

2024

Global Digital Health Certification Network (GDHCN)

A global platform enabling the transfer of verified health documents



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Department of Digital Health
and Innovation



Overview

The World Health Organization's (WHO) Global Digital Health Certification Network (GDHCN) is a global digital public infrastructure that enables verifiable health document portability between institutions and across borders.

The certification network allows participating countries to recognize and trust each other's health documents, such as vaccination records, training certificates, and test results. This makes it easier to check their authenticity and enable individuals to retrieve their health information in portable formats.

As of May 2024, there are over 75 countries participating in the network.

Key features

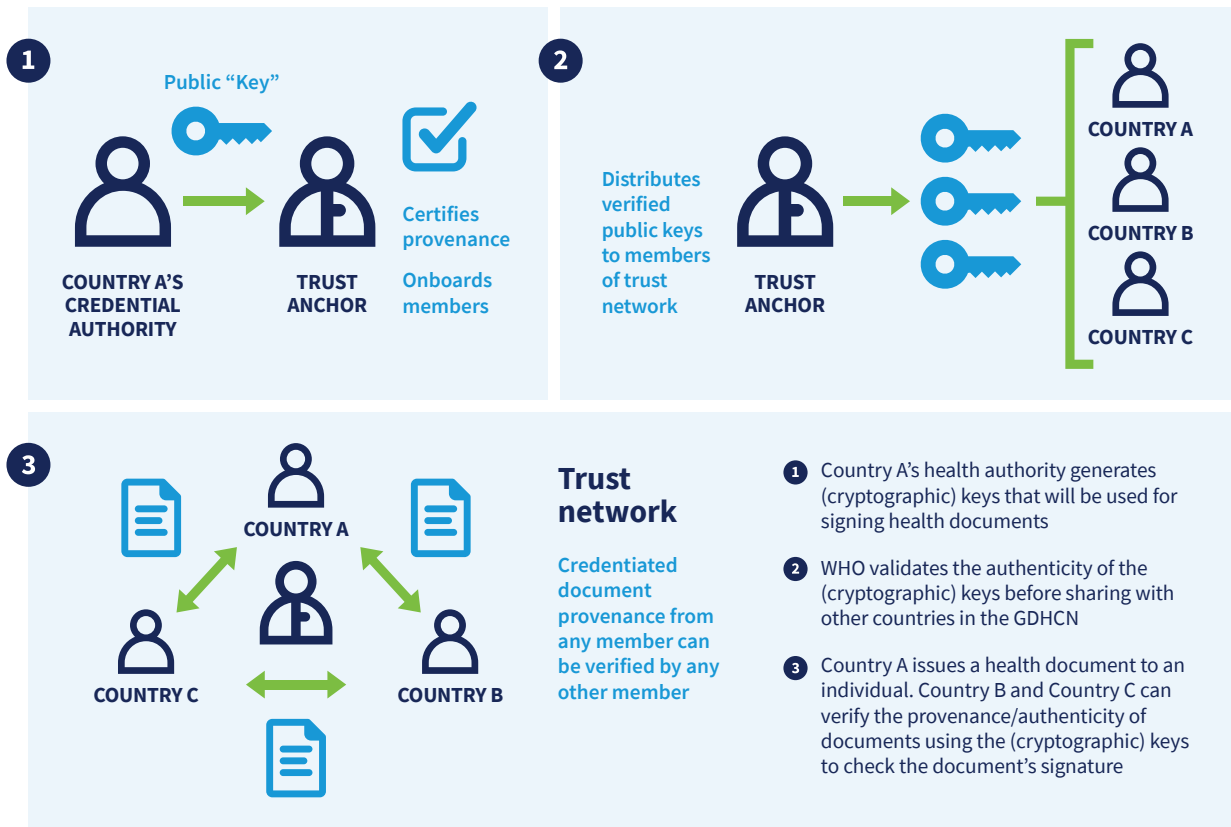
Initiated during the COVID-19 pandemic for verification of COVID-19 certificates, the certification network facilitates other additional use cases:

- childhood immunization records
- international patient summaries
- international certificate of vaccination or prophylaxis
- health worker credentials (licensing, registration and education)
- e-prescriptions
- cross-border telemedicine
- health insurance cards

There are three main components of the certification network, which includes:

- **data standards** for digital health documents
- **public key infrastructure** for sharing codes (known as “public keys”) used to verify the origin of digital health documents
- **a knowledge library** with information on making documents compatible across different systems

How does it work?



This cooperation is based on the principles of transparency and openness, inclusiveness, accountability, data protection and privacy, security, scalability and equity.

The GDHCN operates through software that verifies the authenticity of digital health records within an interoperable, trusted system. The platform uses a 'Trust Network Gateway' which enables secure exchange and verification of Verifiable Digital Health Certificates among participants.

Participants operate within Trust Domains, which comprise predefined use cases, technology standards, and policies to ensure participants are aligned and follow established guidelines and standards set by WHO. This enables participants to trust each other as they would all need to adhere to the Trust Domain's agreed upon protocols.

While WHO defines standards and provides guidance for certificates, the actual verification process occurs within each participating country. When a country joins the network, it contributes by sharing a unique "key" (known as a Public Key) with WHO. This "key" serves as a means of verification, helping to ensure that health documents (such as immunization records) shared within the network are legitimately issued by recognized authorities within that country. These "keys" are then securely shared among participants, facilitating the verification of digitally signed health credentials issued by recognized authorities.

WHO, itself, through the GDHCN neither holds nor transmits individual or aggregate patient data of any kind.

Join us

Member States and eligible entities can benefit from the GDHCN by:

- Applying to join the network
- Raising awareness about the benefits and importance of the GDHCN among countries within the same region
- Proposing new ways to use the network domestically and across borders (i.e., establishing new Trust Domains use cases)
- Engaging in technical community meetings
- Supporting public advocacy and community engagement to build trust in individual-focused digital systems
- Advocating for adequate resources for the GDHCN



For support or queries, you can contact:
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