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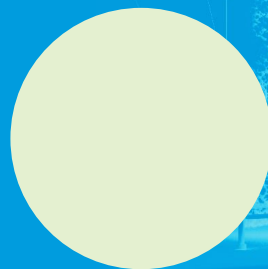
Si Speedinvest

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# Tooling the Physicians of the Future

European startups addressing clinical capacity  
bottlenecks

March 2023





**European early-stage venture capital firm investing in healthcare and tech.**

Inkef is a venture capital firm based in Amsterdam, backing promising early stage companies in Europe. Inkef takes pride in being a patient, long-term investor with the ability to support companies through several rounds of funding. From the early stages of being a technology or life science venture, Inkef supports entrepreneurs building their ideas into successful international businesses.



**Pan-European growth investor focused on the Healthtech sector.**

MTIP is a leading Swiss-based growth equity firm investing in European healthtech companies that aim to revolutionise global healthcare. We leverage our deep sector expertise to help the founders scale up successful and sustainable digital health businesses. Our mission is to empower healthtech innovation with the potential to transform lives and make a meaningful impact on the world.



**Pan-European early-stage venture capital firm with a dedicated Healthtech investment team.**

Speedinvest is one of Europe's most active Seed funds with 40+ investors based in Berlin, London, Munich, Paris, and Vienna. Our six sector-focused teams are the first to fund Europe's most innovative startups, and our in-house operational pros offer founders hands-on support throughout every stage of their journeys. Wefox, Bitpanda, TIER Mobility, GoStudent, and Wayflyer are among our portfolio of 250+ companies.



**Global startup & venture capital intelligence platform**

Dealroom.co is the foremost data provider on startup, early-stage and growth company ecosystems in Europe and around the globe.

Founded in Amsterdam in 2013, we now work with many of the world's most prominent investors, entrepreneurs and government organizations to provide transparency, analysis and insights on venture capital activity.

## Foreword.

“

***As healthtech investors, we strongly believe in the potential of digital technologies to revolutionize the way physicians work.”***

By equipping them with the necessary tools and resources to streamline administrative tasks, reduce stress, and save time, physicians can focus more on what matters most: providing the highest quality of care to their patients. We are proud to support companies developing innovative solutions specifically aimed at meeting the needs of healthcare providers and improving the physician experience in their daily practice.”



**Magdalena Plotczyk**

Associate  
MTIP

“

***It is crucial that we work together to unlock the full potential of digital tools in healthcare.”***

We fully support the development of tools to assist physicians and hospitals in providing care. However, we must also recognize the challenges that arise when integrating these tools into the healthcare system. These include navigating regulatory requirements, concerns around data privacy & security, ensuring that the technology is user-friendly, well integrated in the caregiver workflow, and compatible with existing systems.”



**Estelle Botbol**

Associate  
Speedinvest

“

***As the demands on healthcare workers continue to increase - from higher patient demands to greater administrative burdens and an aging society - we recognize the need for new business models that enable doctors to work more efficiently and effectively.***

With the rise of connected data, cloud computing, and generative AI frameworks like GPT and BARD, we're optimistic that doctors will be able to leverage these tools to better manage patient data and ultimately spend more time providing quality care to their patients.”



**Thys Cohen Tervaert**

Junior Partner  
INKEF Capital

## Why this report?

The healthcare environment – with its packed work days, demanding pace, time pressures, staff shortage and emotional intensity – is putting physicians and other clinicians at high risk for burnout.

Even before Covid-19, 40% of physicians said they felt burned out, due mostly to severe health workers shortages in the industry. The **pandemic was a tipping point**. Global health workforce shortage was estimated at 15 million health workers in 2020.<sup>1</sup> In the same year, 67% healthcare workers screened positive for burnout<sup>1</sup> and 34% of nurses had plans to leave their job.<sup>2</sup>

A study published in the [Annals of Surgery](#) found of physicians, who reported making a major medical error, 70% believed the cause was an individual (not system) factor such as burnout, which could have led to oversights.

Healthcare systems are also severely impacted. It's estimated physician burnout costs the US healthcare industry roughly \$4.6B a year because of higher staff turnover, reduced productivity, and quality of care<sup>3</sup>.

However, there is a silver lining as a new generation of tools is emerging. Proponents say artificial intelligence (AI) and digital health technologies can be used to help ease the burden on maxed-out MDs. Moreover, Big Tech is in an arms race to integrate this technology, with Microsoft and Google recently launching new tools aiming to help physician with their workforce.

In this report, we analyse the European startups tackling physician burnout and the tech solutions tooling the physicians of the future.

1. Source: <https://gh.bmj.com/content/7/6/e009316>

2. Source: <https://pubmed.ncbi.nlm.nih.gov/33861739/>

3. Source: <https://www.fiercehealthcare.com/providers/third-nurses-plan-leave-their-jobs-2022-survey-finds>

4. Source: <https://hbswk.hbs.edu/item/the-economic-cost-of-physician-burnout>

## A big thanks

Contributions and insights from conversations with:



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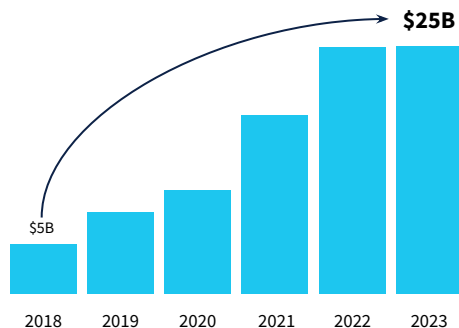
**Daria Gherghelas**  
Investment Analyst  
Speedinvest

# Key takeaways.

## European Physician Tools startups are now worth a combined \$25B, up 4.9x since 2018.

The cohort founded after 2010 is the largest by number of startups and concentrates over 80% of value. Doctolib, CMR Surgical and Dental Monitoring leading as the highest valued startups.

