Implementing Interoperability in China
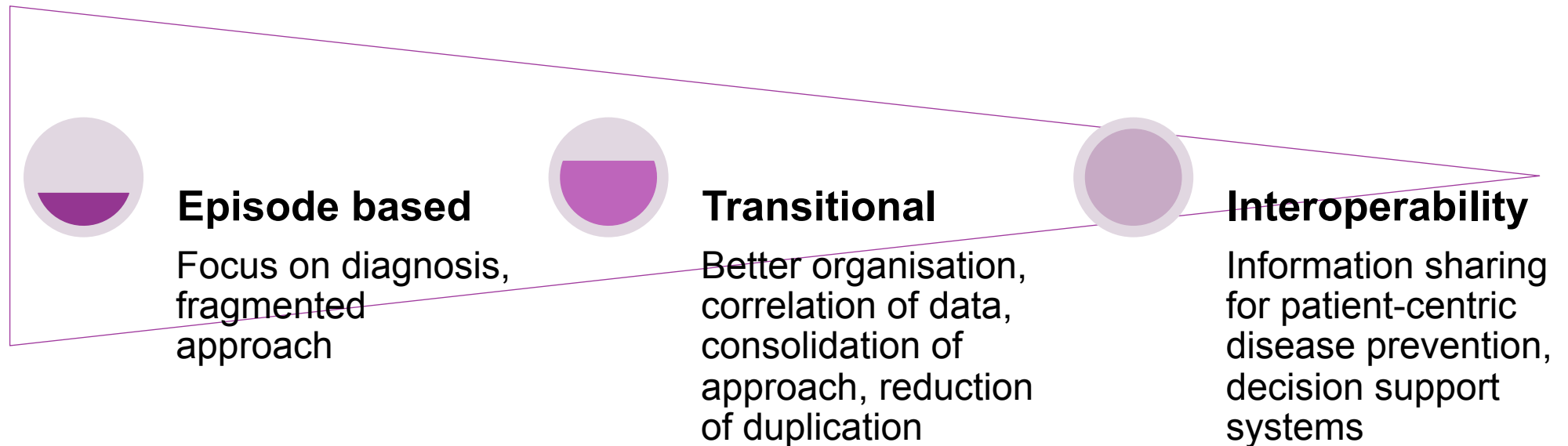
Dedalus
HEALTHCARE SYSTEMS GROUP

The Daqing Experience

Lapo Bertini

International Marketing

February 2015

Evolution of approach: towards interoperability

Episode based

Focus on diagnosis, fragmented approach

Transitional

Better organisation, correlation of data, consolidation of approach, reduction of duplication

Interoperability

Information sharing for patient-centric disease prevention, decision support systems

