, sustainability and cost efficiency. All of them is handled during the educational course and will be assessed also.

Teacher gives students some materials to learn individually and to solve different issues by using problem-solving method in order to offer the best solution to patient or client. Decision on Ethics means the knowledge on nursing principals, working by rules, guidelines and laws of social and healthcare as well as warehousing, problem solving and nursing ethics.

Teacher will help student to understand the basics of patient safety. Patient safety will be shown in safe nursing situation and handling the warehouse goods and transportation. Patient safety is also included in Estonian curricula as well as patient logistics and management. Teacher supervises student to give the patient or warehouse client the best service.

Service design is in vocational education mostly covered by entrepreneurship topics. Teacher guides students to get competence and based knowledge. Students get also articles from some subject to analyse it lightly on their on-the-job-learning.

Sustainability is not just a domestic issue. Sustainability is presented with all the subjects of education and in both countries policy. In vocational level it includes ecological, financial and social and cultural aspects. In ecological view it is shown in reusable goods, research of the risks, disadvantage and costs of choices. Financial sustainability is present in vocational education when warehouse worker or practical nurse is ordering goods and items to ward or healthcare unit. Social and cultural aspect is presented in choices that healthcare logicians' make, so that perquisites of welfare will continue with becoming century. Teacher will guide them in it.

Cost efficiency means that student may choose the right item or good in suitable cost. The cost needs to be related to quality. Teachers will tell the basics of cost efficiency and teach student to take care of quality also.

## 1 AIMS AND OBJECTIVES

The aim of this education is to create a new qualification as healthcare logician. It is developed to logician students and practical students in Finland and Estonia. It is for practical nurses, nursing assistants, care workers and warehouse workers. This course may also be as an informal training for student from other sector of vocational education. After the education, health logicians know how to plan their work and act in different stages of healthcare logistics process following the principles of qualitative work and sustainable development. The main aim is to offer them competence-based knowledge and skills to work as a healthcare logician in a health care unit. The unit may be in an elderly care home, a healthcare factory, a hospital warehouse or they can work as an independent healthcare goods provider.

The education consists of two courses: The basics of warehousing in healthcare (5 ECTS) and The basics of health care in logistics (5 ECTS).

## 2 ENTRY CRITERIA AND EVALUATION METHODS

The course is designed for those students/ professionals who wish to build their professional carrier around healthcare logistics. Students may be youth or adults from all educational sectors. They don't have to have diploma from primary school that they may start this education, it's not optional.

*In Estonia only those who have passed gymnasium exams can attend the course.*

Students may study both courses or just one of it. Students studies will be personalized on her/his personal learning development plan (HOKS) in Finland.

Student needs to have competence in both education sectors to become a healthcare logistician. So, if the student is a nursing student, she gets the knowledge of nursing subject from own studies and just needs additional warehousing part of education. The same is with logician students, so he/she needs to get the competence of nursing. If the student does not have competence from these required contents, she/he will study both courses.

Educational provider will evaluate the student's achievements at studies. In Finland all students after primary school gets the permit to learn what they want. There are no more tests or exams to enter vocational school. But if the teacher finds that the student is not suitable for this education, they may use SORA- legislation to separate student from education. Before it, there has to be an official interview about the issue. In Estonian also those who have graduated from high school and entered on the curricula of care worker can apply for that module as an optional module for care workers curricula.

The vocational skills required for completing the module of health logistics is demonstrated by performing practical tasks in authentic situations and work processes (demonstration of knowledge and skills). A teacher and a working life representative will assess the student's knowledge and skills compared to the competence defined in the qualification requirements. The education provider will then award the student with a certificate once the course has been completed acceptably in accordance with the course requirements laid down by Salpaus and the Finnish National Agency for Education.

In Estonia as the course is an optional module for care workers curricula the result is shown on the final certificate.

## 3 LEARNING OUTCOMES AND COMPETENCIES

In Finland the learning outcomes are the same as competence needs of these two modules. The main outcome is to give student more knowledge and skills to work as a warehouse worker in social- and healthcare. The understand the role of worker in there.

