Health Passport Project

Sponsored by:

Western Governors' Association

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Western Governors' Association

- **21 Western State Governors on the Board**

- **Focuses on policy advocacy, research & innovative pilot projects**

- **Technology pilots:**
  - **- six-state EBT procurement (95-96)**
  - **- three state healthcare smart card pilot (98-01)**
  - **- federal-state secure Internet healthcare data sharing (01-02)**
  - **- expedited environmental permitting using visualization technologies (01-02)**

Health Passport Phase I Project Goals

- **Improve quality of family care;**
- **Streamline access and delivery of public/private health care services;**
- **Promote personal responsibility;**
- **Improve customer satisfaction;**
- **Reduce costs.**

Health Passport Demonstration

- **18 month pilot;**
- **States: Wyoming, Nevada, N. Dakota;**
- **30,000 moms and kids;**
- **Retail stores: Wyoming and Nevada;**
- **Private medical providers.**

Health Passport Services
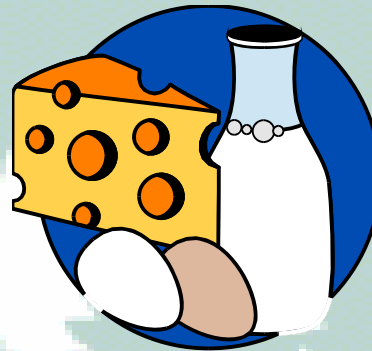
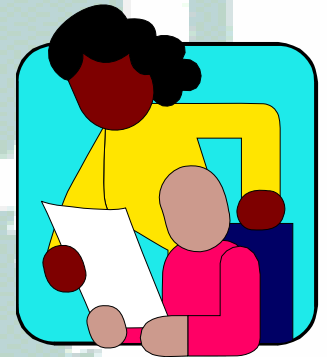**Women, Infants and Children**