Dedalus
HEALTHCARE SYSTEMS GROUP

Interoperability

Allows exchange of health information within disparate administrative and clinical information systems
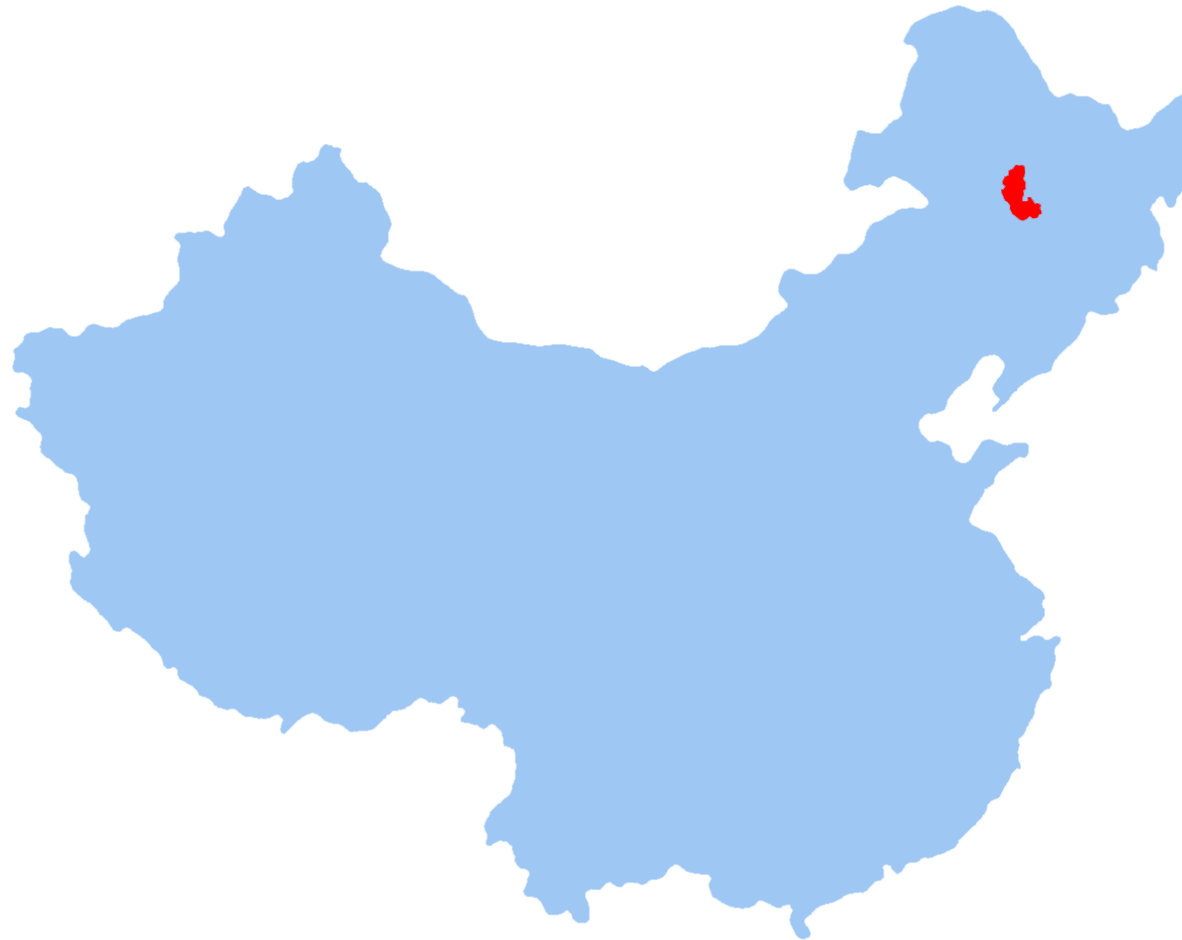
a data generated by one system can be accessed and used by another system, independently of technologies

Covers healthcare, clinical information and workflow

Allows management of policy and security

data privacy, confidentiality, individual and organization identifiers...

