

# Health Data and the Government Multi-Purpose Card (GMPC)

2nd Asia-Pacific  
Smart Health Card Discussion Forum  
Bangkok  
8-9 April 2009

# Background

- The Government Multi-Purpose Card Project (GMPC) is one of the original seven flagship applications under the Multimedia Super Corridor (MSC) initiative launched by the Malaysian Government in 1997.
- The use of a single chip-based smart card (the MyKad – Malaysia Kad Akuan Diri) which contains the national identification document, individual's driving license, individual's health information, bank card, international passport etc.

# Background

- Currently there are 30 applications including Government services, border control, electronic payments, user authentication, loyalty programmes, education, mobile applications, and others that be used on the MyKad

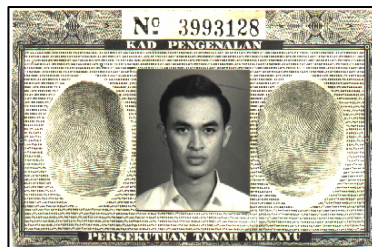
# Evolution Of Malaysian Identification Document



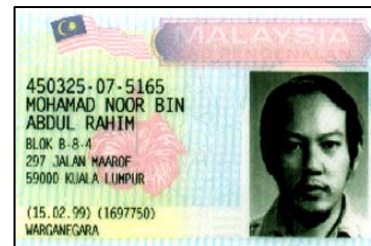
1948



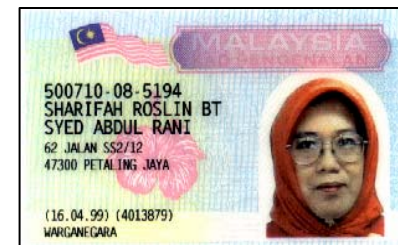
2001



1960



1990



1999

# MyKad Features



## CARD FEATURES

- 64K bytes microprocessor chip
- Uses built-in cryptographic co-processor
- Conforms to ISO 7816
- Biometrics Thumb Print minutiae in chip
- Colour photo and detail information in chip
- Enhanced card surface security features
- MCOS operating system with Dynamic Loading Ready (DLR)

# Utility of the health data on MyKad

- Emergencies
- Limited backup for continuity of care – complementing LHR

# Health Data on MyKad

- 2.6KB out of 32/64KB
- Next of kin
- Health Status
- Visit episode summary records
  - 2 outpatient visits
  - 1 inpatient admission

# Health Data on MyKad

1. Demographic data
  1. Next of kin
2. Static health data
  1. Blood group
  2. Allergies
  3. Immunisation
  4. Implants
  5. Chronic disease/disabilities
  6. Current medication
  7. Insurance/Third party payer
3. Dynamic health data
  1. Visit episode



# Access to health data on MyKad

- Different categories
  - Data
  - User
- Different levels of access
  - Read only
  - Write only
  - Read and Write
- Security Access Module (SAM) in the card reader

# MyKad Readers



Key Ring Reader



Desktop Reader



Mobile Readers

# Individual's choice

## Opt in

- Individuals decide
  - Who can access
  - What can be access
- Doctor/care provider enables
  - Writing data to the card

# Implementation

Pilot project: 2001-02

Putrajaya Hospital

Putrajaya Health Clinic

Workflow:

registration

- read demographic data

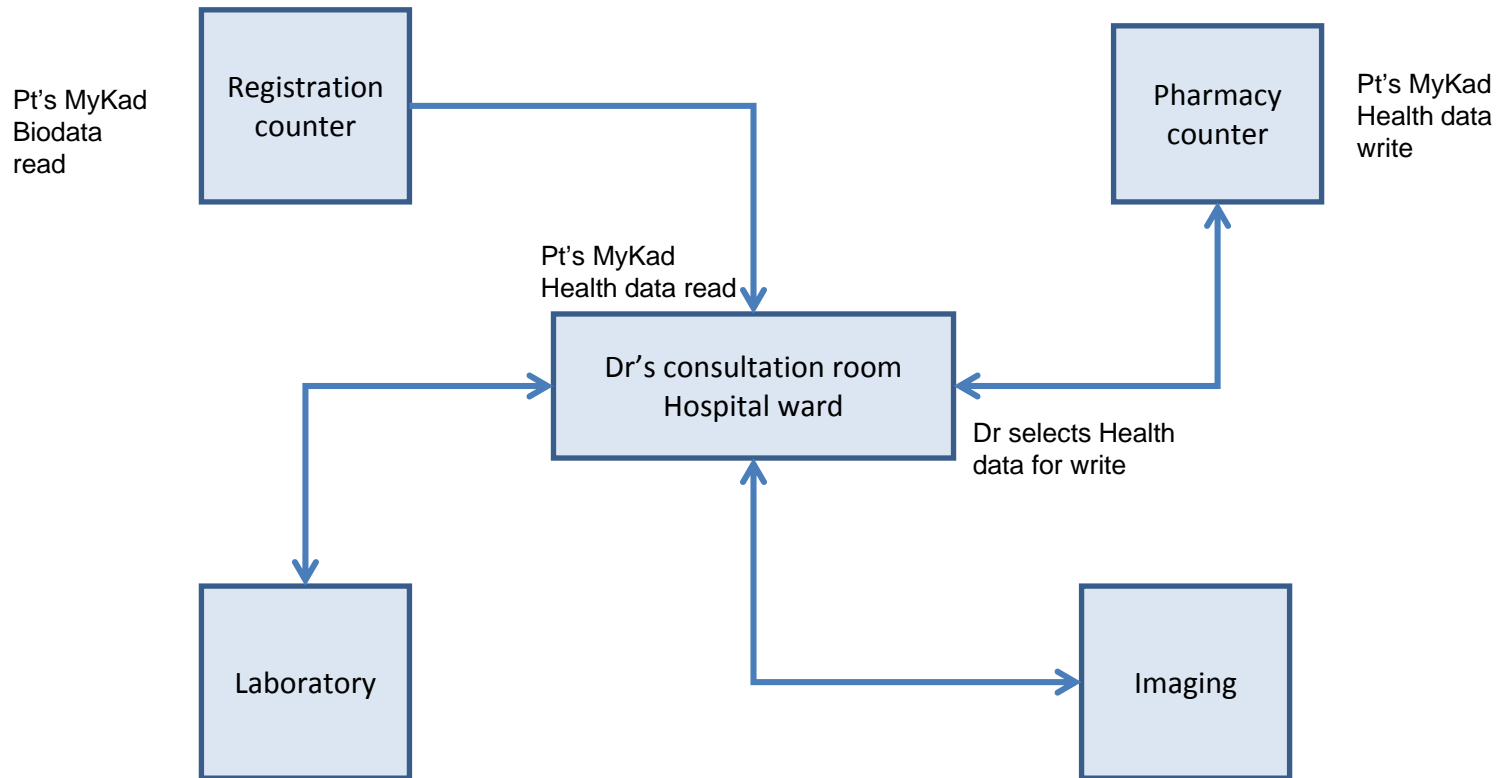
consultation

- read health data, select data to write

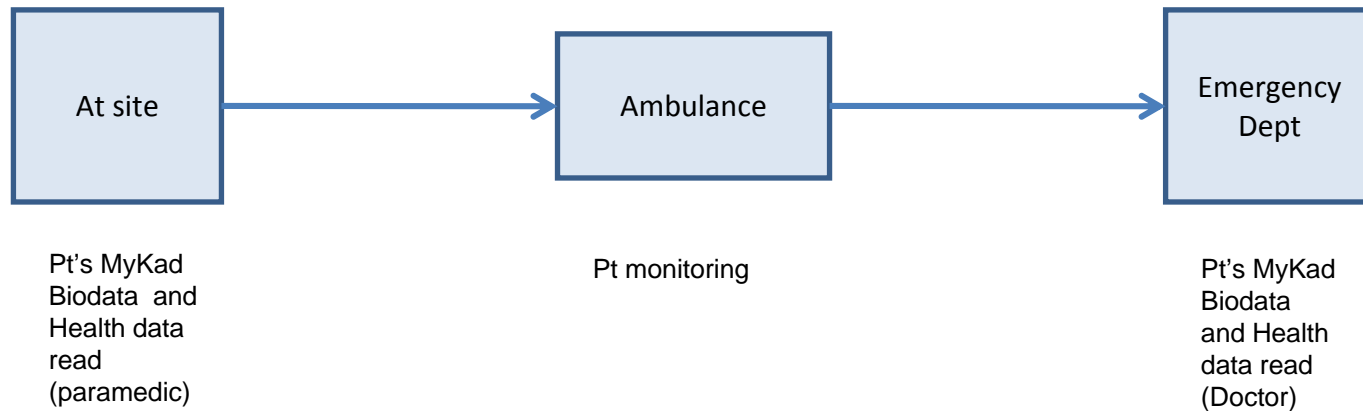
dispensary

- write data

# Workflow – Hospital/Clinic



# Workflow – Emergency Care



# Issues

- Requires some form of IT in place
- No immediate benefit to the individual or his healthcare provider
- Additional work for the healthcare provider
- Individual concerns on privacy/security
- Individual cannot view his own health data

# Thank you

Dr. Amiruddin Hisan

Director, Telehealth Division, MOH Malaysia

[dramiruddin@moh.gov.my](mailto:dramiruddin@moh.gov.my)