Study module	Competencies
The basics of warehousing in healthcare (5 ECTS)	<ul style="list-style-type: none"> <li>- play a role in the logistics system as befits his/her duties</li> <li>- understands the key concepts in the industry</li> <li>- understands the stages in receiving and storing of goods</li> <li>- observes instructions on working safety</li> <li>- uses basic equipment and tools for warehouse working</li> </ul>

	<ul style="list-style-type: none"> <li>- uses the correct packing methods and the necessary labels</li> <li>- uses different transport documents</li> <li>- appreciates the principles of stock control and the cost structure of the stock</li> <li>- handle goods without damaging them</li> </ul>
The basics of health care in logistics (5 ETCS)	<ul style="list-style-type: none"> <li>- works according to social and healthcare regulations, laws, guidelines, principles and values</li> <li>- plans and works under legislations and guidelines of preventive methods in infection protection</li> <li>- uses basic concepts in prevention of infection ports and follow good practices in working places cleanness and hygiene</li> <li>- uses the basic concepts of infection preventive work in equipment</li> <li>- handles and sorts equipment</li> <li>- communicates with all client levels and serve them professionally</li> <li>- promotes working safety, health and well-being</li> <li>- acts on principals of sustainable development</li> <li>- confirms the rules of cleaning, disinfecting methods and to confirm working- and chemical safety</li> <li>- develops her/his own work by professional basis and knowledge</li> <li>- practices as HL in healthcare unit</li> <li>- introduces different systems of social and welfare payments and compensations for people under care in Estonia</li> <li>- supervises and teaches people under care in arranging services and compensations using case management methodology and networking methods in Estonia.</li> </ul>

Among Finnish legislation vocational teachers' education in vocational nursing education is that teacher has Master of Nursing Science or has passed upper degree of University of Applied Science in nursing. If she/ he has this upper degree, it's recommended that she/he will study also pedagogical degree in University of Applied Sciences. In logician education vocational teacher's education demand is Degree of University of Applied Science in Engineering or Bachelor of Logistic. In Estonia teachers on vocational level should have the Masters' degree in the teaching field and pedagogical competencies.

In Estonia the main problem is inadequate co-operation between different systems: between health care and social care. Therefore, TTHK has prepared the module on national level uniting different systems. Estonian health care logistic is a coordinator between systems.

The outcomes of the curricula are:

1. Introduces different systems of social and welfare payments and compensations for people under care in Estonia.

2. Supervises and teaches people under care in arranging services and compensations using case management methodology and networking methods.
3. Defines logistics functions and associates different processes connected with client/ patient with processes available at health and social care.

#### 4 COURSE DESCRIPTION

The course schedule varies in Finland and Estonia, because of the roles of ministry of education, the background of teachers and demands for the on-the-job-learning places.

In Finland the course consists of two basic modules. The structure of education will be personalized to take into account students' individual competence, basic vocational education and work life experience. The student may study the whole course of logistician or healthcare part or both of them or even one part of both of them. All parts are divided into smaller thematic, logically consistent units. The main teacher of the course is responsible for this.

Nursing teachers need to have the following competence on:

- aseptic working methods,
- compliance with good hygiene practices,
- the prevention of infections by different methods,
- handling the aseptic items
- multiply teaching skills
- assessment skills
- customer service

Logician teachers needs to have the following competence on:

- transporting of the equipment, which is the core part of the health care process
- handling the piece of equipment correctly and safely
- packaging material
- the basics of transport, warehousing, and logistics services
- safe and efficient transport
- customer service
- transportation by different kinds of vehicles; manual forklift, Reach, electric forklift
- national rules and legislation concerning logistic
- work ergonomics
- multiply teaching skills
- assessment skills