Dedalus
HEALTHCARE SYSTEMS GROUP
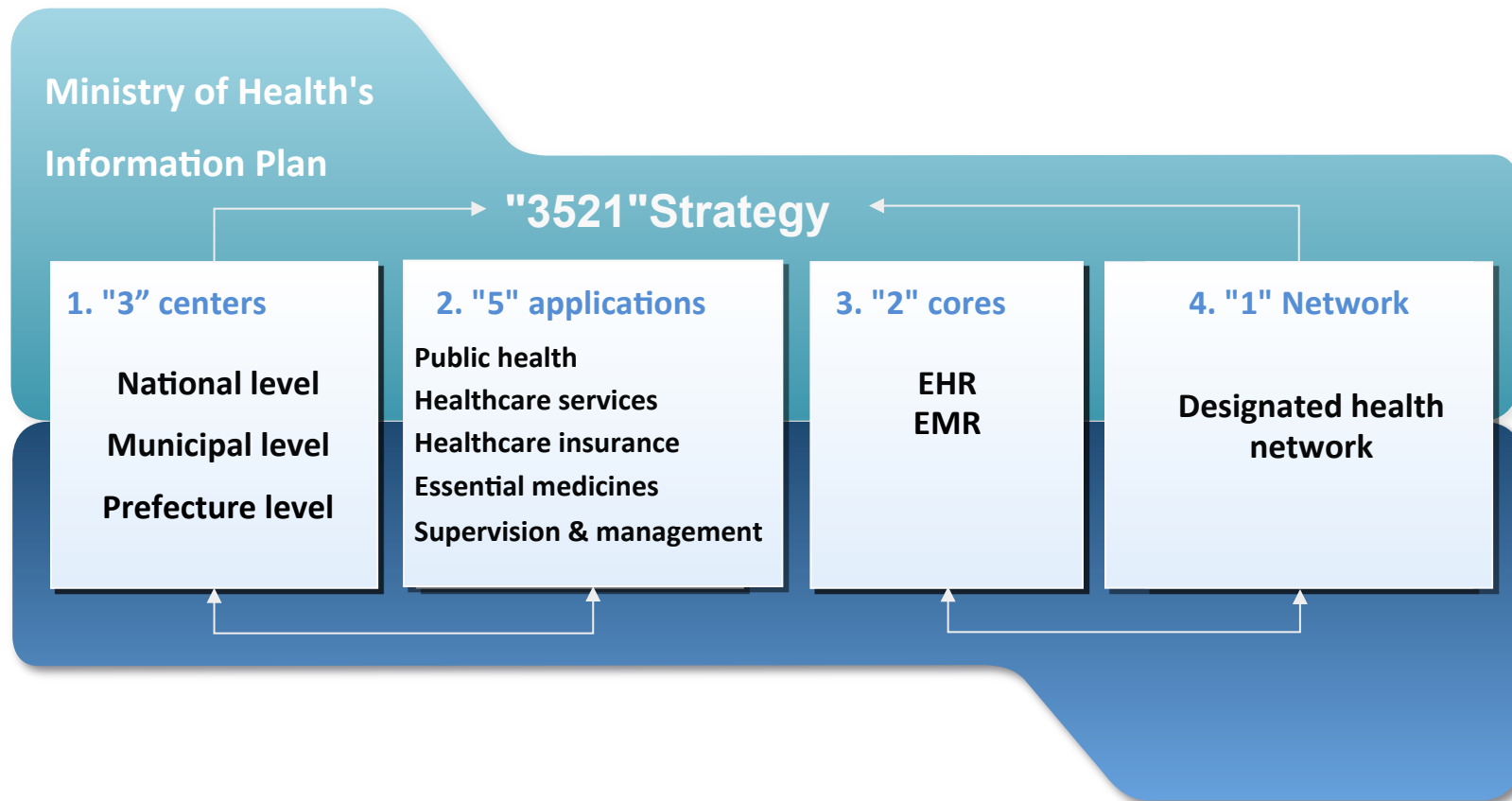
China - Daqing

大庆

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing & Oil

Situated between Harbin and Qiqihar in Heilongjiang Province was made a national model in 1964 when Mao Zedong issued the call "In industry, learn from Daqing", 工业学大庆. Daqing was the first major oilfield opened up in China.

Dedalus
HEALTHCARE SYSTEMS GROUP

China Healthcare Reform – The "3521" Strategy

Ministry of Health's

Information Plan

"3521"Strategy

1. "3" centers

National level

Municipal level

Prefecture level

2. "5" applications

Public health

Healthcare services

Healthcare insurance

Essential medicines

Supervision & management

3. "2" cores

EHR

EMR

4. "1" Network

Designated health network

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing Project Figures

The total population of the Municipality of Daqing is 2.9 million.

The number of healthcare institutions is approximately 1300 of which:

8 level-3 hospitals

17 level-2 hospitals

42 community health centers

57 community service stations

67 township hospitals

864 village clinics

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing Project at a glance

Target

construction of municipal-level health information platform to strengthen the public health, medical services, new rural cooperative information exchange, and integrated application management
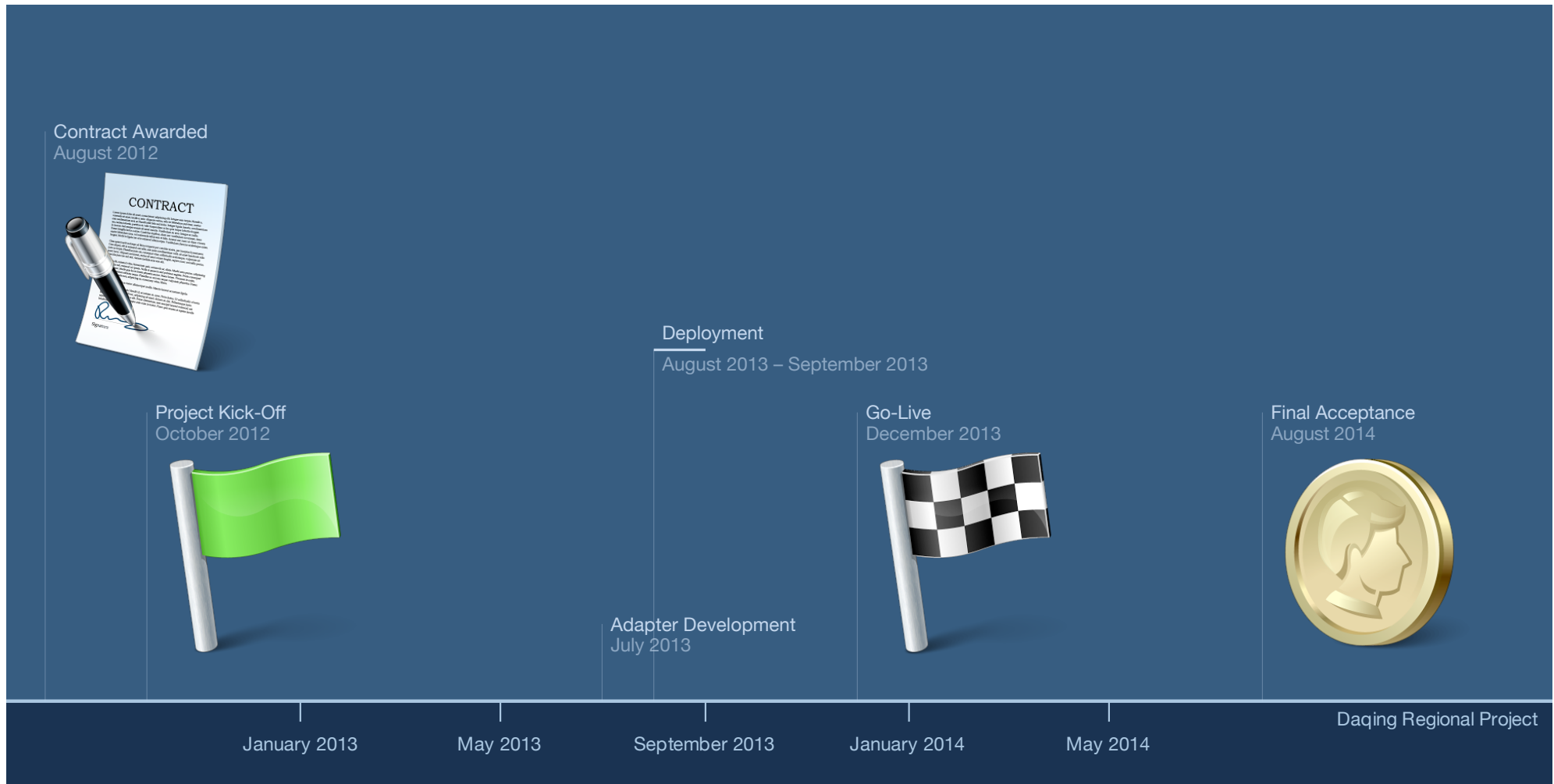
By means of

