

2nd Joint ITU/WHO Workshop on Digital COVID-19 Certificate

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DDCC:VS implementation



Digital documentation of COVID-19 certificates: vaccination status: technical specifications and implementation guidance, 27 August 2021

Use case scenarios



SECTION 3 **Continuity of Care scenario**



SECTION 4 **Proof of Vaccination scenario**

Settings

CARE SITE: where vaccination events take place.
DATA ENTRY SITE: where vaccination records digitized

VERIFICATION SITE: where it is necessary for people to prove their COVID-19 vaccination status

Personas

Subject of Care ; DDCC:VS Holder; Vaccinator ;
Data Entry Personnel ; Public Health Authority

DDCC:VS Holder, Verifier, National Public Health
Authority (PHA) ; International PHA

Service Workflow

- ① Digital Health Solution (EIR, EMR, SHR, etc.)
 - ② DDCC:VS Generation Service
- *Paper First, Offline Digital and Online

- ① Health Certificate Identifier (HCID)
- ② Status Checking Application
- ③ DDCC:VS Generation Service
- ④ DDCC:VS Registry Service
- ⑤ DDCC:VS Repository Service (optional, centralized or decentralized manner)

Related standards

HL7 FHIR or other data exchange standards within healthcare system on interoperability

Manual Verification, Offline Cryptographic Verification, Online Status Check [national DDCC:VS] and Online Status Check [international DDCC:VS]



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SECTION 3 **Continuity of Care scenario**

SG16 Q28: e-health

Interoperability

Data exchange

Data collection

Platform assessment

Accessibility Risk mitigations

- [H.812.5 \(ex HSTP-H812-FHIR\)](#) Interoperability design guidelines for personal connected health systems: Services interface: FHIR observation upload
- [H.HL-SM](#) Structure model for data exchange between heterogeneous health lifelog services
- [F.MESafFra](#) Evaluation framework of safety and effectiveness of active health data collection terminal equipment
- [F.ACC-TH](#) Accessibility of telehealth services



SECTION 4 **Proof of Vaccination scenario**

SG16 Q22: e-health

- [H.DLT-TFR](#) Technical framework for DLT regulation
- [H.DLT-GTI](#) DLT governance and technical interoperability framework
- [H.DLT-TFI](#) Technical Framework for distributed ledger technology (DLT) Interoperability
- [H.DLT-VERI](#) Formal verification framework for smart contract
- [H.DLT-FAM](#) Functional assessment methods for distributed ledger technology (DLT) platforms
- [H.DLT-PAM](#) Performance assessment methods for distributed ledger technology (DLT) platforms
- [F.DLT-DMPG](#) Requirements for change management in DLT-based decentralized applications
- [HSTP.DLT-Risk](#) DLT-based application development risks and their mitigations