



# e-health Pakistan

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# Problem statement

- Health care, unknown to main stream of Pakistanis
- No control over infectious disease(s)
- No information or mean available for outbreaks
- Number of people with insurance are very low
- Silos with health information
- No Centralized data is available to share the information

# Health initiatives

- Different health initiatives have been taken to digitize the records, do surveys, analysis.
- All projects have GIS data and analysis
- Web based dashboards with charts
- Record management with multiple user support

# Projects

- TB reach
  - 300k people data in five cities
  - ~60 Field officers with mobile data collection
  - Analytics and statistical spread analysis

# Projects

- Child health
  - Survey application for child health monitoring
  - Health insurance
  - HIPAA

# Projects

- Dengue outbreak management
  - Mobile workforce management
  - Data collection and analysis

# Projects

- Hospital Navigation
  - What is available
  - How far is this
  - What doctors have top rankings

# Analytics

- Where TB is spreading
- Where surveyor didn't do the good job
- Which hospitals are overloaded
- Where people have health insurance
- Which hospital has more facilities
- How dengue virus is being monitored



# Data silos

- A lot of data scattered around
- GIS and data dashboards
- Reports for figures and maps
- Charts to show off data
- Fragmented data
- No data ware house
- No adaptation of standards

# The need

- A centralized place for health data
- Dashboards, data, GIS data accumulation convergence
- Policy and notices
  - Health awareness sites
  - Insurance plans information
  - Medicine information
- A single point for Industry, Citizens, Donors

# Centralized data

- Data collection and sharing by, Ministry of Health, Private Hospitals/Clinics/Labs, Pharmaceuticals, Public, Doctors, Paramedical Professionals, medical equipment manufacturers, Insurance Companies, Emergency Response Units, Law Enforcement, Utilities (Gas and Power), Civil Administration, Planning Commission of Pakistan, Donor Agencies
- Insurance statistics
- Health and population Statistics

# GIS Management

- Health Facilities
- Planning and management
- Statistics
- Charts
- Dashboards

# The portal

- Health facilities on GIS
  - Sites for the hospitals, clinics
  - Doctors
- Charts and reports
- Documents
  - Policies documents
  - Case studies
- User based editing and rank system
- Reviews
- GIS based maps
  - Navigation
  - Shortest path of routes
  - Data for better planning and management

# Combinations and Analytics

- Data accumulation and analytics based reports and charts
- Area and disease profiles
- Statistical analysis
- Spread of disease analysis
- Vulnerable areas
- Survey of area and samples
- Dashboard of cross linkages of data
- GIS maps with multiple datasets

# Service to people

- One place information of health data
- Maps and charts to quickly scan the data and areas
- Huge data and it verification
- Data sharing and analysis
- Links to the health sites
- Vying to fill the void of health data