#### 4.1 Course schedule in Finland:

##### The basics of warehousing in healthcare (5 ECTS):

<i>Consultations</i>	<i>Topic</i>
Individual learning (before entering the course)	Introduction to healthcare logistics Assessment criteria for HL education and ways to study
Contact day 1	Introduction to the course and knowledge of warehousing: <ul style="list-style-type: none"> <li>- laws, risk analysis in logistics, employers' responsibilities, duties and rights</li> <li>- knowing different kind of packaging equipment. Use them safely, in accordance with instructions</li> </ul>

Individual learning	e-learning modules: <ul style="list-style-type: none"> <li>- terminology of logistics</li> <li>- packing and handling notes</li> <li>- packaging materials</li> </ul>
Contact day 2 - 4	Basic equipment and tools for warehouse working: <ul style="list-style-type: none"> <li>- knowledge of equipment, using of necessary equipment</li> <li>- waybill, referral</li> <li>- receipt goods, checking goods, shelving goods</li> </ul>
Individual learning (between contact days/ hours)	e-learning modules: <ul style="list-style-type: none"> <li>- basics of delivery chain, basics of material management</li> </ul>
Contact day 5 - 6	The principles of stock control and the cost structure: <ul style="list-style-type: none"> <li>- use transport documents, operate warehouse software</li> <li>- cost structure calculation, purchase and sales operations</li> </ul> Introduction into on-the-job-learning and vocational skills demonstration
three weeks on-the-job-learning	Growth of Professional skills: <ul style="list-style-type: none"> <li>- three- weeks on-the –job-learning</li> <li>- work planning</li> <li>- working life skills</li> <li>- life-long-learning</li> </ul>

**The basics of health care in Logistics “as a warehouse worker in health care” (5 ETCS):**

<i>Consultations</i>	<i>Topic</i>
Individual learning (before entering the course)	<ul style="list-style-type: none"> <li>- Introduction to healthcare logistics</li> <li>- Assessment criteria for HL education and ways to study</li> </ul>
Contact day 1	Introduction to the course Basics of Healthcare legislation: <ul style="list-style-type: none"> <li>- basics of Healthcare legislation</li> <li>- laws and guidelines of chemical goods</li> <li>- nursing guidelines, evidence based Hc</li> <li>- nursing values and principals</li> </ul> Basics of nursing concepts Hc organizations in Finland
	<ul style="list-style-type: none"> <li>- nursing values and principals in practice</li> <li>- evidence based nursing and argumentation</li> <li>- students home city Hc organization</li> <li>- risks of bad aseptic</li> <li>- aseptic videos from SanomaPro`s sites</li> </ul>
Contract day 2 - 4	Aseptic <ul style="list-style-type: none"> <li>- basics of aseptic</li> </ul>

	<ul style="list-style-type: none"> <li>- infection prevention</li> <li>- common infections prevention and treatment in hc</li> <li>- aseptic hand wash and disinfection</li> <li>- personal hygiene in Hc</li> <li>- Aseptic conscience</li> <li>- isolation guidelines and classification</li> </ul> <p>Aseptic containment hygiene:</p> <ul style="list-style-type: none"> <li>- hand wash and disinfection</li> <li>- wearing and taking care of isolation clothes</li> </ul>
Individual learning between contact days	<a href="http://www.opinportti.fi">www.opinportti.fi</a> (Infektioiden torjunta) Infection prevention course Working safety in Hc <ul style="list-style-type: none"> <li>- ergonomics</li> </ul>
Contact day 4 - 5	<p>Equipment maintenance process and equipment</p> <ul style="list-style-type: none"> <li>- clients/patients/ equipment logistic in Hc organization</li> <li>- equipment knowledge (most common instruments in operations, sets, operation baskets, optics, containers)</li> <li>- oxygen, manual mucus suction pump, surgical aspirator, pulseoxymeter)</li> </ul>
Individual learning between contact days	<p>Sustainability Waste recycling</p>
Contact day 6	<p>Customer service</p> <ul style="list-style-type: none"> <li>- nurses and other professions in different Hc organizations</li> <li>- elderly clients</li> <li>- surgical patients</li> <li>- dementia clients</li> <li>- aggressive clients</li> <li>- mental and abused clients</li> </ul> <p>Introduction to on-the-job-learning and vocational skills demonstration</p>
three weeks on-the-job-learning	<p>Growth of Professional skills</p> <ul style="list-style-type: none"> <li>- three weeks on-the –job-learning</li> <li>- work planning</li> <li>- working life skills</li> <li>- life-log-learning</li> </ul>