Health Passport Card

Maternal & Child Care

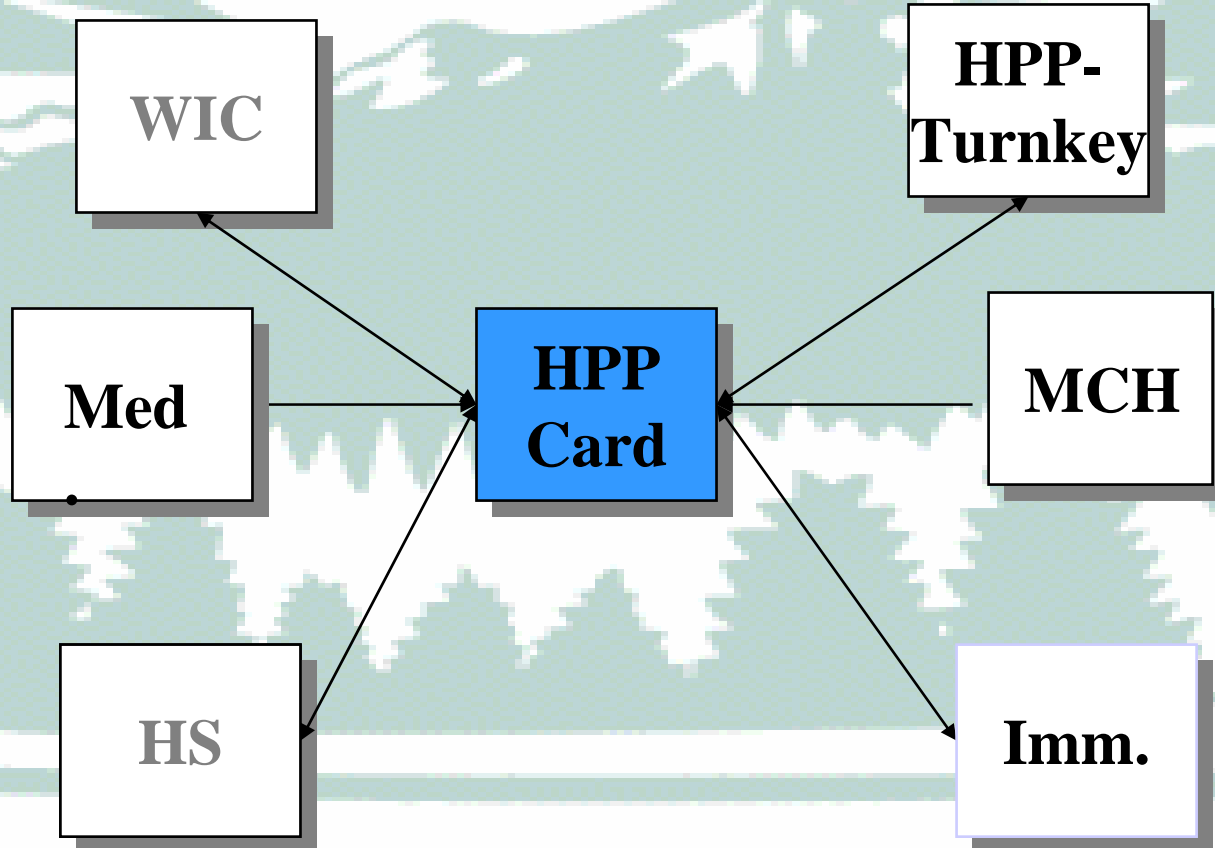**Check-ups & Immunizations**

Food Benefits

Pre-School Education

Legacy System Integration

The HPP Card captures data from each legacy system and has the ability to send new information to the legacy system

What the System Does

- **Common data management tool;**
- **Provides Service authorization;**
- **Generates appointment reminders;**
- **Electronic benefit transfer;**
- **Client access to data at kiosks.**

Health Passport Data

Information on the card:

- **Client demographics;**
- **Immunization status;**
- **Participating programs;**
- **Medical status.**

On the Card: Programs with Status

- **Programs with Detailed Information:**
  - WIC & EBT
  - Nutrition Program
  - Immunization
  - Medicaid EPSDT
  - Head Start
  - Maternal and Child Health
  - Public Health Nursing
  - Private Providers
    - Cheyenne Children's Clinic
    - Med-Center One: Family Doctor's Clinic

- **Programs with Status Only:**
  - Food Stamps, commodity food program
  - Oral Health (Dental)
  - Children's Special Health Services
  - Well Baby Clinic
  - Housing or Fuel Assistance
  - AFDC/Power/TANF
  - Food Pantry
  - School Lunch & Breakfast
  - Family Planning (Reproductive Health)
  - Tracking System (Children)
  - SSI
  - Extension, EFNEP, FNP
  - Presumptive Eligibility for Pregnant Women
  - Others

On the Card: Medical Results

Medical results and date last updated:

- **Height and weight.**
- **Hemoglobin/Hematocrit test results.**
- **Immunizations**
- **Pregnancy Status and Due Date**
- **Gravia**
- **Parity**
- **CDC Breast Feeding Info.**

- **Client Exam Data: (0-6 Coded Results, Source Code, Date Stamp)**
