Estonian general practitioner

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MAIN DISCOVERIES:

- Difficult to find replacements for holidays. GPs need to find replacements themselves.
- There is a lack of immediate one-on-one contact in most online training courses so she cannot ask questions.
- It is impossible to get a hands-on experience in online training courses.
- Trainings have to be practical (applicable to her job as a treatment method or a new medical device), not highly academic and theory-based speculations/research.
- Estonian medical system is highly digitalised.
- Some people exaggerate the seriousness of their condition.
- Patients are assessed using external observations (gait, weight, breathing, etc), and internal analysis (blood tests, blood pressure).
- Small medical practices do not have expensive and advanced medical devices. If needed, patients are referred to a hospital that has those devices.
- Entering appointment and patient's medical information into a digital system used in Estonia takes time (sometimes up to 3 h a day).
- GPs do not get a notification anymore if their patient visits an emergency room or calls an ambulance.
- Anti-vaccination movement is a problem. Although there are few people who are against vaccinating, they are loud and their fabricated information spreads throughout the Internet easily.
- Unvaccinated immigrants from Asia and Africa bring new diseases to Europe.
- There is a lack of medical professionals in Estonia.
- Centralised medical practices make it hard for countryside people with lack of transportation and ability to move to visit their GPs.

FINDINGS:

General

The interviewee works in the countryside in a solo medical practice (only one GP in the house). She meets her patients for about 4-6 hours a day. Left over time is dedicated to paperwork and documentation. Sometimes home visits are needed.

Before the appointments start, she checks the analysis results from the previous day. Usually, 20 minutes is allocated per patient. If visit takes less time, she can enter the gathered information

into a digital system before receiving the next patient. Otherwise it has to be done at the end of the work day. Sometimes this takes up to 2-3 hours.

GPs deal with almost every basic area of medicine: skin, lungs, inner organs etc. People are diagnosed based on external observations (*i.e. gait, movement, skin colour, eye white colour, birthmarks, fatness/obesity, breathing, hyperventilating*) and analysis (*blood pressure, blood tests, EKG*). Sometimes she also observes how people behave before entering or after exiting the building, because some patients tend to exaggerate the seriousness of their condition in the doctor's office.

Devices used at her practice: blood pressure meter, stethoscope (listening to lungs), otoscope (looking inside ears), machine that determines inflammation from the blood test, EKG (electrical activity of the heart). There is no point in having expensive and specific devices in a small medical practice. If needed, patients are referred to a hospital or medical centre with the appropriate devices. The maximum that the GPs could theoretically do is an X-ray.

White gown effect = patients get nervous when at the doctor's. I.e. blood pressure increases, thus measurements are higher and biased.

It is difficult being a solo GP in the countryside. She cannot check her diagnosis with a co-worker next door, but has to call to one in a further away hospital/practice.

Training

There are many medical trainings. The older generation is used to participating in a lecture physically, but last spring she had an online course in which she watched video lectures, read articles and took tests. She said it was very convenient because she did not need to leave her house. However, there was a lack of immediate one-on-one contact, so she could not ask questions from the lecturer. She proposed video calls (i.e. via Skype) as a possible solution to that.

In online courses, it is also impossible to get a hands-on experience.

Her last training was a conference filled with useful lectures. It had a huge wow-effect on her because she felt that the topics and teachings were extremely useful. She managed to make quite a lot of connections to her existing patients and took notes on who to refer to whom (which specialist).

She does not like plain theory, since it is difficult to apply that to her everyday GP job. Instead, she is interested in the practical side of training — things that are relevant for a GP and can be put

to use immediately after the lecture on her existing patients. In her terminology, **practical = in an** easy to understand language, not highly academic and theory-based speculations and research, but applicable to her job as a treatment method or a new medical device.

Some trainings provide participants with lecture slides, but she takes extra notes as well. While the most interesting things will be remembered, she also keeps her conspectus (lecture notes) at her workplace to refer to when needed.