#### 4.2. Course schedule in Estonia

Consultation	Topics
	<ul style="list-style-type: none"> <li>- legislation</li> <li>- social welfare act;</li> <li>- different services (school, kindergarten, fire brigade, victims aid, emergency medicine, care for mentally ill people, dental services, services provided in the community, councils for disabled people; hobby activities in day centres, funeral services)</li> </ul>

	<ul style="list-style-type: none"> <li>- social services</li> <li>- health care services</li> <li>- educational services</li> <li>- labour market services inc the aim, necessary documents, requirements of the offered services</li> <li>- payments and compensations (compensating extra costs due to the disability, compensation on medicine)</li> <li>- process of applying</li> </ul>
Individual work	Student describes independently pre-prepared case and analyses it according to the existing services.
	<ul style="list-style-type: none"> <li>- case management: principles and methods</li> <li>- networking and principles for composing network plan</li> <li>- principles for team working</li> <li>- the principles of information flow and working mechanism</li> <li>- supervising client/ patients and his relatives</li> <li>- time management</li> <li>- stress management</li> <li>- supervising/ teaching</li> </ul>
Individual work	Compiles flier how to teach client/ patient and their relatives to apply services and benefits according to the care plan: what are the main problems, how to solve these problems, and how to teach; what kind of tools are needed and in what order.
	<ul style="list-style-type: none"> <li>- logistical process</li> <li>- shelving services</li> <li>- operations at warehouse</li> <li>- stock management</li> </ul>

#### Curricula in Estonia

Outcomes	Topics	Assessment criteria	Methods
1.Introduces different systems of social and welfare payments and compensations for people under care in Estonia	1.Legislation 1.1. Social welfare act; 2. Different services (school, kindergarten, fire brigade, victims aid, emergency medicine, care for mentally ill people, dental services, services provided in the community, councils for disabled people; hobby activities in day centres, funeral services) 2.1. Social services 2.2. Health Care services 2.3. Educational services 2.4. Labour market services inc the aim,	1. Describes different agents and their responsibilities on offering various services. 2. Describes how persons under care can receive their services at home and in institutions. 3. Describes what kind of services can be provided to people under care and how to apply.	-Lecture -E-study -Role plays -Group works -Individual work/ assignments

	necessary documents, requirements of the offered services 3. Payments and compensations (compensating extra costs due to the disability, compensation on medicine) 3.1. Process of applying		
<b>Individual work</b>	Student describes independently pre-prepared case and analyses it according to the existing services.		
2. Supervises and teaches people under care in arranging services and compensations using case management methodology and networking methods.	1. Case management: principles and methods. 2. Networking and principles for composing network plan. 3. Principles for team working. 4. The principles of information flow and working mechanism. 5. Supervising client/patients and his relatives. 5.1. Time management 5.2. Stress management 5.3. Supervising/teaching	1. Compiles suitable service/ benefits system to patient/client according to the needs of the patients and relying on the data of previous assessments and plans inc care plan. 2. Compiles suitable network to patient/client which includes the roles of important members at the network and it takes into consideration individuality of each patient/ client. 3. Co-ordinates information flow between all members of the network on time. 4. Supervises client/patient on applying one service/ benefit according to the service plan and care plan.	- lecture - e-study - group work - demonstration - study visit - individual work
<b>Individual work</b>	Complies flier how to teach client/ patient and their relatives to apply services and benefits according to the care plan: what are the main problems, how to solve these problems, and how to teach; what kind of tools are needed and in what order.		
3. Defines logistics functions and associates different processes connected	1. Logistical processes 2. Shelving services 3. Operations at warehouse	1. Formulates the aim of logistics by using logistics terminology	-e-learning -lecture -role plays

with client/ patient with processes available at health and social care.	4. Stock management 5. Process management	to visualize the systematic processes. 2. Explains the importance of managing information flow and points out the surplus value in processes 3. explains the risks connected with logistic processes and shows the possibilities to prevent these risks. 4. Plans and manages shelving services 5. Carries out stock management tasks	- demonstrations
<b>Students individual work</b>	Draws logistic process chart on services and products flow for different target groups.		