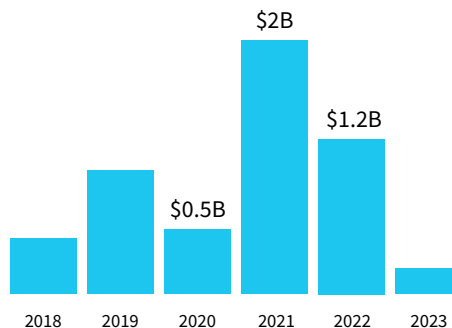
Combined enterprise value of European Physician Tools startups



## European VC investment into Physician Tools startups has increased 2.7x since 2018, to \$1.2B in 2022.

In 2022, European Physician Tools startups raised \$1.2B, although this is a 40% drop compared to full year 2021, it's still higher than 2020 levels. The UK leads by the largest number of startups and amount of VC investment raised since 2018, comprising over 30% of the total VC investment since 2018.

VC investment in European Physician Tools startups

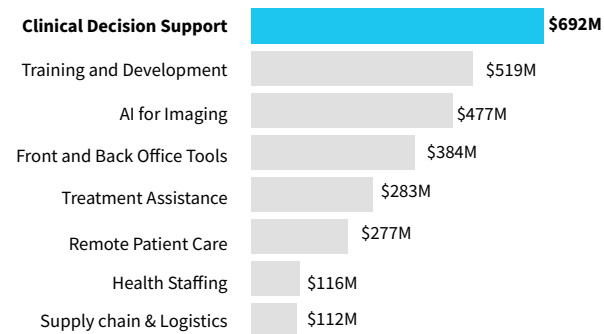


## Clinical Decision Support solutions attracted the bulk of investment since 2018.

Aside megarounds, Clinical Decision Support raised \$692M since 2018.

Training Assistance and Front and Back Office Tools concentrate over 50% of its VC investment in megarounds.

Segments by VC investment, excluding megarounds, 2018-2022



# Physician burnout has been increasing dramatically in recent years.

- The **burnout rates are dramatically increasing**: 53% in 2023, from 47% in 2021, and jumped 26% since 2018.
- Health care shortages are the main cause behind raising levels of stress.
- Physicians who specialized in emergency medicine, internal medicine and pediatrics were **more prone to suffer from higher levels of burnout** compared to their colleagues.
- In terms of demographics, **women** are also **most likely to report feeling of burnout** than men (63% vs 46%).
- Physicians stated that **bureaucratic tasks and admin burden** are by far the main driver of burnout.
- Burnout also takes a toll on physicians' personal lives and contributes to increasing in depression. Of those physicians reporting depression, **64% said job burnout was the primary reason.**

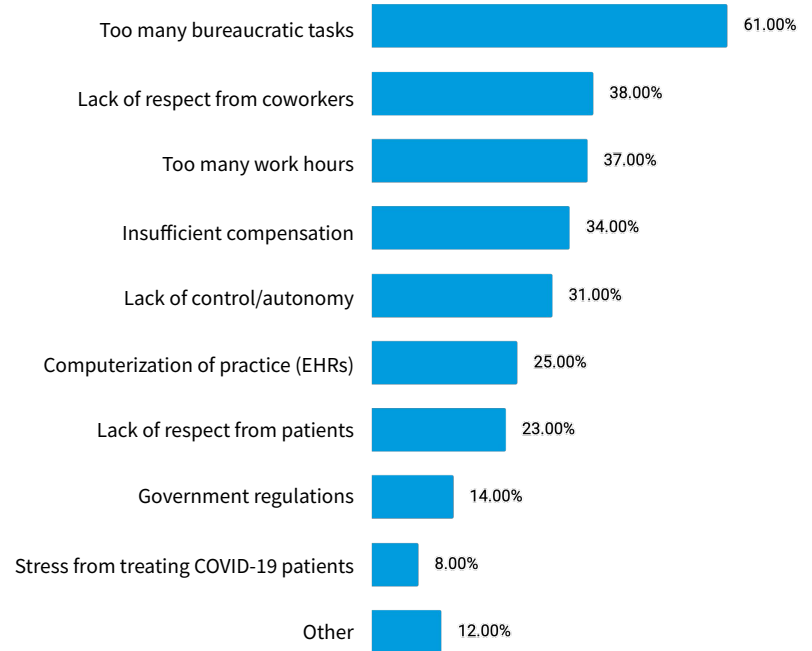
**53%**

of physicians said they are **burnout**

**1 in 5**

physicians reported experiencing **depression**

## What contributes most to your burnout?



## Number of doctors working in NHS over time.

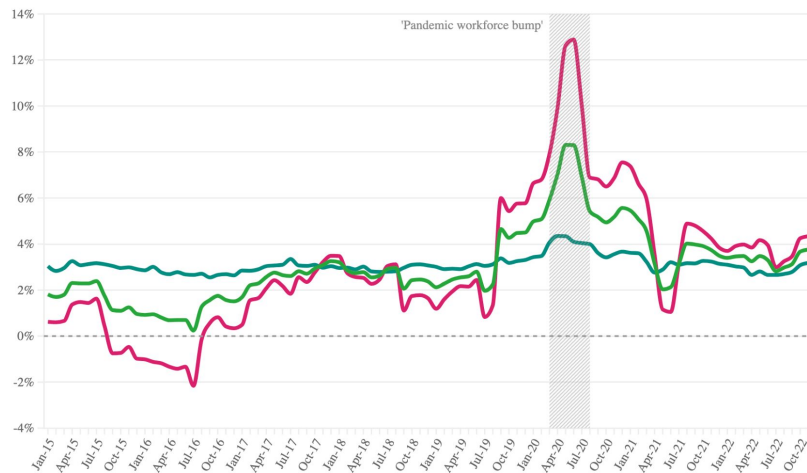
Overall, the number of doctors working in NHS (National Health Service) has not changed throughout the analysed period. The pandemic was a catalyst for a slight bump however the rate went back to previous levels right after July 2020.