  - **Heart**
  - **Blood Pressure**
  - **Lungs**
  - **Abdomen**
  - **Teeth**
  - **Hearing**
  - **Vision**
  - **Extremities**
  - **Nose**
  - **Throat**

Federal & Private Partners

- **DHHS: PHS, MCH, Head Start**
- **HCFA- Medicaid**
- **CDC - Immunization**
- **USDA - Food & Nutrition**
- **GSA - Technical evaluation**
- **National Library of Medicine**
- **Pasteur-Merrieux Laboratory**
- **Johnson & Johnson**
- **Pfizer and other pharmaceutical companies.**

Comments from Providers

Health Passport Is:

- *Efficient, linking programs in the public domain;*
- *Flexible, with pending update capability to allow the entry of medical data at next visit;*
- *Transparent, interfacing with other program software;*
- *Reducing staff time and extra client visits;*
- *Improving case management; and*
- *It streamlines program reporting.*

The Health Passport Phase II Vision

Improve health care and nutritional benefit delivery through electronic access and sharing of medical information.

Western Governors Commitment

> *"The Web-Based Virtual Patient Account will demonstrate digital signature, open systems, interoperability and integration of the Internet…"*
> *– Governor Jim Geringer, Wyoming*

Goals

- Build partnership across levels of Government and the private sector to share medical information to support user agency needs.
- Demonstrate secure, scalable processes for requesting and disclosing medical information.
- Explore network and card-based data sharing, deploying multi-application smart cards to support multiple governmental programs.
- Test the interoperability of PKI across federal, state, and private partners.