uniform standards and harmonized technical standards in order to facilitate interoperability between each part of the city's medical and health information system
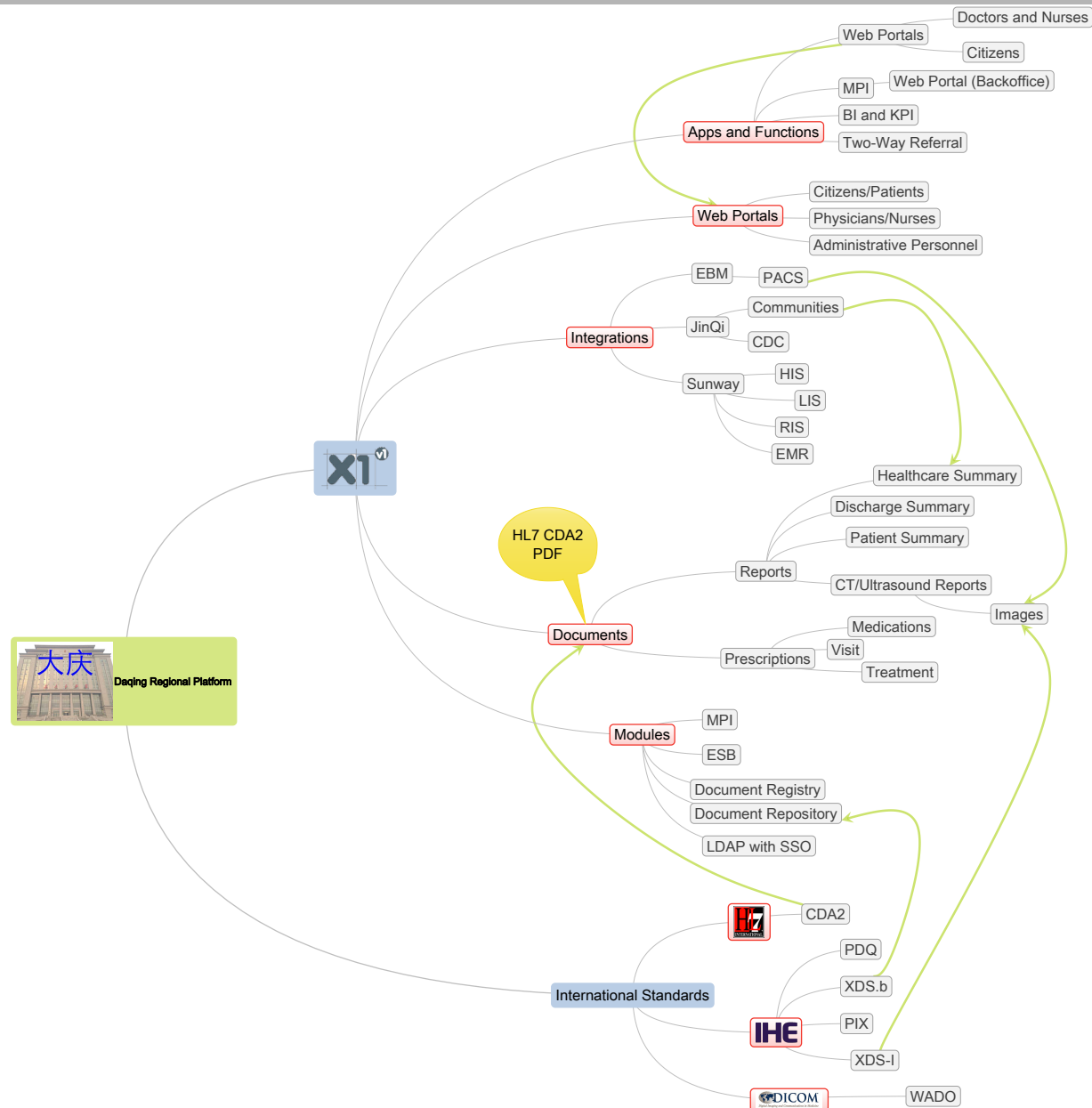
In order to

■ provide timely, accurate and comprehensive information to the Daqing municipal, district, and governmental authorities

