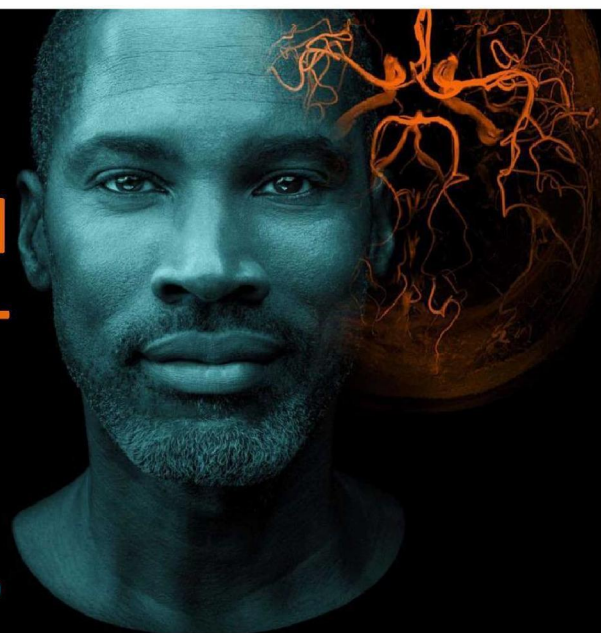
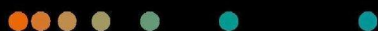




Platform for optimized organization of COVID-19 vaccination

Information on Test and Vaccination Analytics
November 18, 2020



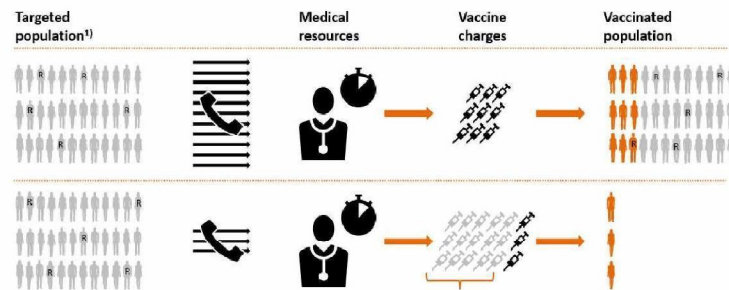
Challenge for ministries, health authorities and health insurances to effectively distribute and manage vaccination

Target Group - global

Ministries, Health Authorities & Health Insurances

Challenge

How to best utilize **the limited supply of vaccines** in order to **minimize the impact of the epidemic** and allocate the existing infra-structure **without wasting resources**

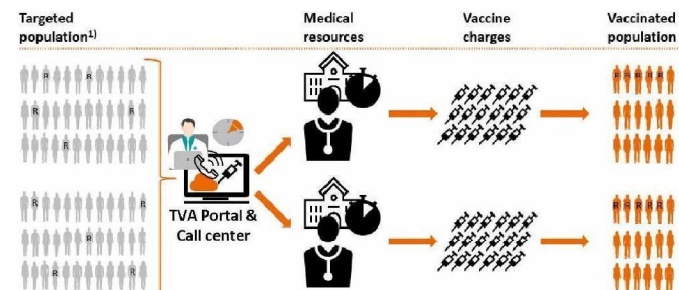


¹⁾ Whole population, including citizens non-tested or healthy citizens, R: risk group (elderly citizens, patients with pre-existing conditions, essential workers e.g. doctors, nurses, police, teachers)

This service is under development and not commercially available. Its future availability cannot be ensured.

Solution

Effective distribution and optimized management of population vaccination by **prioritizing risk groups and regions** through the **digitalization of the immunization process**

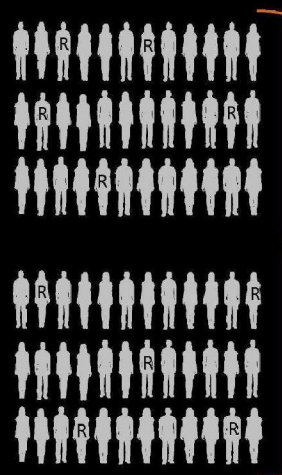


¹⁾ Whole population, including citizens non-tested or healthy citizens, R: risk group (elderly citizens, patients with pre-existing conditions, essential workers e.g. doctors, nurses, police, teachers)

Optimized vaccination through digitized vaccination management powered by smart vaccination intelligence



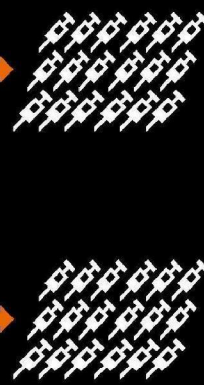
Population
(risk group¹ 40%)