Health Passport Partners

Phase I:

- **Federal Partners**
  - **DHHS - PHS, MCH, Head Start, National Library of Medicine**
  - **HCFA- Medicaid**
  - **CDC - Immunization**
  - **USDA - Food & Nutrition**
  - **GSA - Technical evaluation**

- **State Partners**
  - **Western Governors' Association**
  - **States of Wyoming, Nevada, North Dakota**

- **Private Partners**

Adding for Phase II:

- **Federal Partners**
  - **Defense Commissary Agency**
  - **DoD/Overseas WIC**

- **State Partners**
  - **State of California Department of Health Services**
  - **California WIC**

- **Private Partners**
  - **American Red Cross**
  - **Private HMOs**
  - **(CA Medical Assn.)**

Two Key Components

On-Line WIC

Electronic Medical Data Exchange

Common Distributed Smart Card
Base for Participating Beneficiaries

Key Business Drivers

- **Program need** for medical information for Federal program eligibility/certification.
- **Delays** in program and benefit delivery due to time for reproduction, mailing, and non-receipt of paper records.
- **Privacy, security, and confidentiality** mandates (HIPAA).
- **Budget constraints.**
- **Improved cost efficiencies** of internet-based transactions.
- **Need for quality** and accessible health care.

The Problem Today -- No Standard Process for the Electronic Exchange of Medical Data

Absent a standard process, organizations wishing to exchange medical data electronically must establish separate procedures, protocols, and agreements which increases risks and costs and will not be scaleable.

Provider Organizations

Requester Organizations
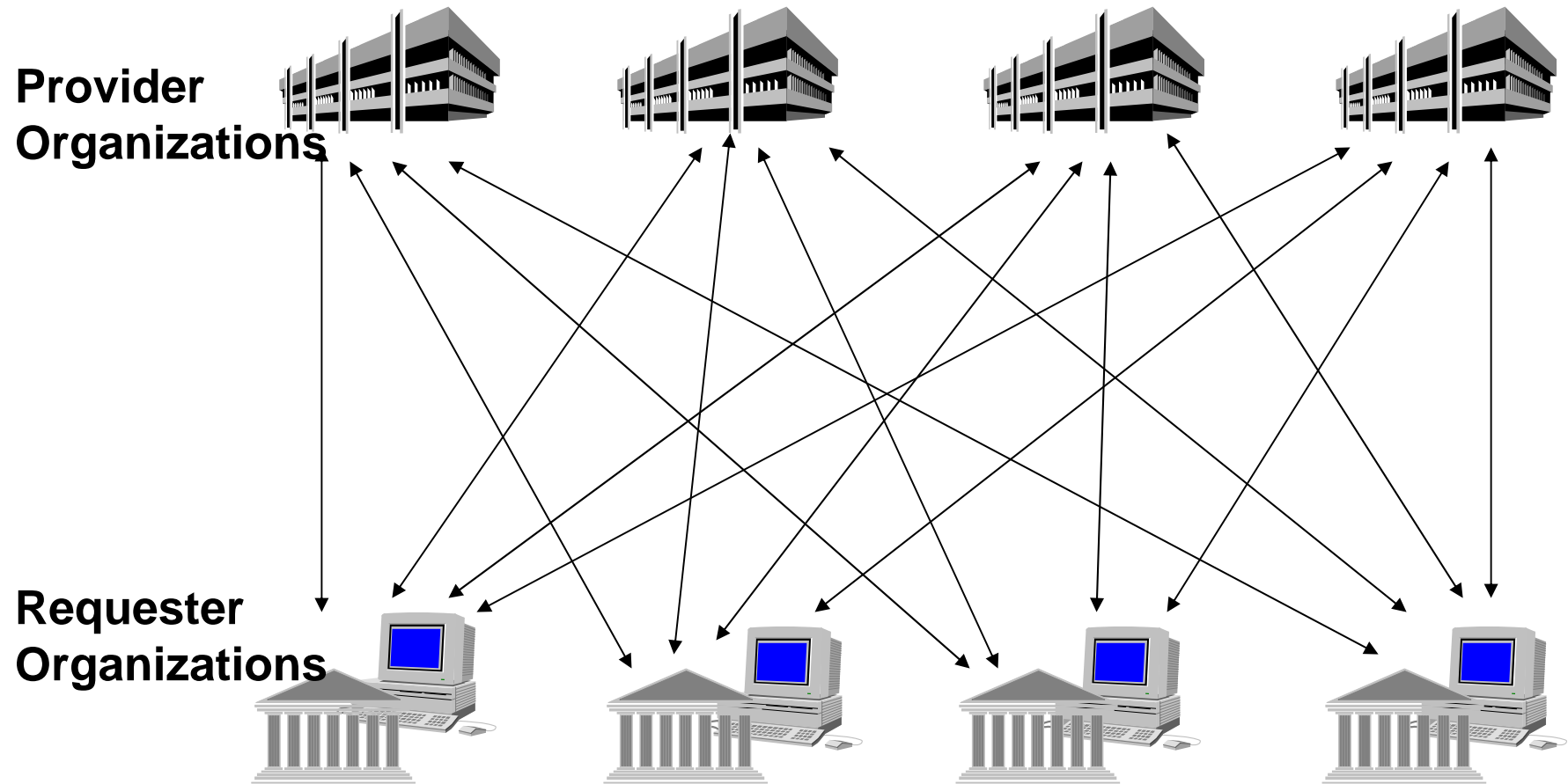
Health Passport Aggregator - A Potential Solution

