VaccineGuard MobileFirst Pilot Network

The VaccineGuard Pilot Network provides organizations with a Network for Proof of Concepts and Pilots. This network mimics the production VaccineGuard MobileFirst Network, but does not include sensitive data, real names of organizations and production SLAs.

Why participate in the Pilot Network?

The VaccineGuard MobileFirst Pilot Network connects actual Vaccine Value Chain Participants for trials, Proof of Concepts, and tests. These include real Vaccine Manufacturers, State and National Governments, and Health Organizations, testing and working together to strengthen the production VaccineGuard MobileFirst Network. Once onboarded, you can exchange data with actual participants.

How to get access?

Enrollment is as simple as providing a desired organization name, emails, and the type or types of Roles requested. An example form is illustrated below:

Desired Organization Name: _____

User Names / Emails: _____

Entity Types Requested

Public Health Authority Platform Governance	Public Health Authority Distribution Insights	Public Health Authority Vaccination Reporting
☐	☐	☐
Vaccination Administrator	Verifying Entity	Patient
☐	☐	☐

What will you Expect?

Once processed, the requester of the Pilot Network email will receive the information for your new VaccineGuard instances. This will include a dedicated instance for your organization for each the various Entity Types requested.

Logins and URLS will be provided as well as a welcome document and how to start participating in the video.

Once logged in, participants can begin right away, with pre-populated data and a live Network with constant data exchange.

Participation with other organizations is easy, as data can be exchanged with each organization and the list of participants constantly updated as new organizations join.

What do I Need?

A web browser - The VaccineGuard Pilot Network allows organizations to start participating as quickly as possible with no setup time or infrastructure to create. For more involved trials, such as on premise installations, VaccineGuard can be set up to support this as well.

How long do I get access?

The standard Pilot lasts 30 days. This provides enough time for participants to feel comfortable with the platform and provide feedback for the production version.

What do I do after the Pilot?

After the Pilot, transitioning to the production version is simple and straightforward. The participants will be on-boarded in a very similar way and gain access to the production network.

VaccineGuard

VaccineGuard

It is a **digital platform** for interoperability and data provenance verification, connecting different participants in the vaccine ecosystem (vaccine manufacturers, hospitals, public health authorities, certificate providers, wellness app providers, citizens, border guards, visualization providers, insurance companies). It provides **end to end verification of data and actions across multiple systems** that are all integral to vaccination delivery across organizational boundaries and international borders.

The overall goal of the product is to enable social and economic interactions within and across national borders without health-related restrictions. VaccineGuard supports **secure and reliable vaccine distribution** for **well-coordinated vaccination campaign** in combination with privacy-preserving facilitation of **globally recognized Vaccination Certificates**.

In order to create trusted Vaccination Certificates, authorities overseeing the implementation of as well as organizations involved in distribution and administering of vaccines need **trusted and real time situational information and assurance** about:

1. The vaccines being used are authentic and effective.
2. The vaccination campaign is deployed efficiently and without waste.
3. The Vaccination Certificates are based on real vaccines and real vaccination.
4. The Vaccination Certificates are globally provable for an identifiable person with protected privacy.
5. All the above is independently provable in real time to target vaccination goals and enable social interactions.

In order to achieve these goals, VaccineGuard provides functionality for different user groups with different perspectives to execute their tasks in an interlinked manner throughout the value chain. These user roles and relevant functionalities are listed below.

1. Health Authorities

Health Authorities are national, state, or local authorities responsible for overall organisation tracking and managing vaccinations and the policies for the Vaccination Certificates.

VaccineGuard provides capabilities for Ministries of Health or national, state, or local government agencies to gain vaccine distribution insights, report on vaccination progress, and manage the Vaccine Administrators. These functions explained in more detail below:

Vaccine Distribution Insights

VaccineGuard enables planning, managing and oversight of the distribution of Vaccines. This enables Public Health Authorities to

1. Verify and Inventory vaccines
2. View and prove the origin of vaccines throughout the supply chain.
3. Manage and report distribution of vaccines.
4. Get alerts and report on possible counterfeits or diversion within the supply chain.

Vaccination Insights

VaccineGuard enables real time reporting for parties responsible for tracking and reporting on vaccination targets and any variances of those goals. This enables a single point of truth of Public Health Authorities for aggregating data and tracking in real time:

1. Overall vaccination coverage and progress vs target vaccination rate.
2. Vaccination coverage by predefined patient groups or ad hoc analytical insights.
3. Vaccination efficiency (time, waste) and accountability (priority and target management).
4. Predict and manage vaccine supply needs by location.

Vaccination Platform Governance

Public Health Authorities will be responsible for rolling out the mechanisms to achieve the overall goals. VaccineGuard provides a simple, inclusive and scalable platform for Public Health Authorities to deploy and maintain. The PHA are responsible for vetting and onboarding other parties within their authority boundary, for example a national level, throughout the ecosystem.

