

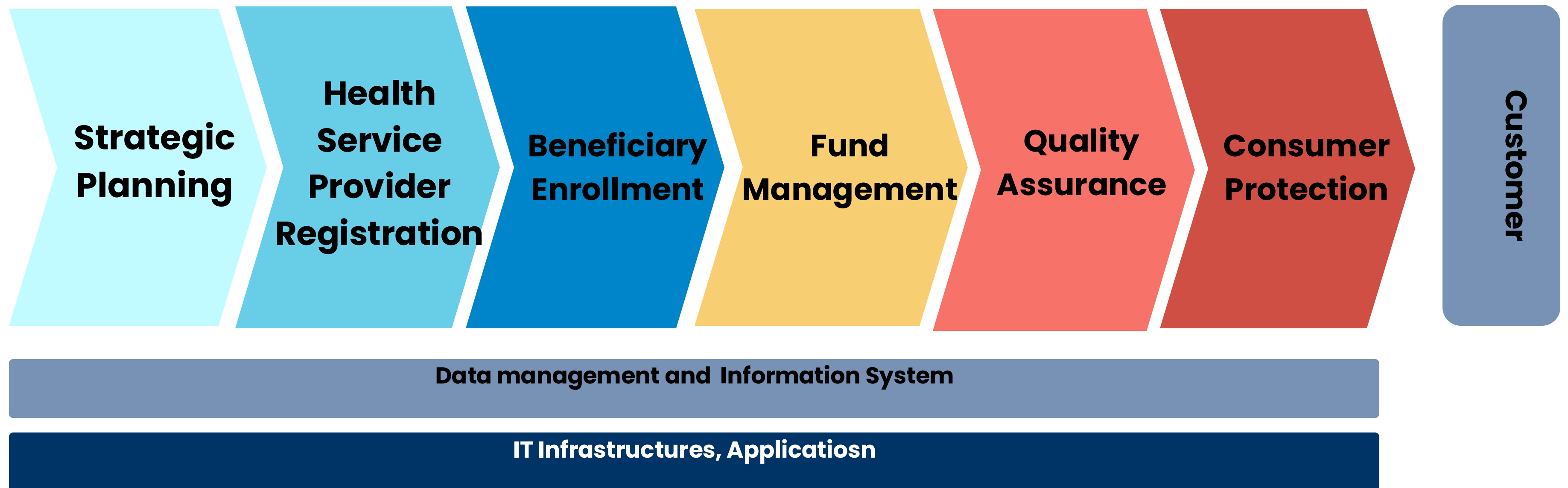
Your Face, Your Health ID: Digital Innovation Driving UHC Access

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ABOUT THE NATIONAL HEALTH SECURITY OFFICE



Founded in **2002** under the **National Health Security Act** as a public organization governed by the National Health Security Board. Our mission is to **manage the National Health Security Fund** efficiently and transparently, and to develop a quality health service system that ensures **equitable access for all Thais**.



UCS INFORMATION SYSTEM: TRANSITIONING FROM A PAPER-BASED TO A FULLY DIGITAL



2001–2002: Paper-based Systems

- Paper “Gold Cards” for beneficiary identification
- Manual data and claim recording
- Paper-based transaction and reimbursement process

2008–2009: Digital Transition & National ID Integration

- Introduced electronic data entry (offline/online)
- Linked UCS with Civil Registration database
- Use of National ID instead of Gold Cards.

2015: Unified Beneficiary Registration Center

- Integrated 3 public health insurance databases to prevent duplication
- Enabled automatic newborn registration and enrollment

2021–2027: Toward a Fully Digital Society

- Multi-channel verification
- AI-assisted pre-audit and seamless e-Claim
- Facial recognition pilot for secure access
- Real-time data exchange and AI-driven analytics

- Payment for Provider**
- Beneficiaries**
- Fund management**

Payment process took 6–9 months



Within the agreed payment cycle

Inconvenient, fragmented, and unequal access



Inclusive and real-time eligibility verification

Duplication, delays, and data errors



Driving efficiency, accuracy, and transparency through real-time data.

CURRENT IDENTITY VERIFICATION

National ID card

An individual user can be verified by using the national ID card (smart card)



Mobile ID

e-KYC* is required to use the service.



Birth certificate

For young children (under 7 years)



13-digit national ID number

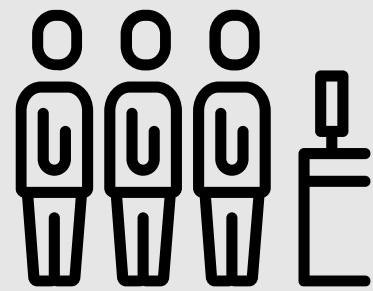
For emergencies or cases without documents

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*e-KYC: Electronic Know Your Customer

THE CHALLENGES OF THE CURRENT SYSTEM

Delay access to service



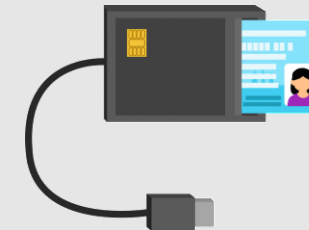
- On-site document verification takes time
- Queues build up during manual checks

Risk (Fraud & Misuse)



- Possibility of identity fraud or unauthorized use
- Errors from the manual verification process

Workload



- Staff required to verify documents manually
- High administrative burden for registration staff

Inconvenience



- Patients forget or lose ID cards
- Login issues with the NHSO app

THE GAME-CHANGING TECHNOLOGY: FACIAL RECOGNITION & MOBILE APPLICATION



“Your Face is Your Health Insurance ID”