Medical Resources /
Vaccination Centers



Vaccine
amount



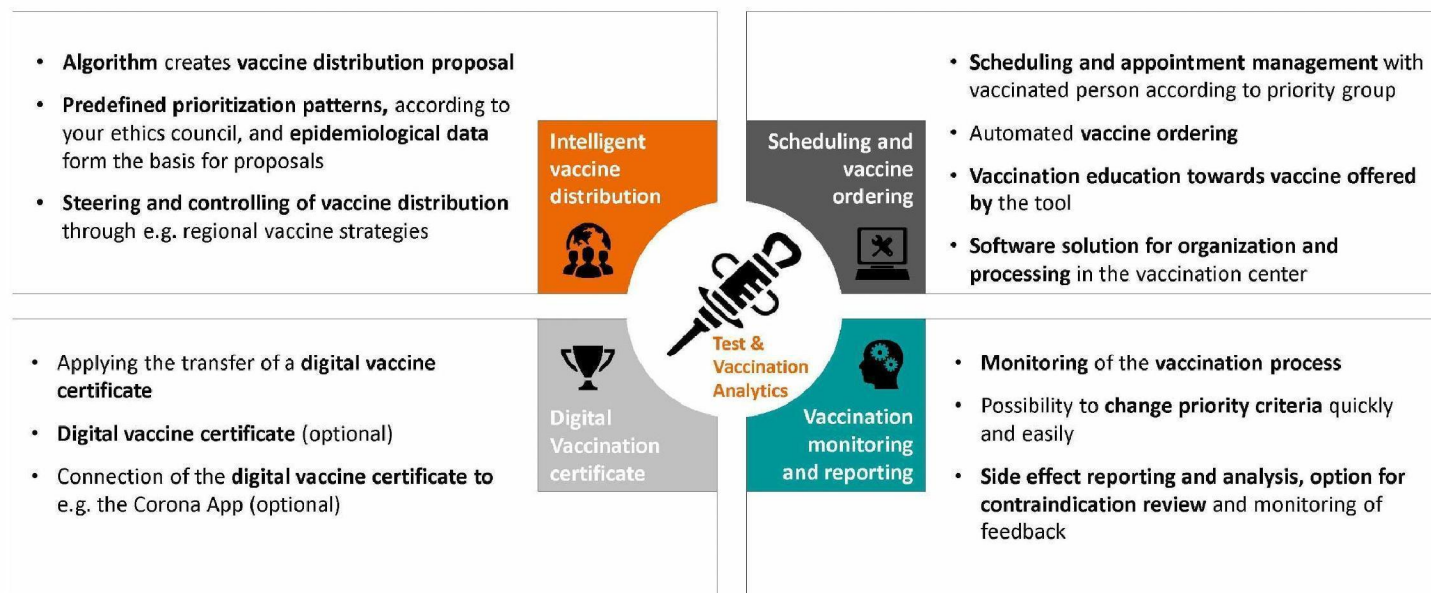
Vaccinated
patients



¹) R= risk group

This service is under development and not commercially available. Its future availability cannot be ensured.

One solution provides the answer to four challenges in vaccine distribution



This service is under development and not commercially available. Its future availability cannot be ensured.

Dashboard on overview of vaccination allocation in different regions and simulation of vaccination strategy - Prototype



Vaccine Distribution & Monitoring

Open Home Medical Company

Search for location

42,712 new cases

Updated: Mar 3, 2021 - 10:42:56 - Source: MERSO (Germany) 2020

Total Vaccines Released

210K

- Release 5 - March
Mar 2, 2021 - 08:24:56
- Release 7 - Late February
Feb 26, 2021 - 06:20:36
- Release 6 - Early February
Feb 8, 2021 - 08:21:36
- Release 5 - Late January
Jan 20, 2021 - 09:24:56
- Release 4 - Early January
Jan 6, 2021 - 08:24:56

Create New Release

Germany
Updated: Mar 3, 2021 - 10:42:56 - [Refresh](#)

512K Cumulative Cases
Reported yesterday: +2,712

52,344 New Cases (14 days)
Open: 27 - Jan 4

10,305 Deaths
Reported yesterday: +34

354K Vaccinated
Reported yesterday: +11,382

23,400 Open Vaccination Slots
Slots/Week

42,650 Booked Vaccination Slots
Slots/Week

56,340 Registered in Waiting
Slots/Week

75,000 Release 8 - March
Mar 2, 2021 - 08:24:56

Vaccines allocated based on priority, rate of each region.
Vaccination activities compiled to a managed vaccination strategy.