Research shows the mounting pressures and declining staff wellbeing are key factors for the poor staff retention and insufficient growth in the medical workforce.

### Rate of growth in FTE number of NHS secondary care doctors

Percentage change since 12 months prior

■ Trainee doctors ■ Total ■ Fully qualified doctors



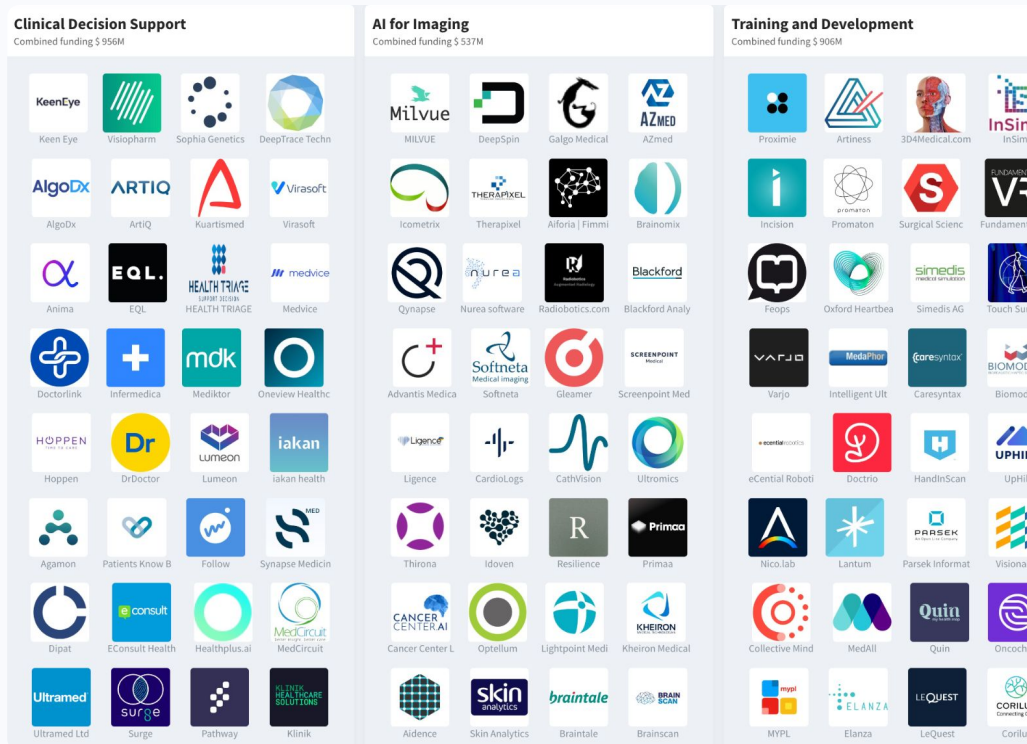
“An ever increasing burden is being placed on today’s healthcare providers (HCPs). High rates of burnout are leading both to workforce challenges and negatively impacting patient care. Novel approaches support workforce resilience and care delivery are urgently needed.”



**Max Denning**  
Medical Doctor  
NHS

# Physicians are looking for new ways to cope with clinical efficiency bottlenecks.

- Physicians have been adopting personal coping mechanisms such as exercise, talking and enhanced resting times. Also hospitals and health systems have been increasingly adopting different strategies to tackle burnout among health staff.
- Digital health tools have emerged in the last years as one of the key strategies to mitigate the workload of physicians and support their daily tasks in several ways.
- For this report, we identified over 350+ startups across 8 segments supporting physician and hospitals.



See full landscape



# We identified over 350+ startups across 8 segments supporting physicians and hospitals.

We analysed over 350+ European startups and classified them across 8 segments.

## Front and Back Office Tools

Tools that support clinical and administrative staff with reporting, document management, communication, appointments management and payments.

Doctors' Assistance



Communication Tools



Practice Software Management



Automated Consultation Preparation



## Clinical Decision Support

Evidence-based software using predictive analytics, AI, and ML, that help physicians in providing the highest quality of care while reducing the risk of errors.

Smart Triage



Clinical Workflow Solution



Clinical Data Management



Automated Prescription



## Treatment Assistance

Software and hardware systems that drive improved patient outcomes through enhanced care delivery.

Robotic Rehabilitation



Surgical Robotic



## Training & Development

Tools that help healthcare professionals acquire the knowledge, skills, and competencies to effectively do their jobs.

Cognitive Simulators for Surgical Training



Medical Learning



## Health Staffing

Software tools that help healthcare facilities to manage the hiring, scheduling, and tracking of medical personnel.



## AI for Imaging

AI tools that assist in the analysis of medical images for the detection, diagnosis, and treatment of medical conditions.



## Supply Chain and Logistics

Systems and processes used to coordinate the flow of goods, services, and information from suppliers to healthcare providers and patients.

Medical Inventory Management



Medical Transportation



## Remote Patient Care

Technologies enabling to deliver healthcare remotely and to monitor patients' health outside of clinical settings.