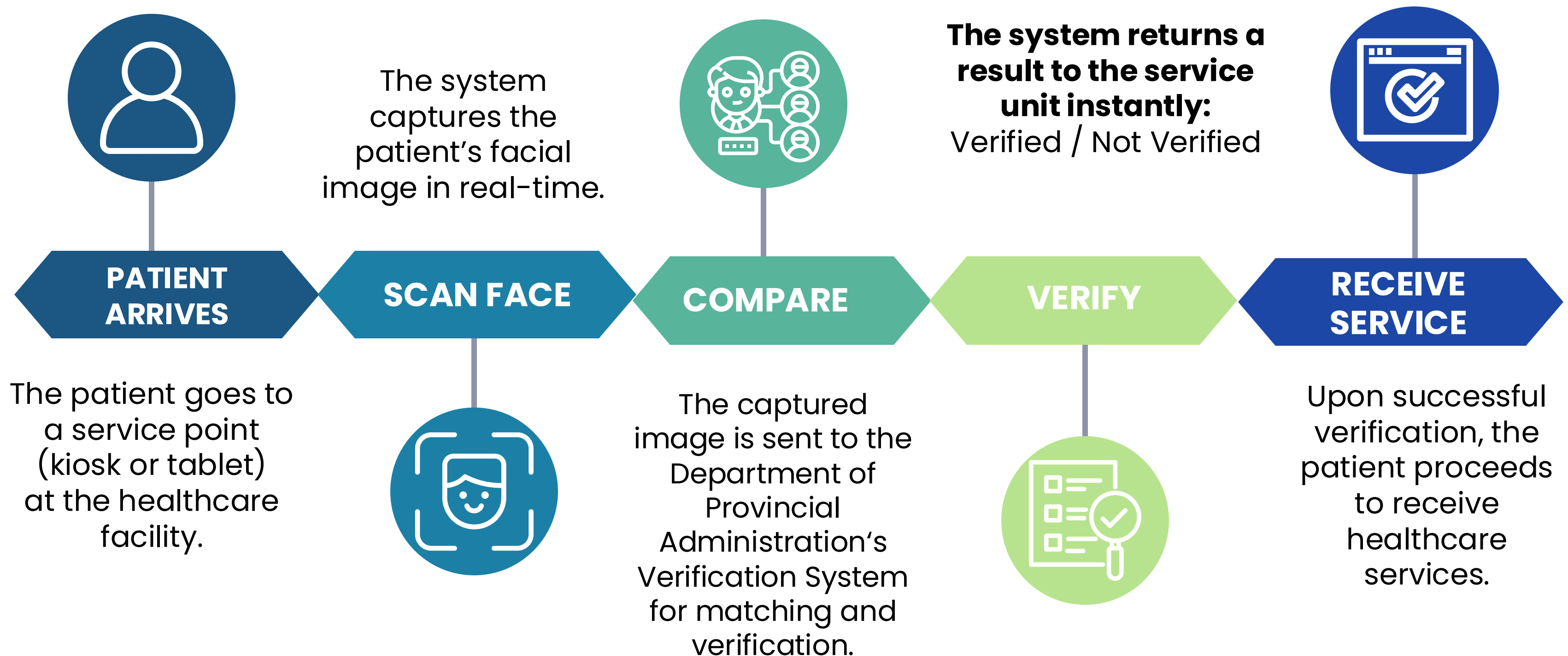
FACE RECOGNITION

Biometric technology that verifies identity through facial features — enabling fast, secure, and contactless access to health services.

MOBILE APPLICATION

Smartphone app that lets users check eligibility, manage health rights, and access NHSD services anytime, anywhere.

HOW FACIAL RECOGNITION WORKS FOR BENEFICIARY IDENTIFICATION



KEY BENEFITS OF FACIAL RECOGNITION

01



Patient Experience

- Quick, seamless check-in
- Shorter waiting times
- Elderly & disability-friendly

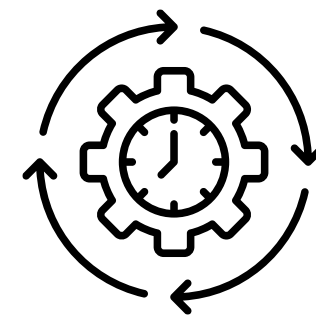
02



Data Security & ID Integrity

- Accurate identity verification
- Prevents fraud & unauthorized access

03



Operational Efficiency

- Less admin workload
- Eliminates duplicate records

04



Treatment Accuracy

- Instant access to correct records
- Prevents medication or treatment errors

CHALLENGES & MITIGATION STRATEGIES



Technical Accuracy

Failures from poor lighting, masks, facial changes, or system downtime



Privacy & Data Security

Concerns about biometric collection and data misuse



Access & Equity

Exclusion of elderly, disabled, or those without smartphones/internet



User Trust

Public hesitation to share facial data for medical use



Technology Enhancement

Liveness Detection, Smart Card/National ID, or OTP fallback options



Data Protection

Encrypt facial templates, comply with PDPA, and define data destruction policy



Inclusive Access

Maintain on-site verification & traditional ID methods, provide easy user guides



Communication & Trust-Building

Clear campaigns on data safety and benefits; ensure opt-in participation

CONCLUSION & NEXT STEPS

Face recognition is not just a technology.
It is a key enabler for enhancing security and efficiency in the UHC system.

Next Steps

- **Establish a Task Force:** Study legal and technical dimensions in detail.
- **Implement a Pilot Project:** Test at subdistrict health centers or community hospitals to assess real-world impacts.
- **Develop a Communication Plan:** Build public understanding and trust in the system.
- **Facial recognition function** to be included in telemed services





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THANK YOU

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