■ provide digital health services to the citizens of Daqing by realizing the interoperability among various healthcare institutions through the X1.V1 Daqing Regional Health Information Platform
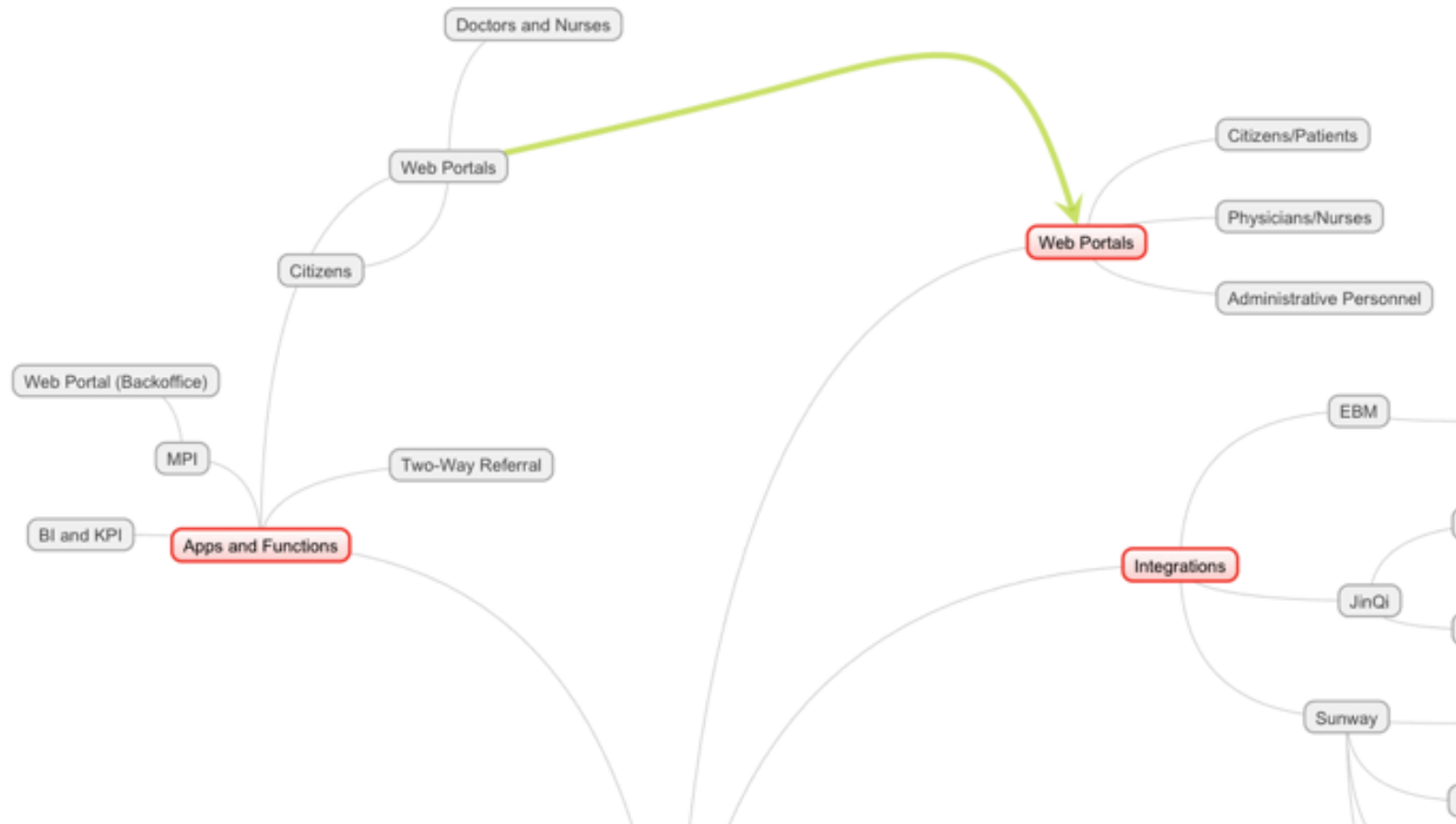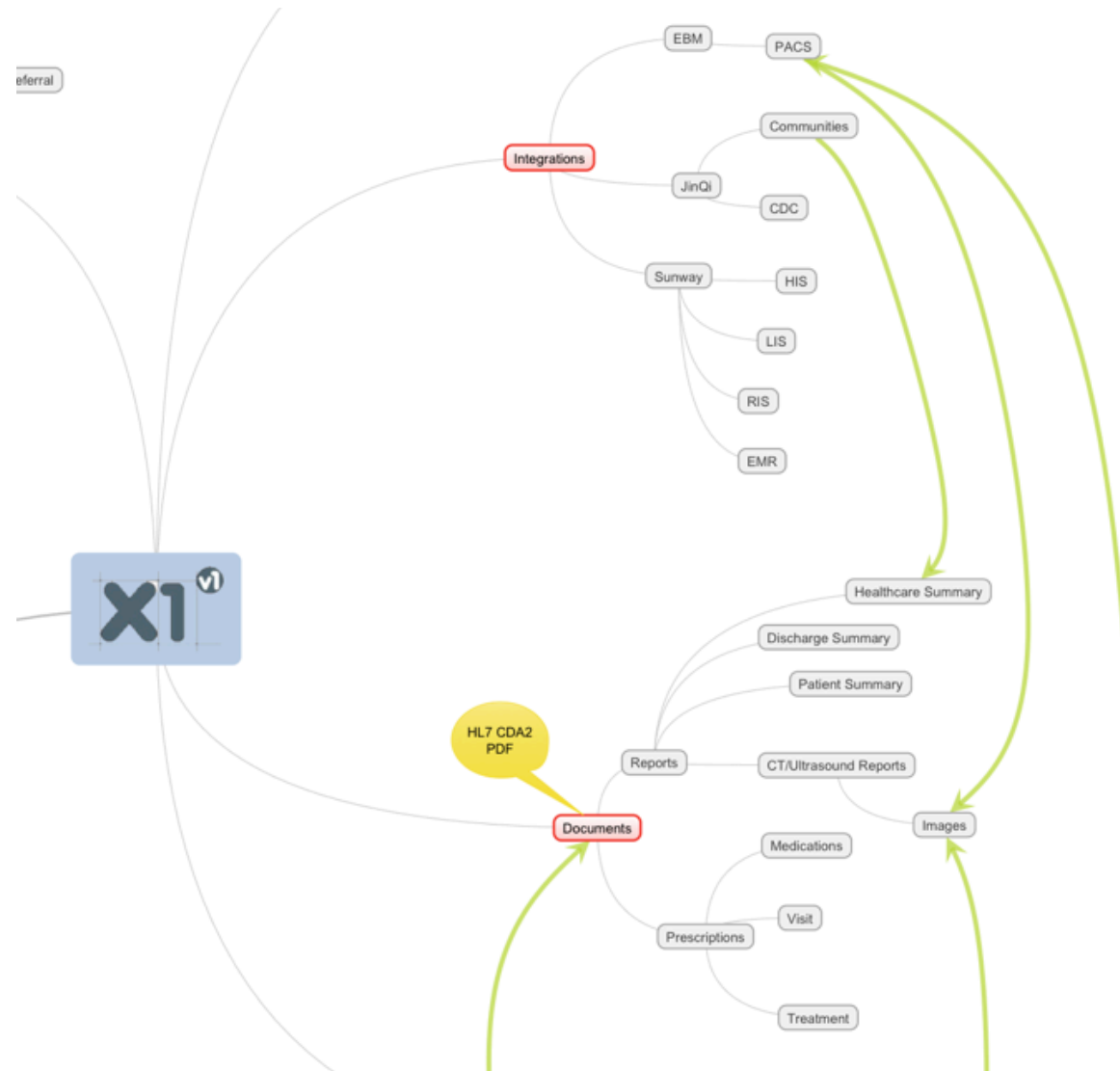
Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing - Timeline