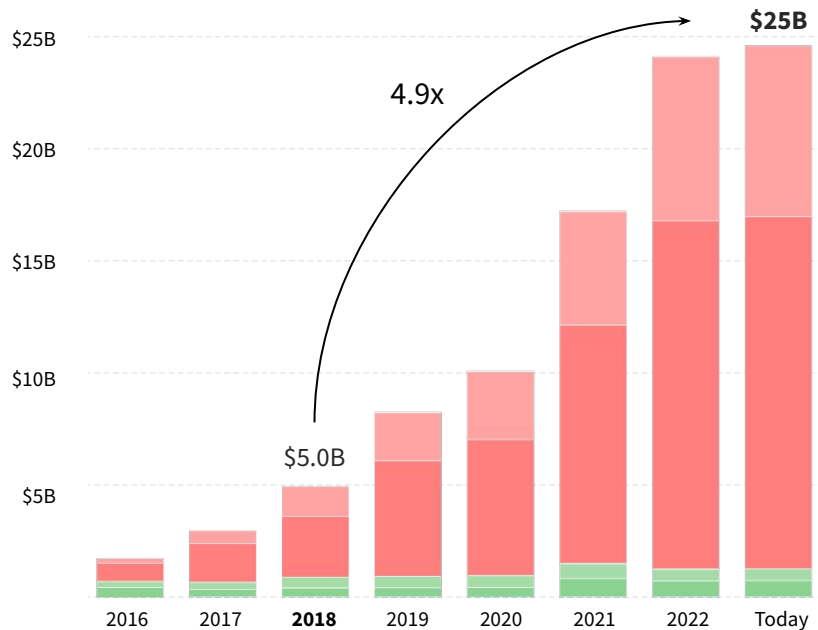
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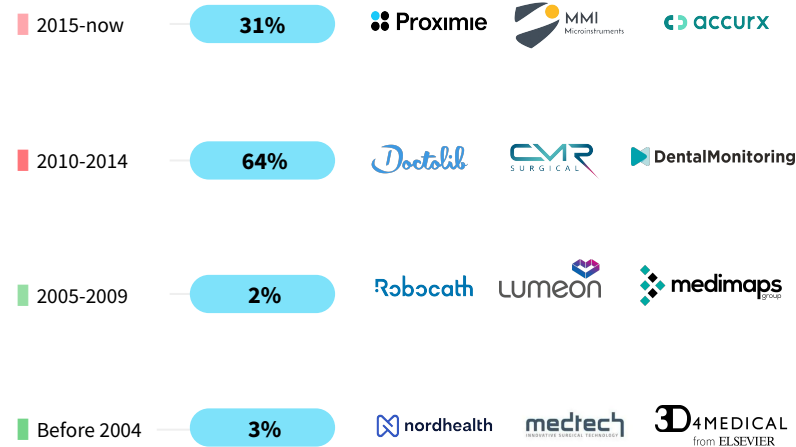
# Physician Tools startups are now worth \$25B, up 4.9x since 2018. The cohort of companies founded since 2010 concentrate over 90% of value.

## Combined enterprise value of European Physician Tools startups\* [» view online](#)

Enterprise value per launch year

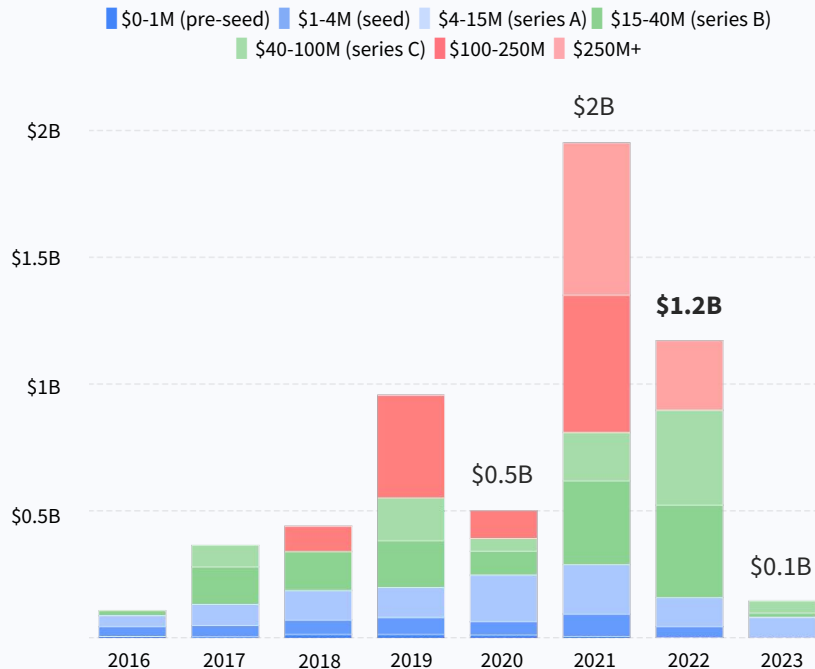


Cohorts: Share in 2023



# Physician Tools startups raised \$1.2B in 2022, their second best year on record. 2021 combined pandemic-driven urgency with a global high water mark in venture capital.