## 5 ASSESSMENT AND GRADING CRITERIA

Evaluation is part of the course theoretical and on-the-job-learning process. Teacher will introduce assessment procedure and assessment criteria in the first lesson. In Finland it's based on vocational skills demonstration, in which the students may show their competence on healthcare logistic. The criteria are picked from both curricula and confirmed in Organization of National Education Ministry. More information: [www.eperusteet.fi](http://www.eperusteet.fi)

The teacher's evaluation tools intend to measure personal development through the on-the-job-learning as a whole. Student may show his/her professional competence in the end of the period by vocational skills demonstration. She/he will write a plan for it and open all the assessment criteria to the mentor and teacher. She/he may also use learning diary to help Vocational skills demonstration. The mentor will give the students a written evaluation, the teacher will record it. Student don't have to make any self-evaluation and she/he has two weeks' time to remediate the evaluation.

The vocational skills demonstration assessment will be scaled/Pass requirements Satisfactory S1 / Satisfactory S2 / Good G3 /

Good G4 / Excellent E5 in Finland and in Estonia it is Satisfactory 1/ Good 2/ Excellent 3

In Estonia each outcome is assessed according to the agreed criteria. The curricula cover minimum level requirements. The optional module is either assessed or not, no grades are given. For outcome 1 the students shall describe independently pre-prepared case and analyses it according to the existing services. For outcome 2 they compile flier how to teach client/patient and their relatives to apply services and benefits according to the care plan: what are the main problems, how to solve these problems, and how to teach; what kind of tools are needed and in what order. And for outcome 3 they draw logistic process chart on services and products flow for different target groups.

## 5.1 Assessment and grading criteria in Finland

### 5.1.1 Warehousing in health care (5 ECTS)

#### Student role in the logistics system his/her duties and benefits

Satisfactory 1	knows how the company's purchase and sales operations affect storage
Satisfactory 2	
Good 3	understands the basic principles of the purchase and sales operations
Good 4	
Excellent 5	assesses the effect of purchase and sales on storage

#### Student understands the key concepts in the industry

Satisfactory 1	is familiar with some of the most common storage systems, equipment and concepts
Satisfactory 2	
Good 3	is familiar with different storage systems, equipment and concepts
Good 4	
Excellent 5	is familiar with all storage systems, equipment and concepts

#### Student understands the stages in the reception and storage of goods

Satisfactory 1	transfers goods to their storage locations, putting them away without damaging them and following instructions
Satisfactory 2	
Good 3	knows the storage address system and transfers products to the correct locations
Good 4	
Excellent 5	transfers the arrival data to the inventory accounting system using updated order information

#### Student observes instructions on working safety

Satisfactory 1	observes the regulations and instructions on working safety and knows the factors that affect wellbeing at work
Satisfactory 2	
Good 3	identifies and avoids safety risks and takes account of the effect of ergonomics on health

Good 4	
Excellent 5	assesses and develops his/ her work environment and makes his work practices safer

#### Student uses basic equipment and tools for warehouse working

Satisfactory 1	uses basic equipment in warehouse, observing safe work practices
Satisfactory 2	
Good 3	competently uses different equipment for collection and dispatch, observing safe work practices
Good 4	
Excellent 5	uses different equipment in warehouse, methodically and with no mistakes, observing safe work practices

