

world's first low-cost Al powered app & stethoscope for lungs



## Hello,

We're so excited to develop and present a solution to a major crisis affecting us all.

This deck provides a brief overview of the benefits LungPass can bring to every family - but especially to those with young children and the elderly.

Please don't hesitate to reach out with any question or if you want to discuss this opportunity in depth.

#### Helena Binetskaya

Healthy Networks OÜ CEO

## Respiratory

**2nd leading cause** of A&E visits and admissions



Pneumonia — 1st infectious cause of death among children, taking 850 000 lives each year



COPD — the only leading cause of death on the rise

#### diagnosis is often late



over 40% of pneumonia cases missed at first presentation to a GP

up to 70% of COPD exacerbations reported late by patients

# Current diagnostic tools lack either precision



# Current diagnostic tools lack either precision or access



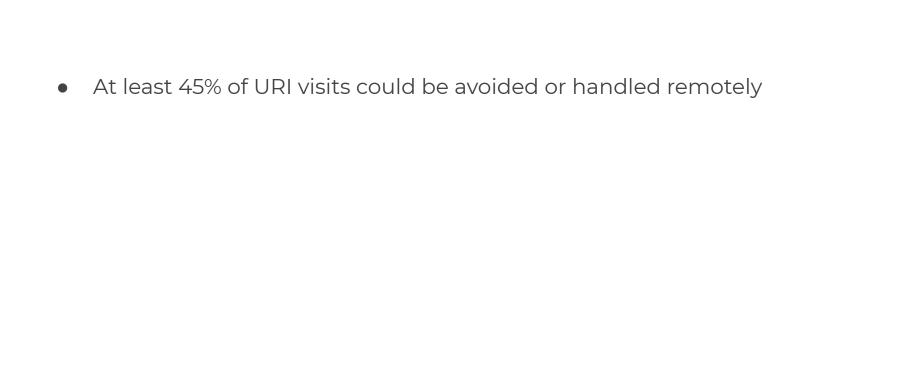
# Current diagnostic tools lack either precision or access

yet continue to grow as demand surges





What if accurate early detection system became massively available at primary care and community level?



Sruthi ReKarin Kallander, et al, Early identification and treatment of pneumonia: a call to action, The Lancet Global Health, DOI: https://doi.org/10.1016/S2214-109X(15)00272-7;

• At least 45% of URI visits could be avoided or handled remotely

And with timely treatment...

- Reduction in all-cause mortality due to pneumonia
- Up to 30% of COPD hospitalisations prevented

# LungPass — distinct improvement in lung disease management





Extremely affordable - 70 euro end-user price



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Popular with young mothers, used at home to mirror GP exam



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Al analysis of chest sounds - objective predictors of lung disease



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94% find it easy to handle

GP: "ALRI, stay at home, watch out for red flags"

Day 1 Day 5

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Symptoms worsen slightly. Observation continues at home until a noticeable deterioration

Day 1 Day 3 Day 5

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#### With LungPass

Crackles are detected. GP orders X-Ray >> confirms pneumonia

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Day

Day 3

Day 5

#### With LungPass

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## LungPass accuracy

in comparison with a panel of pulmonologists

	Accuracy	Sensitivity	Specificity
Normal	95.50%	96.88%	90.00%
Crackles	90.50%	92.50%	82.50%
Wheezes	97.50%	99.38%	90.00%
Artifacts	98.00%	98.75%	95.00%
Heart sounds	94.50%	97.50%	82.50%

## LungPass performance in pneumonia

'Regular' pneumonia, 148 patients

95% - LungPass revealed crackles, incl. cases with mild or unclear symptoms



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COVID-19, 61 patients

88.5% - LungPass revealed crackles v. 31% by GP

Control group, 90 records taken: 89 – normal breathing (true), 1 crackles (false)



## LungPass performance in COPD

30 self monitoring patient cohort

Change in sound pattern 7+ days prior to hospitalisation







## Commercialisation



Direct sales

Retail price  $\in 7$ 

## Commercialisation



Direct sales

Retail price

€70



Value-based procurement

DVG

Price determined by a tender scope

## Action plan

2020	<b>+</b>	2021	2022	2023
PoC pneumonia study results	D2C and B2G sales Eastern Europe	Validation studies pneumonia, COPD	FDA clearance, sales launch	100k lives bettered
	C-level relocation to Germany	EU clearance, sales launch		1m devices sold
		Integrated care program		

## Our mission —

## reduce global respiratory burden

by making early lung disease detection available to everyone

Join us in bringing LungPass to every home!



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