## VC investment in European Physician Tools startups\* » [view online](#)

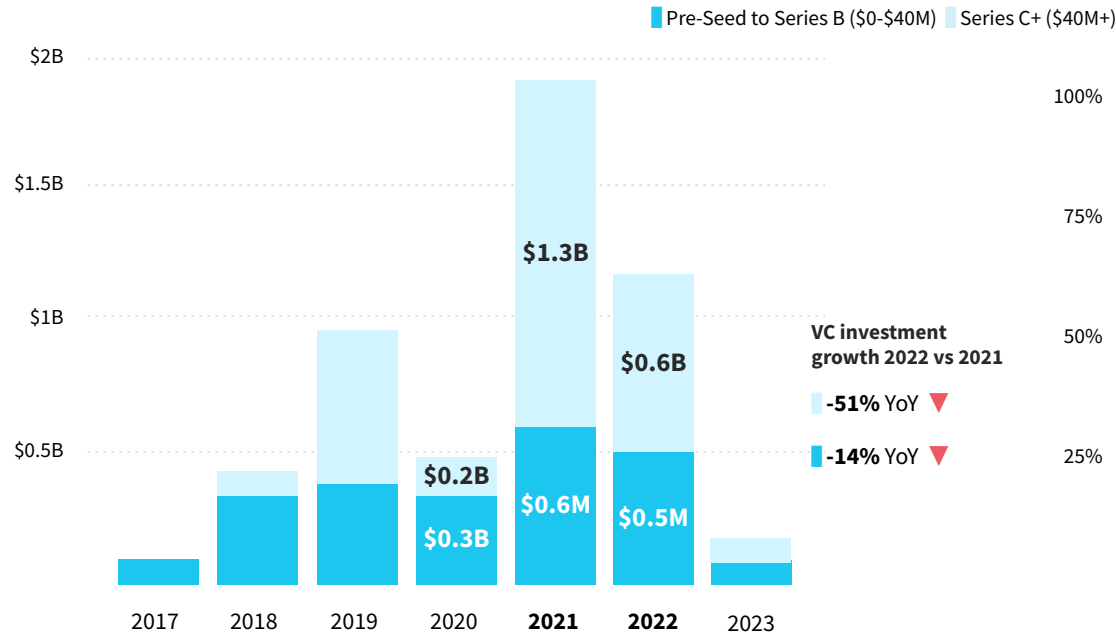


## Largest rounds in 2022 » [view online](#)

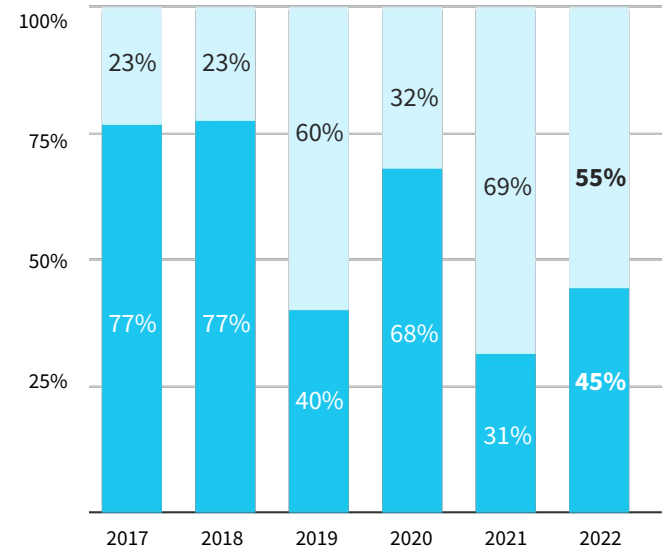
NAME	INVESTORS	MARKET	LOCATION	VALUATION
<b>Doctolib</b> Transforming healthcare through t...	General Atlantic Bpifrance Eurazeo	health health platform	Levallois-Perret, France	\$6.4b
<b>DistalMotion SA</b> Removes the complexity out of ro...	415 Capital Revival Healthcare Capital	health robotics medical devices	Epalinges, Switzerland	\$360–540m
<b>Proximie</b> Health technology platform that u...	Eight Roads Ventures SoftBank F-Prime Advent Life-Sciences Emerson Collective	health health platform medical devices	London, United Kingdom	\$320–480m
<b>Medical Microinstruments S.p.A. (MMI)</b> A developer of novel robotic soluti...	Fountain Healthcare Partners Panakès Partners RA Capital Management Andera Partners Sambatech Srl	health robotics medical devices	Italy	\$300–450m
<b>Wandercraft</b> Develops robotic innovative wheel...	Bpifrance Eurazeo LBO France Cemag Invest Quadrant Management	health robotics medical devices	Paris, France	\$180–270m
<b>Resilience</b> Building a software-based solutio...	Seaya Cathay Innovation Picus Capital Exor Seeds MACSF	health health platform	Paris, France	\$176–264m

# The decrease in VC investment was more pronounced in late-stage investment, while early to mid-stage investment is holding up far better in comparison.

VC investment in European Physician Tools startups by round size\* » [view online](#)



Distribution of VC investment by round size



# Where are Physician Tools startups based?

Where are the Physician Burnout startups based?

< 10 10-20 20-30 30-40 ≥ 40

## United Kingdom

80+ startups, 2 future unicorns, 1 unicorn:



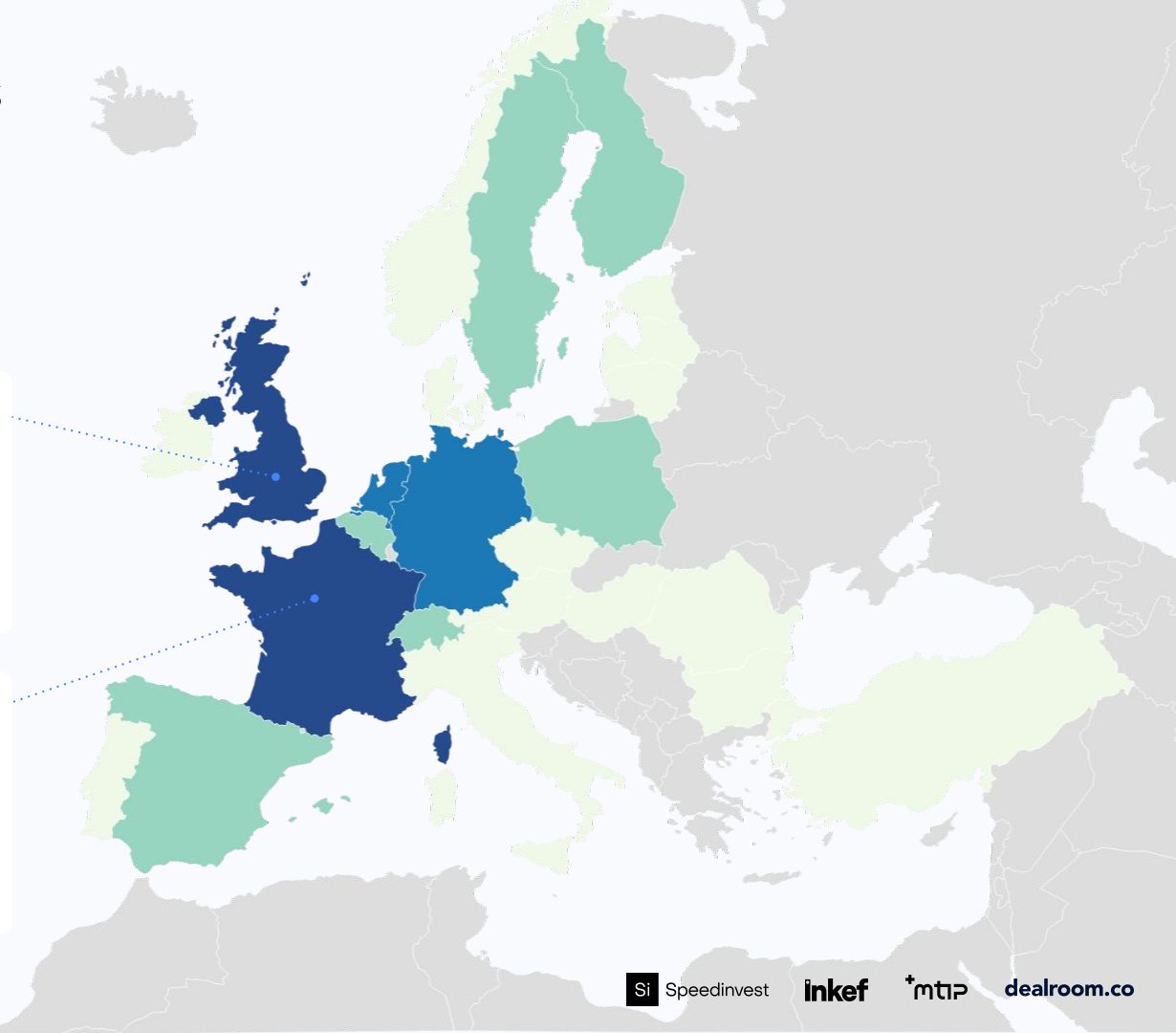
[» view online](#)

## France

60+ startups, 3 future unicorns, 2 unicorn:

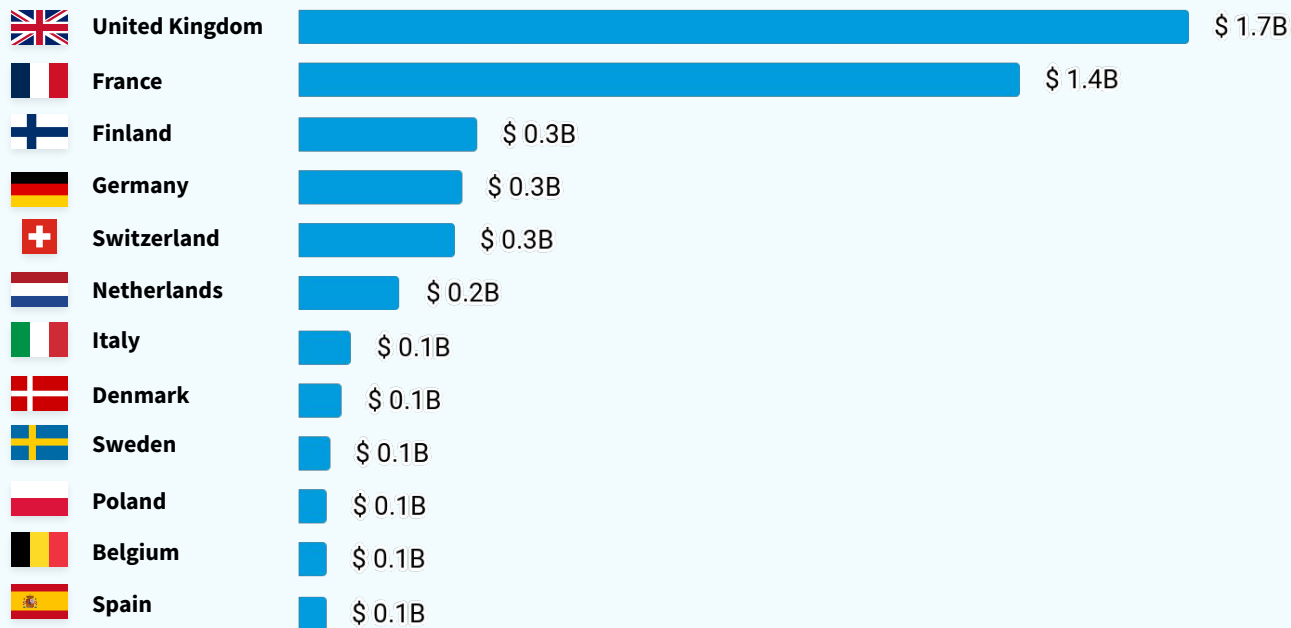


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# The UK is the largest country by investment, comprising over 30% of all VC investment since 2018.