#### Student uses the correct packing methods and the necessary labels

Satisfactory 1	packs products following instructions
Satisfactory 2	
Good 3	chooses the right packaging for each consignment and uses packaging materials in accordance with the company's instructions on environmental protection
Good 4	
Excellent 5	is competent when it comes to economical packing techniques and observes the instructions on environmental protection in an exemplary manner when using packaging materials

#### Student uses different transport documents

Satisfactory 1	is familiar with the necessary transport documents
Satisfactory 2	
Good 3	uses different kinds of transport documents
Good 4	
Excellent 5	is familiar with the most common documents used for international transport and interprets the information contained in them

**Student appreciates the principles of stock control and the cost structure of the stock**

Satisfactory 1	under supervision, understands the principles of stock control and its purpose, and knows the costs of storage
Satisfactory 2	
Good 3	knows the purpose of the main stock performance indicators, knows the costs of storage
Good 4	
Excellent 5	knows the content of stock performance indicators and its effects on costs, and can say what actions influence what trends in indicators

**Student knows how to handle goods without damaging them**

Satisfactory 1	transfers goods to their storage locations, putting them away without damaging them and following instructions
Satisfactory 2	
Good 3	knows the storage address system and transfers products to the correct locations
Good 4	
Excellent 5	knows the principles behind establishing a storage address system and, if required, creates new storage locations

**5.1.2 The basics of health care in logistics (5 ETCS):**

**Student follows the laws, rules and guidelines in his/her work**

Satisfactory 1	follows social and health care laws, guidelines, regulations and ethical principles in some situations; follows the principals of sustainability; classifies the waist, uses disposable goods appropriate
Satisfactory 2	
Good 3	follows social and health care laws, guidelines, regulations and ethical principals in chancing situations; follows the principals of sustainability and explains her/his work; classifies the waist, uses disposable goods appropriate and recycles well
Good 4	
Excellent 5	follows social and health care laws, guidelines, regulations and ethical principles

	and explains his/her decisions; follows the principals of sustainability and explains her/his work and makes development ideas; classifies the waist, uses disposable goods appropriate and recycles well; understand also the environmental aspect in sustainability
--	---

### Student plans and prevents infections in equipment maintenance work

Satisfactory 1	knows the basic of equipment maintenance process; knows the basic precautions in different levels of equipment maintenance; checks the readiness in different levels of equipment maintenance; knows the cleanness rules and levels of cleanness
Satisfactory 2	
Good 3	knows the equipment maintenance process; knows the basic precautions in different levels of equipment maintenance; checks, prepares and predicts the readiness in different levels of equipment maintenance; knows the cleanness rules and levels of cleanness and makes the work aseptic.
Good 4	
Excellent 5	Knows the equipment maintenance process Evaluates the basic precautions in different levels of equipment maintenance and gives development ideas. checks, prepares and predicts the readiness in different levels of equipment maintenance; knows, guides and ensures the cleanness rules and levels of cleanness and makes the work independently

### Student follows the basic precautions in cut the contamination chain.

Satisfactory 1	takes care of hand hygiene; isolates properly; understand and works in aseptic orders; takes care of the cleanness and order in working unit
Satisfactory 2	
Good 3	takes care of hand hygiene and uses basic precautions to prevent infection chains; isolates properly and argues with facts; takes care of the cleanness and order in

	working unit and assess own work in infection prevention
Good 4	
Excellent 5	takes care of precautions to prevent infection chains in every equipment maintenance process; isolates properly and argues with facts in patient safety view; takes care and guides the cleanness and order in all equipment maintenance process levels

#### Student plans his/her work

Satisfactory 1	plans and makes targets for his/her work with someone else; works together with someone else; plans his/her daily work as a member of working team
Satisfactory 2	
Good 3	plans the work and take care of the client's needs and culture; plans his/her work and care of the weekly plans of working team; work as a member of working team
Good 4	
Excellent 5	plans the work and takes care of the client's needs and; he/she makes own options and explains his/her own work; plans his/her work and takes care of the weekly plans and other plans of working team; work as a member of working team and knows his/her responsibilities