Contract Awarded
August 2012

Deployment
August 2013 – September 2013

Project Kick-Off
October 2012

Go-Live
December 2013

Final Acceptance
August 2014

Adapter Development
July 2013

Daqing Regional Project

January 2013   May 2013   September 2013   January 2014   May 2014

Dedalus
HEALTHCARE SYSTEMS GROUP

Dedalus
HEALTHCARE SYSTEMS GROUP
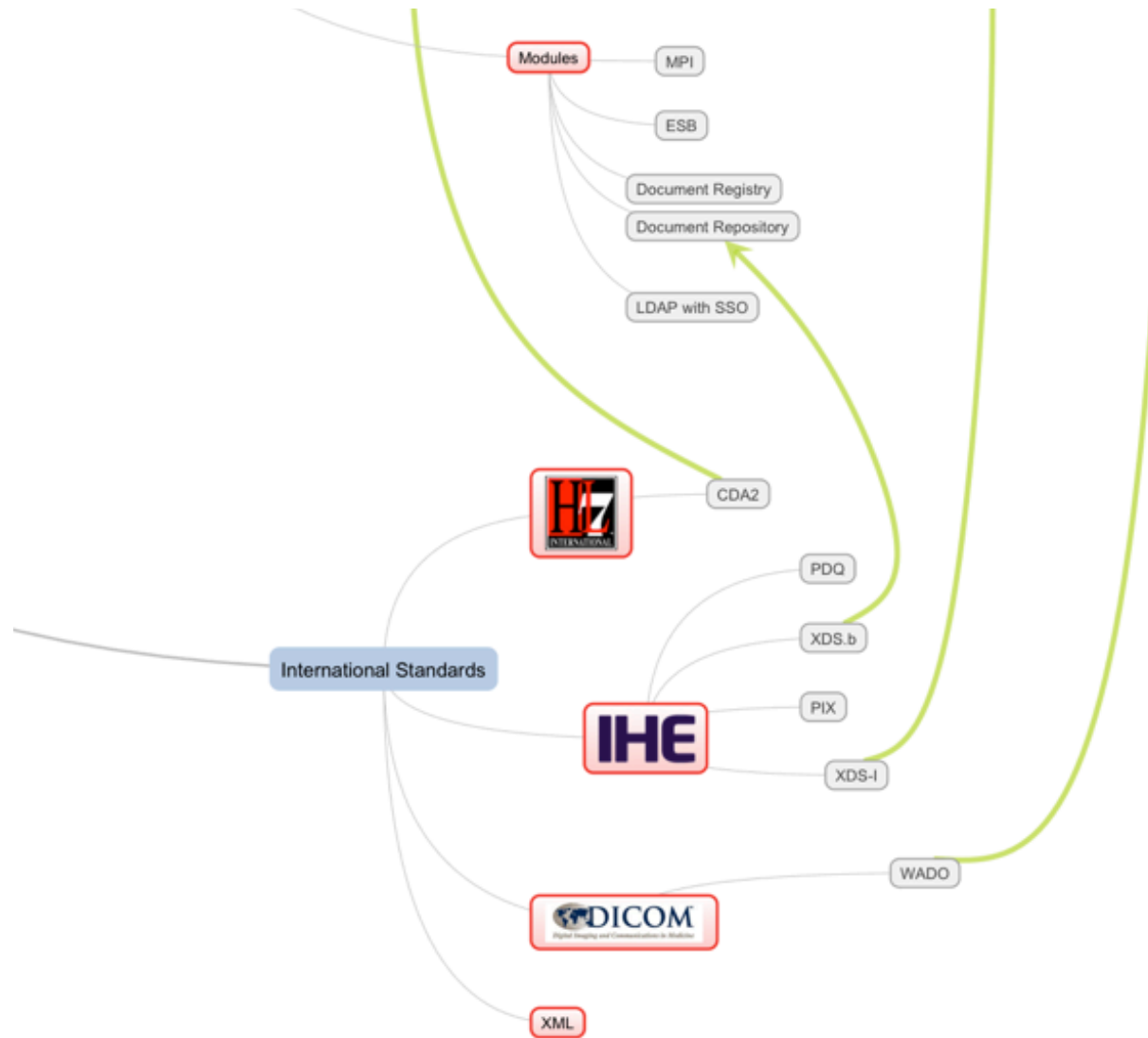
Daqing Components Overview

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing Components Overview

Daqing Components Overview

Documents managed at Daqing

Documents managed each year through X1.V1 interoperability platform

5.000.000 for inpatients

10.000.000 for outpatients

Type of documents

prescriptions for treatment

prescription for drugs

reports from HIS, LIS, RIS, EMR,…

CT and ultrasound reports and images from PACS

generic reports produced by Communities' HIS

Dedalus
HEALTHCARE SYSTEMS GROUP

Architecture overview

Web Portal

- Citizen
- Health Bureau
-

MPI

- Patient Demographics
- Coding

Apps

Two-way referrals

Business intelligence

KPI

Etc…

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing: Key Achievements (1)

Fundamental Health Services

Multiple Records in ONE SYSTEM

Integration of health records into clinical information

Key Features:

- Chronic diseases
- Maternal and child healthcare
- Geriatric care
- Vaccine planning
- Family planning guide
- Disability rehabilitation

Daqing: Key Achievements (2)

Two-Way Referral System

Sharing of information of patients, medical records for a "two-way referral" between big hospitals and town-level hospitals or the community health service centers

EHR Viewer (Physician Portal)

Management of patient's medical information from birth to death, including treatments, medications, tests/examinations, and disease history.

Facilitates the controlling the patient's condition, enhancing the healthcare quality while reducing risk

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing: Key Achievements (3)

Citizen's Web Portal

The Citizen Health Service Network allows citizens to consult their medical history information at home

Business Intelligence and KPI

The Health Decision-Making Analysis System allows comprehensive multi-dimensional analysis, including statistics and reports, on various healthcare, clinical and public health information, in order to assist administrators at all levels in their decision-making analysis.

Dedalus
HEALTHCARE SYSTEMS GROUP

Daqing: benefits realised through X1.V1

Rapid access to patient data aggregated across applications

Unified portal view of patient's complete medical record

Improved organizational ability to comply with Chinese reform

Improved clinical efficiency and patient safety

Integration with IT systems provided by different vendors

Automated notification system based on availability of documents and events

Dedalus
HEALTHCARE SYSTEMS GROUP

THANK YOU

Life flows through
our software

Dedalus
HEALTHCARE SYSTEMS GROUP