VC investment in Physician Tools startups per country  
Cumulated investment 2018-2022

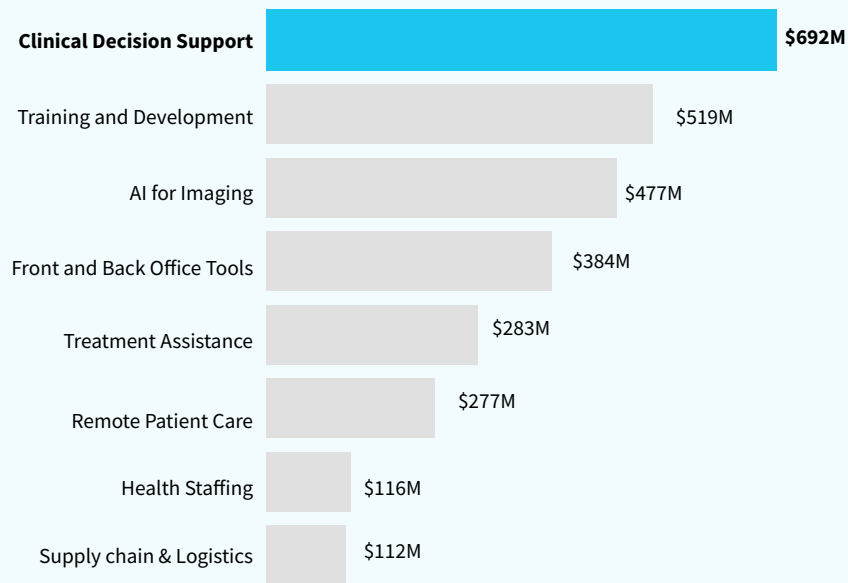


# Most active investors.



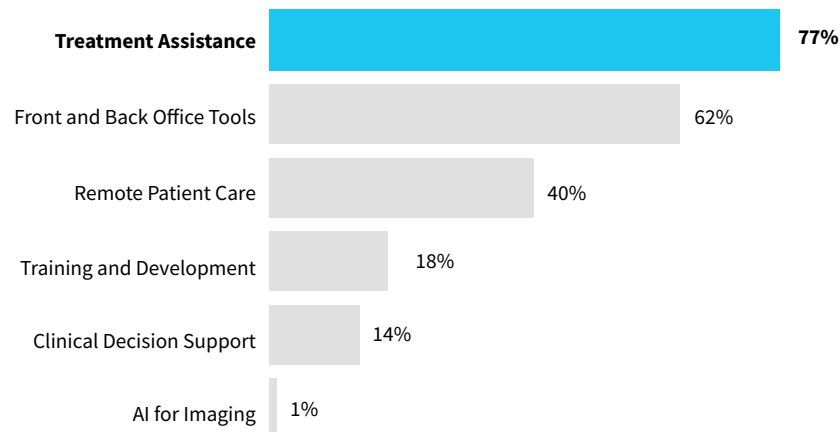
## Excluding megarounds, Clinical Decision Support startups see the bulk of investment in the last 5 years with \$692M.

Segments by VC investment, excluding megarounds  
2018-2022



## Over 50% of VC investment raised by Treatment Assistance and Front & Back Office solutions is concentrated in megarounds.

Share of megarounds in total VC investment per segment,  
2018-2022



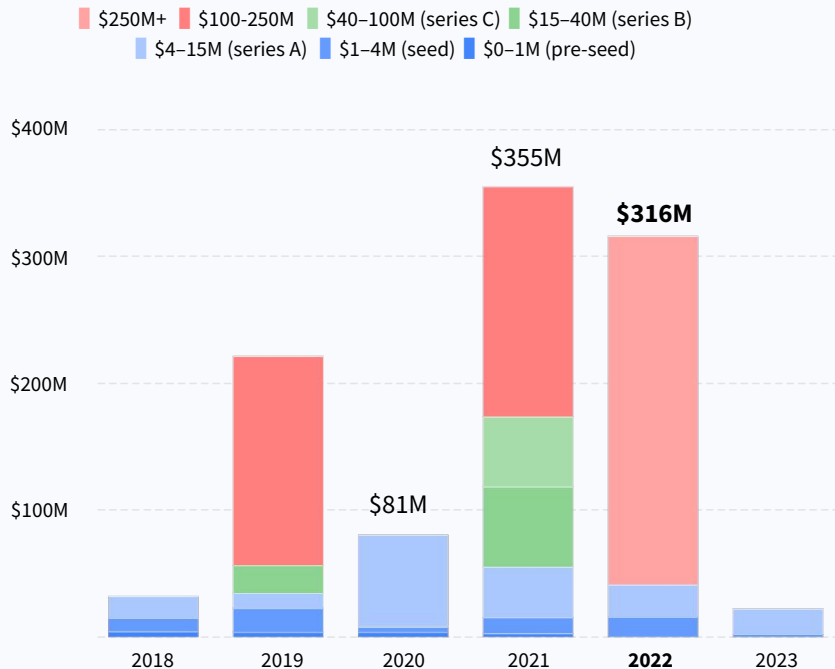




## Back and Front office tools

# Front & Back Office Tools is the widest segment of startups tackling clinical inefficiencies.

### European VC investment in back and front office tools [» view online](#)



**70+**  
startups

**70+ startups** with a combined enterprise value of **\$8.5B, up 16.1x since 2018**, and comprising over 30% of all value of Physician Tools startups.