The Health Passport Aggregator will simplify medical data exchange for multiple parties by providing common security and privacy controls through a single access protocol under a set of uniform operating rules.

Provider Organizations

HPP Common Operating Rules and Agreements Among Parties

HPP Aggregator
Common Data Exchange Protocol and Controls

Requester Organizations
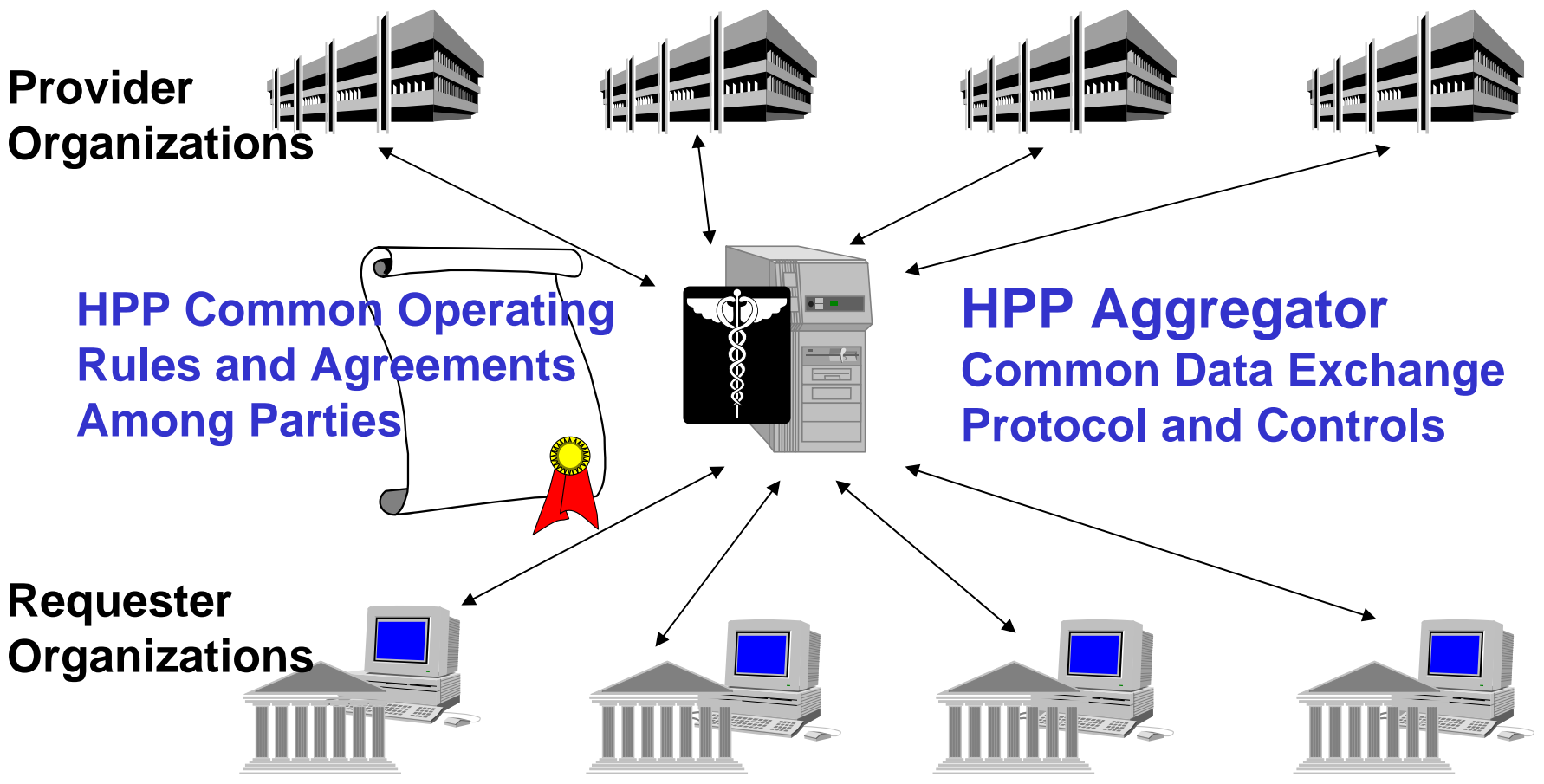
Key Infrastructure Components