Simulation Dates:
Mar 2, 2021 - Apr 3, 2021

Region	Allocation & Slots	Outcomes	Status	Alerts
Nürnberg Kreisfreie Stadt	5000 Vaccines 2 Centers: 2500 each 700 Total Slots / Week	Cases: -12,242 ▲ 19.92% Deaths: -34 ▲ 88.02%	Open Slots: 342 Booked Slots: 728 Registered: 874	Uptake slow, 10% slots open for next week.
Erlangen Kreisfreie Stadt	2400 Vaccines 1 Center: 2400 each 520 Total Slots / Week	Cases: -8,426 ▲ 24.36% Deaths: -12 ▲ 32.16%	Open Slots: 128 Booked Slots: 426 Registered: 874	
Nürnberg Kreisfreie Stadt	5000 Vaccines 2 Centers: 2500 each 700 Total Slots / Week	Cases: -12,242 ▲ 19.92% Deaths: -34 ▲ 88.02%	Open Slots: 342 Booked Slots: 728 Registered: 1,242	Vaccination supplies end in 2 weeks
Erlangen Kreisfreie Stadt	2400 Vaccines 1 Center: 2400 each 520 Total Slots / Week	Cases: -8,426 ▲ 24.36% Deaths: -12 ▲ 32.16%	Open Slots: 128 Booked Slots: 426 Registered: 874	Large number of No-Show?
Nürnberg Kreisfreie Stadt	5000 Vaccines 2 Centers: 2500 each 700 Total Slots / Week	Cases: -12,242 ▲ 19.92% Deaths: -34 ▲ 88.02%	Open Slots: 342 Booked Slots: 728 Registered: 1,242	
Erlangen Kreisfreie Stadt	2400 Vaccines 1 Center: 2400 each 520 Total Slots / Week	Cases: -8,426 ▲ 24.36% Deaths: -12 ▲ 32.16%	Open Slots: 128 Booked Slots: 426 Registered: 874	High number of At-Risk individuals
Erlangen Kreisfreie Stadt	2400 Vaccines 1 Center: 2400 each 520 Total Slots / Week	Cases: -8,426 ▲ 24.36% Deaths: -12 ▲ 32.16%	Open Slots: 128 Booked Slots: 426 Registered: 874	

Nürnberg Kreisfreie Stadt
Updated: Mar 3, 2021 - 10:42:56 - [Refresh](#)

15,234 Vaccinated
Reported yesterday: +248

342 Open Vaccination Slots

728 Booked Vaccination Slots

1,242 Registered in Waiting

Vaccination Center	Allocation & Slots	Status	Alerts
Vaccination Center 1 Volkswirtschaftsbau-Gemeinschaft Frauenheimmauer 42, 90402 Phone: +49 911 221459	2500 Vaccines 350 Total Slots / Week	Open Slots: 240 Booked Slots: 422 Registered: 842	Uptake slow, 10% slots open for next week.
Vaccination Center 2 Volkswirtschaftsbau-Gemeinschaft Frauenheimmauer 42, 90402 Phone: +49 911 221459	2500 Vaccines 350 Total Slots / Week	Open Slots: 240 Booked Slots: 422 Registered: 842	Uptake slow, 10% slots open for next week.

Demographics

■ Scheduled ■ Registered

Population Cohort

- Healthcare Workers: 551,333
- Older Adults (65+): 137,127
- Older Adults (Not at risk): 162,716
- Groups with comorbidities: 28,145

Population Cohort Coverage

- Healthcare Workers: 348 Vaccinated (59% Scheduled)
- None

This service is under development and not commercially available. Its future availability cannot be ensured.

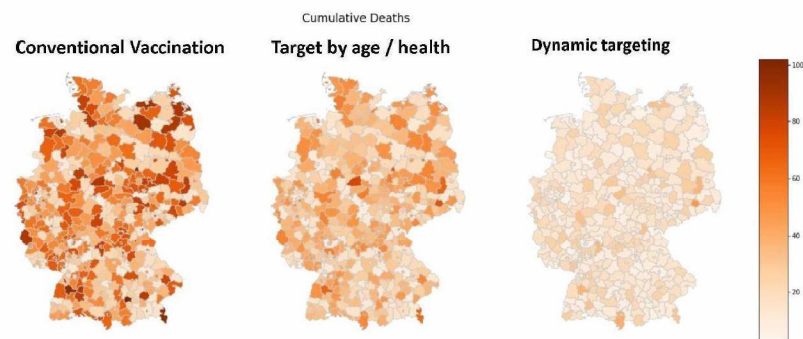
Unrestricted © Siemens Healthineers, 2020

How are we addressing the dynamics of an epidemic in the vaccination distribution intelligence?



Smart Vaccination

Vaccination algorithm simulation (deaths)



Using big data to improve targeting

- Dynamic epidemic → Outbreak locations constantly changing
- Focus on age groups or pre-existing conditions not enough
- Regional outbreak dynamics data improve mortality/costs by up to 30%

This service is under development and not commercially available. Its future availability cannot be ensured.