#### Student takes care of his/her safety, client safety, working ability and work wellbeing

Satisfactory 1	follows the guidelines of well-being and working safety; acts aseptically; knows the basics of infection prevention; knows how to use common equipment in work; notices the aggressive client's behaviour; knows the working places safety plan; knows the basics of the risk handling; works as a member of working team; understands the basics of ergonomics
Satisfactory 2	
Good 3	follows the guidelines of well-being and working safety and prevents the safety risks in work; acts aseptically; knows the facts of infection prevention and may give new solutions; knows how to use common equipment in work aseptically; notices the

	aggressive clients behaviour and can meet him/her; knows the working places safety plan; knows the basics of the risk handling and acts with it; works as a member of working team; understands the basics of ergonomics
Good 4	
Excellent 5	follows the guidelines of well-being and working safety both prevents the safety risks in work and develops more solutions; acts aseptically; knows the facts of infection prevention and may give new solutions and development ideas; knows how to use common equipment in work aseptically and safely; notices the aggressive client's behaviour can meet and calm him/her; knows the working places safety plan; knows the basics of the risk handling and may also act independently; works as a reliable member of working team

## 5.2 Assessment and criteria in Estonia:

<b>Assessment criteria</b>
Describes different agents and their responsibilities on offering various services. Describes how persons under care can receive their services at home and in institutions. Describes what kind of services can be provided to people under care and how to apply.
Compiles suitable service/ benefits system to patient/ client according to the needs of the patients and relying on the data of previous assessments and plans inc care plan. Compiles suitable network to patient/ client which includes the roles of important members at the network and it takes into consideration individuality of each patient/ client. Co-ordinates information flow between all members of the network on time. Supervises client/ patient on applying one service/ benefit according to the service plan and care plan.
Formulates the aim of logistics by using logistics terminology to visualize the the systematic processes. Explains the importance of managing information flow and points out the surplus value in processes. Explains the risks connected with logistic processes and shows the possibilities to prevent these risks. Plans and manages shelving services Carries out stock management tasks

## 6 TRAINING PLAN, STUDENT WORKLOAD

The vocational level study modules will be piloted at TTHK in Tallinn (logistics study module) and at Salpaus in Lahti (healthcare study module). These pilots will be targeted especially to the students of TTHK and Salpaus.

Tallinn Health College started the first pilot on week 35 with 14 students. Estonian piloting will last till week 2/2020.

Salpaus Further Education piloted in spring 2020, from 31<sup>st</sup> January to 28<sup>th</sup> February with 15-10 students. Logistic students study the basics of nursing and care in five contact days (4 hours) and 5 e-learning days. In pilot there were two nursing lecturers and they shared the topics together.

## 7 RECOMMENDED LITERATURE, MATERIALS AND WEBSITES

The recommended material varies also in both participant countries, because the students may not speak or understand English. That the reason for literature in national languages and links and websites.

### **Recommended literature in Finland:**

Hirvonen Kaisa jne 2017. Välinehuolto

Hovilainen-Kilpinen Tuula jne 2018. Lähihoitajan käsikirja

### **Useful links and websites in Finland:**

Suomen sairaalahygieneiyhdistys. <http://www.sshy.fi/>

Terveyden ja hyvinvoinnin laitos. [www.thl.fi](http://www.thl.fi)

Terveyskirjasto. [www.terveyskirjasto.fi](http://www.terveyskirjasto.fi)

Terveysportti. [www.terveysportti.fi](http://www.terveysportti.fi)

### **Recommended literature in Estonia:**

[Social Welfare Act](#); [Local Government Organisation Act](#), puuetega inimeste sotsiaaltoetuste seadus, [Health Services Organisation Act](#), [Health Insurance Act](#), võlaõigusseadus, perearsti ja temaga koos

**Töötavate tervishoiutöötajate tööjuhend; Procedure for drafting and amendment of a list of medicinal products of the Estonian Health Insurance Fund and the content of criteria for establishing the list and evaluators of compliance with the criteria, and establishment and rules of procedure of a medicinal products committee**

**Handbook on case management; Ülalpidamiskohustuse õigusanalüüs ja juhend KOvidele**

## 8 EXPERIENCES (TEACHERS, STUDENTS, STUDENTS FEEDBACK)

Feedback was collected after pilot study both in Estonian and Finland. The sample involved teachers and students.