- **Common Operating Rules and Membership Agreements –** WGA executes and administers for demonstration, but potential privatization

- **Common Authentication/Authorization Protocol –** Use of digital certificate to authenticate requestor/provider

- **Common Data Exchange Protocol –** Single protocol to request/disclose information using digitally signed request

- **Common Control Mechanism -** Single point of control/access authorization

Health Care Record Request / Disclosure Flow

Audit Database

Authorization Database

PROVIDER CLINICS

9. Maintain Record of Transactions in Audit Database

3. Determine Authorization Privileges

4. Generate and Digitally Sign Disclosure Request

5. Generate and Digitally Sign Medical Disclosures

AGGREGATOR APPLICATION

8. Present Medical Disclosures

6. Aggregate Medical Disclosures

1. Digitally Sign and Send Health Care Record Request to Aggregator

2. /7.Validate Digital Signature

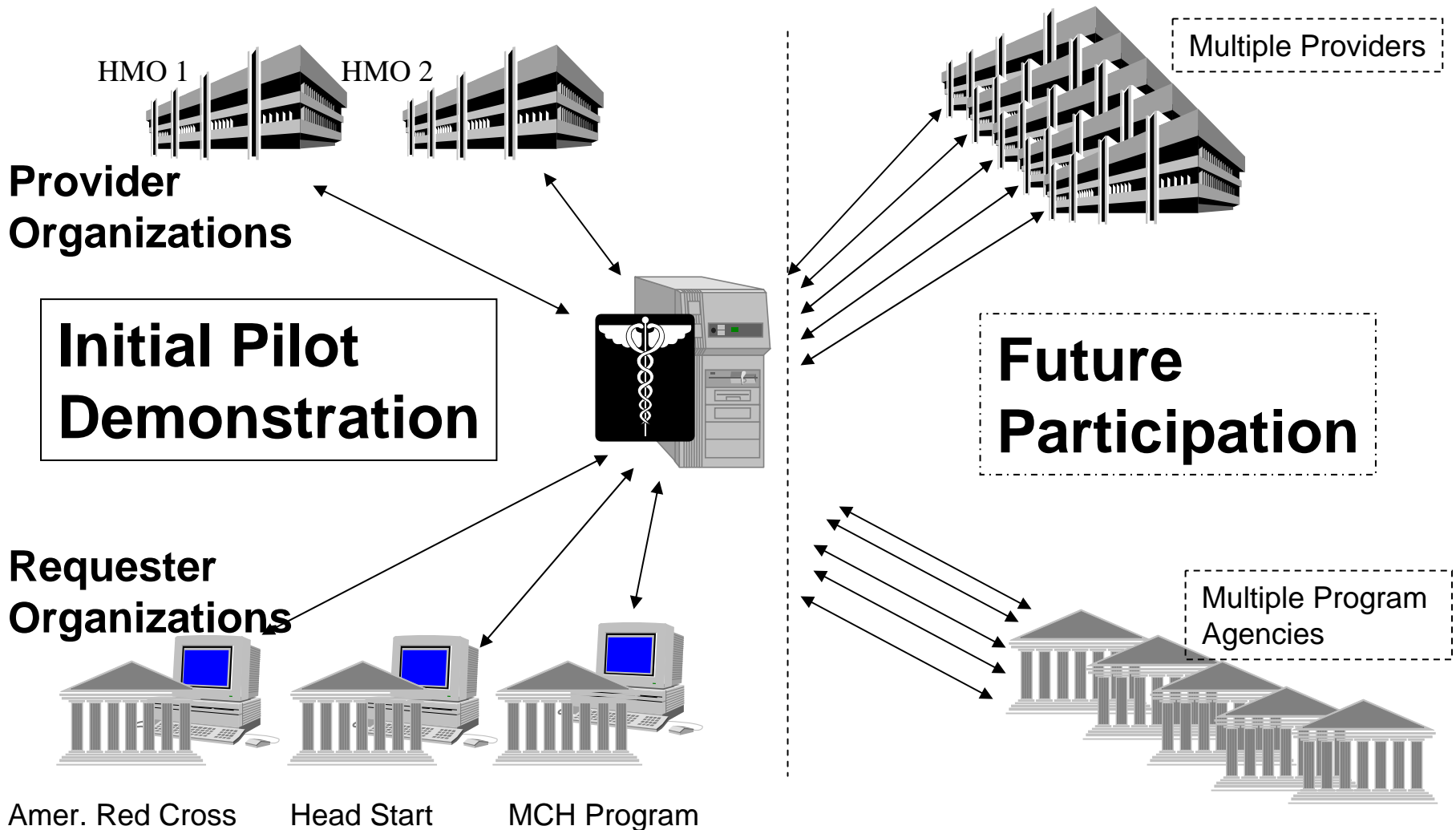REQUESTER CLINIC

CERTIFICATE AUTHORITY

Aggregator Functionality

- **Validate Requests.** Receive and validate all requests for medical information

- **Authorize Requests.** Determine authorization privileges for all validated requests from authenticated users

- **Generate Disclosure Requests**. Generate signed requests for medical information to the participating healthcare providers for all validated requests

- **Aggregate Medical Disclosures**. Receive and validate all disclosures of medical information

- **Present Medical Disclosures.** Present medical information to requesters through standard user interface

- **Record Transaction Data.** Record all transactions (i.e., requests, validation, disclosures) using standard transaction set and maintain transaction audit record

A Scalable Solution

Following initial pilot demonstrate, new program agencies and medical service providers may join the Project by executing agreements to follow the uniform operating rules.