**\$316M**  
VC investment raised in 2022

After a record \$355M raised in 2021, **\$316M** raised in 2022, down 11% year on year.

### Most funded Back and front office tools startups by VC investment since 2018



» Explore all **Back and Front Office Tools** startups

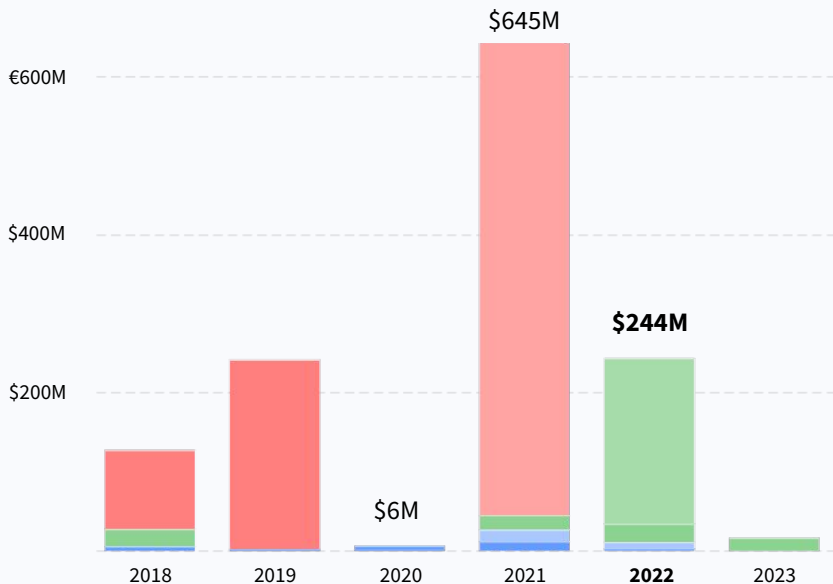
Explore list



# Treatment Assistance startups attracted the highest investment in the last five years.

## European VC investment in treatment assistance tech » [view online](#)

■ \$250M+ 
 ■ \$100-250M 
 ■ \$40-100M (series C) 
 ■ \$15-40M (series B) 
 ■ \$4-15M (series A) 
 ■ \$1-4M (seed) 
 ■ \$0-1M (pre-seed)



20+ startups

60+ startups with a combined enterprise value of \$2.7B, up 2.1x since 2018.

\$244M VC investment raised in 2022

\$244M raised in 2022, down 62% year on year, but still 95% higher than in 2018.

### Most funded Treatment Assistance startups by VC investment since 2018



» Explore all Treatment Assistance startups

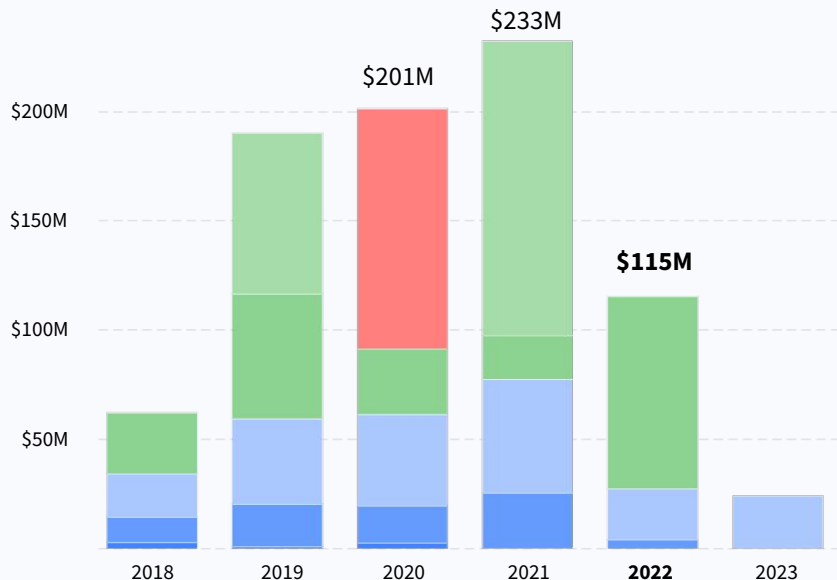
Explore list



# Clinical Decision Support startups are 2nd in number of startups, 3rd in VC investment since 2018.

European VC investment in clinical decision support tech [» view online](#)

■ \$250M+ 
 ■ \$100-250M 
 ■ \$40-100M (series C) 
 ■ \$15-40M (series B) 
 ■ \$4-15M (series A) 
 ■ \$1-4M (seed) 
 ■ \$0-1M (pre-seed)



60+ startups

60+ startups with a combined enterprise value of \$2.7B, up 2.1x since 2018.

\$115M VC investment raised in 2022

\$155M raised in 2022, down 51% year on year, but still 84% higher than in 2018.







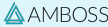




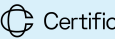

















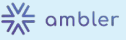
## Most funded Clinical Decision Support startups by VC investment since 2018



» Explore all Clinical Decision Support startups

Explore list

# Prominent startups that emerged in the last years building tools for physicians in Europe.

Unicorns								
Future unicorns	 		 		 			
Rising Stars	   	  	  	   	 	  	 	 
<p>Identified with <b>dealroom SIGNAL</b></p>	<p><b>Front and Back Office Tools</b></p>	<p><b>Clinical Decision Support</b></p>	<p><b>Training and Development</b></p>	<p><b>AI for Imaging</b></p>	<p><b>Treatment Assistance</b></p>	<p><b>Remote Patient Care</b></p>	<p><b>Health Staffing</b></p>	<p><b>Supply Chain and Logistics</b></p>