Estonian digital medical system

In Estonia, the medical system is highly digitalised. There used to be paper-based referral notes if you needed to see a specialist doctor. Those were replaced by digital referral notes. Now, there is also a possibility to conduct a digital consultation in which the GP sends a letter containing patient's medical condition and symptoms to the specialist who decides based on the information provided how soon the appointment is needed. This system ensures that eager people with less serious problems get to the specialists later than those who really need it.

She has been using a computer for her work since 1998. At first, everything was mixed — partly written on paper and partly entered into a digital system. Now, everything is online in an environment called Digilugu (translation: DigitalStory). GPs use a program called Perearst2 (translation: GeneralPractitioner2) to enter the information. The program helps with statistics, documentation and communicating with Estonian Health Insurance Fund to give proof of their work.

However, the program does not show information about patient's visits to the ER (emergency room) and calls for medical emergency response team. If the patient does not tell this information themselves, the GP not search for it either because it will take time and is hard to find. In the old days, GPs would receive a pink paper slip from the ER with information about why their patient went to the ER.

Anti-vaccination movement

Sees this as a huge problem. Her area had a recent outbreak of measles. Some ship builders went to Indonesia/Philippines in April and came back with measles. In the laboratory, an analyst dealing with their analysis was infected and in turn infected an unvaccinated child at a kindergarten party due to not knowing he was infectious.

A bunch of anti-vaxxers sent her a letter requiring data regarding that case, but she did not comply because she felt that they would have misunderstood the information.

She thinks that there are not that many actual anti-vaxxers, but a group of people (she said Russians in Estonia) who just know how to make themselves heard using the Internet. They fabricate text content which spreads through the Internet like fire.

In her practice, only 1 person out of 1600 patients was not vaccinated before the measles outbreak.

Diseases spread because of open borders, globalisation, and immigration. Unvaccinated immigrants (incl. students, workers) from Africa and Asia bring new diseases to Europe.

Diseases also change. The disease is the same, but symptoms differ which makes it harder to diagnose.

Lack of GPs

There is a lack of doctors and GPs in Estonia, especially young ones and especially in the countryside. The youngsters do not come here because there are more interesting cases and challenges in big towns. In solo practices it is more difficult because you cannot do all analysis.

Lack of medical professionals makes it hard to find a replacement for vacation (needed for up to 28 days). GPs need to find the replacement themselves. She has got lucky the past 5 years and has managed to find replacements from residents (students who can prescribe medicine and treatment) or GPs on a mother leave.

Due to a lack of demand and doctors, the Estonian government wants to assemble the countryside medical practices to a centralised location. This makes it difficult for people without transportation or with difficulty moving to visit their GP.

Original notes (in Estonian):

Perearst Päevased vastuvõtud 4-6 h paberitöö, dokumentatsioon Kodukutsed

Koolitused Harjunud loengus käima vana põlvkond Eelmisel kevadel esimene e-koolitus Kuulasin arvutiloenguid, luges materjale, täitis teste Hästi mugav, ei pidanud kodust kaugele minema Täiesti sobilik Otsekontaktist puudus Skypeist puudus

10 aastat tagasi teleloengud Lektor tallinnas, tartus, Kures kuulasime Sõltus lektori häälest, ülekandest

Valdkond nahk, siseelundid, kõik asjad kopsud, esmaabi Puudu jääb käega katsumisest, seda videoloengus ei tee

Dick pic

Hästi praktilisi asju vaja Mida igapäevaelus kasutada Mida kasutusele võtta Teooria ei lähe peale

viimane koolitus Tallinnas Itk sisekliiniku konverents Hommikul vara algab Loenguid tihkelt Praktilised loengud vau-efekt, nii olulised asjad Seos patsientidega

Praktiline = maakeeles Saab kohe midagi rakendada ravimismeetodeid, uusi aparaate maatingimuses

Näitematerjalid slaidina

kliinik, igaaastane täienduskoolitus slaidid+video, küsimusi esitada ei saa, sest otsekontakt puudu Kõik erialad oma uut ja huvitavat loengusse panna Kolme päeva jooksul väga huvitavad loengud 6-21 Slaidid konspektina ees, saad märkmeid juurde teha