### Finnish feedback:

In general students were satisfied with the course.

The sample consists of one group of vocational students (N=15), five female and ten men. Most of them were under 25 years old, all under 30 years. None of them had more than five years work experience. Still almost half of them had under five years' work experience.

Most of the students answered to all the recommended question. Their answers on scale from one to ten remained mainly between three and nine. Most of the students will recommend this learning unit to other students.

Most of the Finnish students felt that learning unit's duration and demands were sufficient. It was not too easy nor too difficult to study. The goals of learning unit were presented clear and they felt they got enough knowledge and skills on healthcare logistics. The knowledge, highlights and skills supported the education. The leaning units were well organized.

Learning methods also supported Finnish students learning. Lecturers excellent guidance were markable. Lecturer introduced the content, supported and quided student approximately more than well to take response of students own learning and gave opportunities to ask more questions in lessons. Lecturer also gave continues feedback on students learning process. The lessons were planned well and those supported learning goals and assessment.

Finnish students get good knowledge and skills to work as expert of healthcare logistics. They felt that their knowledge and skills has been developed excellent during this learning unit and they will recommend this further. Independent e-learning were implemented in Elsa and it was easy and simple to use.

To conclude Finnish students are very satisfied with learning units' pilot and they felt that they got enough knowledge and skills to work as healthcare logician or warehouse worker. The development of learning unit will continue after the feedbacks and those recommendations will be used carefully. The e-learning unit needs more visualization and then it could be used wider. Useable so, that student may study independent and lecturer just quide or train them web based. To get healthcare logistics education more comprehensive, it needs to get also e-learning module of basics of warehousing to online platform.

#### Estonian feedback

After the pilot training the feedback from students and teachers are collected. The sample included 20 students and five teachers. All students are on care workers curricula. They all learn on workplace-based learning group and their average age was 42. All respondents were women. All teachers are women, they background is logician, and policy.

The students and teachers received feedback sheets where they have to assess statements on 3 points scale: 1 = Not at all; 2= Somewhat; 3= Completely. In general, both students and teachers are very satisfied with the course.

The summery of the student's feedback.

First of all, we wanted to know about the content of the course: The statement: content of the course module is relevant received score 2,86. Only one comment was made:

*We cannot use it in everyday work*

High score (2,86) also received learning methods (statement: The learning methods of the course module support my learning).

comments:

*Not enough learning materials; We did not meet with some teachers (e-learning)*

Students were extremely satisfied with the guidance during the course module which supported their learning. It was assessed as 3.

Students also paid much attention to individual learning and this can also be seen in feedback. Statement: I have actively made an effort with my own learning during the course module was assessed by 2,92

*As much as possible*

Students skills and knowledge have developed during the course module according to the learning objectives as scored as 2,86

*Too little time for gaining new knowledge*

Teachers gave feedback to students learning, and the score for that statement was: 2,71

*Problems with information system;*

*Not all teachers gave feedback. (This comment was made twice).*

The amount of work required for completing the course module is in line with the number of ECTS (assessed by 3).

The assignments were appropriate for evaluating the learning outcomes (2,92).

*It was not always clear how the assessment procedure work.*

The contact day was/ contact lessons were well implemented (2,86).

As a whole student were very satisfied with the course, both the content as well as the organisational side.

*Well organized course*

*Everything was very good and interesting*

*Teachers were very nice and helpful*

*Everything was very useful*

*I got very important learning materials*

*New knowledge*

*Different assignments*

*The experiences of practitioners*

However, students also were a little bit confused about the course and the new profession suggested

*To tell the truth – a little bit strange and unknown knowledge*

*Lot of new information.*