1. Vetting and Onboarding of all users/roles of the Vaccination Platform, including Health Organizations (Clinics / Vaccination Centers) performing vaccinations and issuing Vaccination Certificates
2. Overseeing the basic operation of the different entities in the value chain
3. Enabling Patients to obtain mechanisms such as mobile apps for participation.

2. Health Organizations

Health Organizations are hospitals, clinics and vaccination centers that are vetted and approved by the Public Health Authorities for administering vaccines. The role of a Health Organization can also be performed by an authorised health data processor that maintains records on vaccinations - for issuing certificates and contributing to the distributed reporting between vaccination platform users.

VaccineGuard eases the burden for these organizations by simplifying the processes and reducing error rates; it also enables traceable and accurate administration of vaccines linked with verifiable vaccination certificates. These functions are explained in more detail below.

Vaccine Stock Management
VaccineGuard enables planning, management and oversight of the vaccine stock of the Health Organization. This includes:
1. Making orders for vaccines.
2. Verifying the origin of vaccines throughout the supply chain and inventorying vaccines.
3. Managing vaccine stock by vaccinations and legitimate write-off.
4. Getting overview and generating reports of vaccine stock, administration, and write-off.

Vaccination Documentation and Certificate Creation
VaccineGuard enables convenient and low-error recording of necessary data about vaccination and issue verifiable and privacy-preserving Vaccination Certificates based on this information. This includes:
1. Linking identifiable person with unique authentic vaccine.
2. Linking single vaccinations into multi-dose vaccination regimens across various health organizations.
3. Linking demographic or other descriptive individual characteristics with the unique vaccination for real-time distributed reporting.
4. Linking verifiable and portable Vaccination Certificate with completed vaccination regimen (single- or multidose)
5. Enabling portable Vaccination Certificate in various formats (paper and digital) for global verification.
6. Enabling anonymous reporting based on unique Vaccination Records and Certificates.

Vaccination Insights
VaccineGuard enables realtime overview on vaccination targets and any variances of those goals. It also enables anonymous and automated reporting to other users/roles (eg Health Authority) of the VaccineGuard. This includes:
1. Overall vaccination coverage and progress vs target vaccination rate.
2. Vaccination coverage by predefined patient groups or ad hoc analytical insights.
3. Vaccination efficiency (time, waste) and accountability (priority and target management).
4. Predict and manage vaccine supply needs.

3. Vaccine Distributors

Vaccine Distributors can be public or private organisations responsible for distribution and tracking of vaccines from the wholesale storage to individual vaccination sites (Health Organizations). This role can also be performed by Health Authority.

VaccineGuard enables planning, managing and oversight of the distribution of Vaccines via following functionalities:
1. Verify the origin of vaccines throughout the supply chain and inventory vaccines.
2. Accept and manage vaccine orders.
3. Manage and Report distribution of vaccines.
4. Get alerts and report on possible counterfeits or diversion within the supply chain.

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4. Vaccine Manufacturers

VaccineGuard provides Manufactures with seamless participation with the Health Authorities (and Vaccine Distributors) to promote efficient distribution of authentic vaccines and also detect potential counterfeit or diversion. The Vaccine Manufacturers are not required by the Public Health Authorities, but increase the provenance of the Vaccines to strengthen the pedigree of vaccines. Relevant functions are explained in more detail below.

Vaccine Distribution Management
VaccineGuard enables planning, management and oversight of the vaccines sent for distribution. This includes:
1. Recording digital identity for each vaccine (to the level of a lot and/or serial number) sent for distribution.
2. Accepting orders for vaccines.
3. Earmark vaccines for use in a dedicated location or by selected organization (country, distributor, etc).

Vaccine Distribution Insights
VaccineGuard enables realtime overview on vaccine usage from anonymized reports. This includes:
1. Vaccine inventory within the supply chain and by location.
2. Reporting on distribution and use of vaccines.
3. Alerts and reporting on possible counterfeits or diversion within the supply chain (via reports on vaccination or certificate overuse)
4. Prediction and management of vaccine supply needs.

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5. Patients

Patients will be vaccinated, but need a trustworthy and useful way to prove they are vaccinated. VaccineGuard provides Vaccine Certificates that can be stored anywhere from a mobile device to a physical piece of paper. The Patients will gain:
1. Globally verifiable Vaccine Certificates with maximum privacy protection
2. Proof the vaccines are authentic and valid
3. Freedom to achieve multi-dose vaccination by any Health Organization.

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6. Verifying Entities

Verifying Entities are cross-border transport or immigration officials, places of work, or public gatherings that will require a Patient to present a valid Vaccine Certificate. VaccineGuard provides lightweight mobile apps and web applications to independently verify the Patient's Vaccine Certificate and the pedigree of the Vaccine if needed. Using VaccineGuard, Verifying Entities will:
1. Achieve Immediate Cryptographic Verification of the reliability and correctness of Vaccine Certificates
2. Allow Cross border verification of Vaccine Certificates
3. Track and Detect Counterfeit Vaccine Certificates