Ülihuvitavad asjad jäävad mällu Ülejäänud otsib konspektist üles

Kõike toimub perearsti juures

saatekiri, digitaalne saatekiri, e-konsultatsioon Kiri eriarstile, kes annab nõu, mis võib viga olla Eriarst helistab patsiendile, kutsub vastuvõtule sõltuvalt sellest, kui vajalikuks peab (kiirelt)

Diagnoos: Väline vaatlus Analüüsid

Väline vaatlus Kuidas uksest sisse tuleb, kuidas majast lahkub Liikumine Kõnnak (alkoholiprobleem Nahavärv Silmavalge (kollane silmavalge, kui sapiteedes takistused) Sünnimärgid Kaal (ala, üle) hingamine, hingeldamine

Vererõhu mõõtmine Valge kitli efekt

Abivahendid Vererõhuaparaaat Kuuldetorud Otoskoop (kõrvade jaoks) Verest põletiku määramine testi abil EKG Väikeses kohas pole mõtet palju varustust hoida Suuremates keskustes paremad

Arvuti alates 98- aastast Töö käis paralleelselt, osaliselt arvutisse, osaliselt haiguslukku Nüüd kõik digiloos Perearst2 programm

Statistika Dokumentatsioon Haigekassale tõestamine

Paberimajandus võtab aega Patsient 20 min Kui hästi, saab selle ajaga ka arvutisse kirjutatud Kui palju uurida, siis rohkem Mõnikord 2-3 h paberitööd Iga päev Enne töö algust süvenemine, analüüside vastused vaadata, digiloost vaatamine

Programmi tulevad vastused, aga ei näe, kas patsiendi juures on käinud kiirabi Vanasti tuli roosa paber, et inimesel käis kiirabi sellise hädaga Kui inimene ise ei teata, siis ei lappa arst läbi ka, ei leia üles

Vastuseid ei näe, kas käis või ei, peab ise otsima

Mürkrohelised = vaktsiinivastased Ümber veenmine väga raske SAI KIRJA pealkirjaga teabenõue Uunas terviseameti poole Aprillis laevaehitajad käisid indoneesias/filipiinidel Laboris üks haigestus Laborant nakatas lasteaia peo ajal, kui ei teadnud, et on nakatusohtlik Nakatas lapse, kes polnud vaktsineeritud Tahtsid andmeid vaktsineerimiste kohta Arst ei ole kohustatud vastama Andmeid oleks tõenäoliselt vääralt tõlgendatud

Eesti meediaruumis on venelased, kes toodavad vaktsiinivastast infot internetis Arvutikutid fabritseerivad tekste Tõelisi vastaseid on vähe, aga hääl on tänu info levikule tugev 1/1600 vaktsineerimata, nüüd hakkasid

aafrikas, aasias vaktsineerimata inimesed, immigrandid toovad puhangud sisse Haigustest on kuuldud, aga pole näinud ränne, piirid lahti, lihtne liikuda Haiguspilt on muutunud, haigus muutub, sümptomid erinevad '

Maal üksikarstidel raske, tahaks kolleegilt nõu küsida Tahaks maalt polikliinikutesse kokku viia Arste vähe, tahavad koondada (riik) Kaotab maa inimene, kellel pole transporti, kes ei jaksa tulla

Kui jännis, võtad telefoni, helistad sõbrale Teine mõtleb läbi, soovitab Helistad haigla kolleegile Perearstid kõiki uuringuid teha ei saa, max röntgen (kompuutrit, MRT-d ei saa)

Tunneb puudust noortest kolleegidest Arstide puudus Noored ei tule maakohta Raske soolopraksisesse Kõiki uuringuid ei saa teha, Trt, TIn põnevamad väljakutsed, põnevamad haiged Puudus puhkuse asendajatest

Maal tuleb asendaja ise leida On 5-6 aastat leidnud küll, hästi läinud Residendid (üldarstina lõpetanud, aga õpivad spetsialiseerumist edasi, retseptiõigus, tohivad asendada, üld 6 a) kolleeg, kes lapsepuhkusel