HMO 1   HMO 2

Provider Organizations

Multiple Providers

Initial Pilot Demonstration

Future Participation

Requester Organizations

Multiple Program Agencies

Amer. Red Cross   Head Start   MCH Program

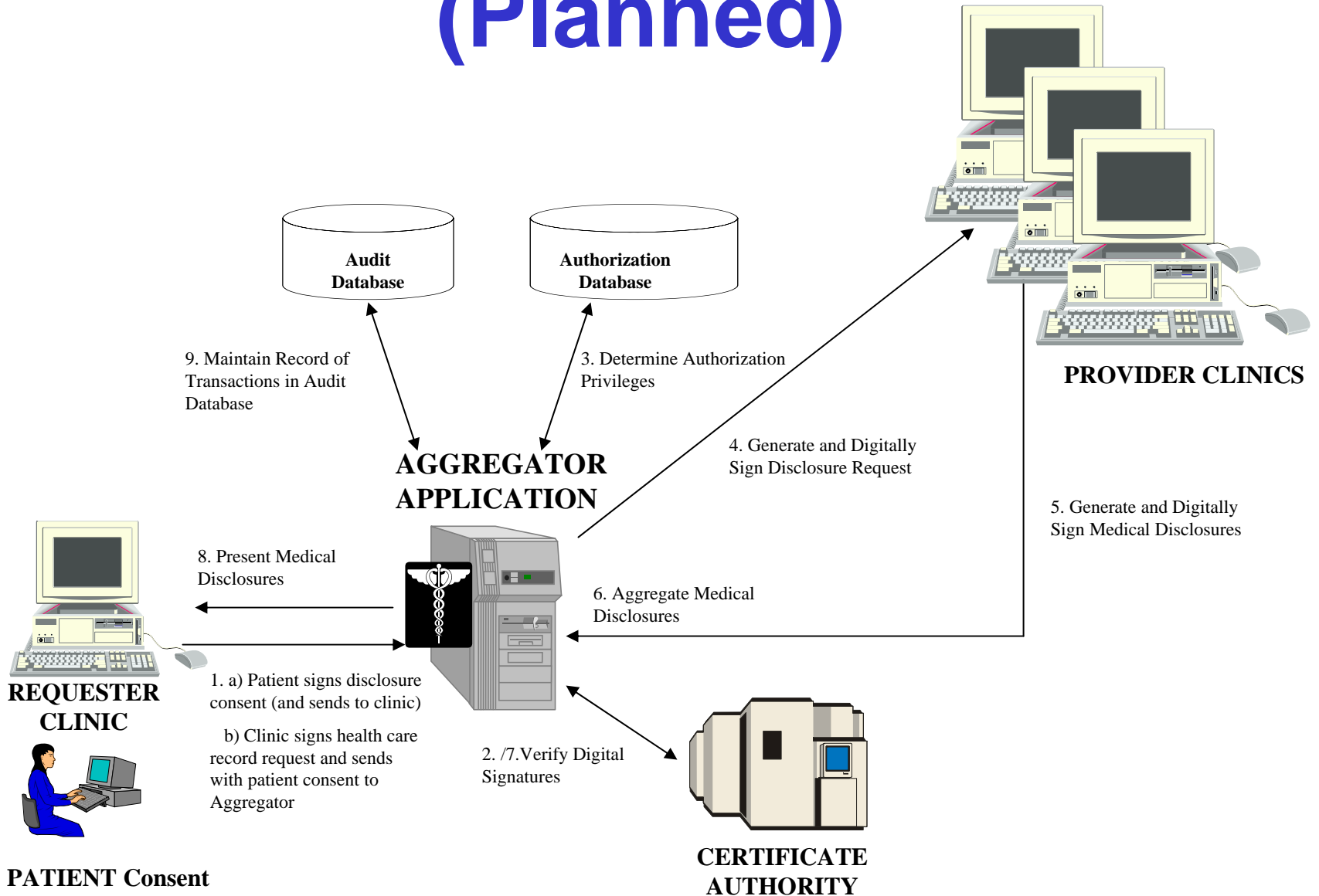# HPP Aggregator Solution Provides Interoperability and Scalability

Aggregator functionality is built on common processes and standards:

- **Standard health care record request protocol**
- **Standard health care record disclosure protocol**
- **Common authentication/authorization process**
- **Common user interface**
- **Common transaction and audit records**
- **Common rules and agreements among participants**

Patient Disclosure Authorization (Planned)

Audit Database

Authorization Database

9. Maintain Record of Transactions in Audit Database

3. Determine Authorization Privileges

PROVIDER CLINICS

4. Generate and Digitally Sign Disclosure Request

5. Generate and Digitally Sign Medical Disclosures

AGGREGATOR APPLICATION

8. Present Medical Disclosures

6. Aggregate Medical Disclosures

REQUESTER CLINIC

1. a) Patient signs disclosure consent (and sends to clinic)

   b) Clinic signs health care record request and sends with patient consent to Aggregator

2. /7. Verify Digital Signatures

PATIENT Consent

CERTIFICATE AUTHORITY

Benefits of Aggregator Architecture

- Scaleable
- Rules-based identifying protocols
- Low cost of entry for requesters and providers
- Security

Privacy, Security and Confidentiality

- **Authentication --** All requests and disclosures of health care records are authenticated through digital signature.

- **Authorization** -- All health care record requests are authorized against an authorization database maintained by the Aggregator.

- **Audit Records** -- All transactions will be recorded in an audit log maintained by the Aggregator.

- **Confidentiality** -- Confidentiality of health information will be protected over the Internet through SSL encryption.

- **Records Systems --** There will be no new or aggregated systems of records for the information exchanged through the Aggregator. The Aggregator will maintain no health information records other than the audit logs.

- **HIPPA Compliance --** The information system and procedures will be reviewed for HIPPA compliance.

Key Milestones

- Meet with Participants to Build Program Design – Fall/Winter 2000

- Build Conceptual Design – Spring 2001

- Next Steps:
  - **Establish Program Requirements & System Specifications – Spring/Summer 2001**
  - **System Development/Testing – Fall 2001**
  - **Implement Pilot Demonstration – Winter 2001**
  - **Pilot Evaluation – Summer 2002**
  - **Build Interoperability with Federal Bridge CA – 2002**