



# ***Financing the National Health Information Infrastructure***



Financial Incentives Track  
National Action Agenda for NHII  
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# 'We can't get there from here...'

The healthcare marketplace, as currently structured, is unlikely to attract sizable capital investments from independent healthcare ICT companies to build the information technology infrastructure.

Healthcare retailing and online content companies have failed catastrophically, in an environment of supply without adequate demand and without needed standardization. E-health companies suffered \$4.9 billion in aggregate losses in 2000 and \$8.2 billion in aggregate losses in 2001.

Companies focusing on industrial applications such as computer-based physician order entry, electronic medical records, and electronic data interchange have seen slow acceptance among purchasers and mediocre support in the stock market.

The median physician practice spends 2 percent of its operating budget on ICT, hospitals spend about 2.4 percent, as compared to insurance companies which spend 8.1 percent and financial services companies which spend 11.1 percent. The combination of a fragmented system and capital financing problems works to limit investments in new information technologies.

*- From the NHII Financing Track Workgroup*

# The Case for Federally Supported Capital Financing for Healthcare IT Infrastructure

- Consensus that investment in IT infrastructure will lead to quality improvement and efficiencies in healthcare delivery:
  - Institute of Medicine reports
  - President’s Information Technology Advisory Committee Report
  - National Committee on Vital Health Statistics reports and recommendations
  - LeapFrog Initiatives
  - Veteran’s Administration implementation
  - Selected regional initiatives:
    - CareScience Santa Barbara County Care Data Exchange Pilot
    - New England Healthcare EDI Network (NEHEN)
    - Indianapolis Network for Patient Care
- Federal CHI identifying and implementing data standards to promote interoperability. Remaining needs:
  - Funding for development and maintenance
  - Organizing body to coordinate SDO work

# The Case for Federally Supported Capital Financing for Healthcare IT Infrastructure

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- Government, which pays for one-third of Nation's \$1.3 trillion healthcare expenditures, has a significant interest in stimulating investment in NHII
- Compelling precedent for Government partnering with the private sector to meet America's essential infrastructure needs

# The Case for Federally Supported Capital Financing for Healthcare IT Infrastructure

- Significant structural barriers to investment in IT infrastructure by providers:
  - Access to capital: limited, inversely proportional to need
  - Operating costs: support during transition, ongoing operations, upgrades
  - Technical assistance and training
  - ‘Separate pockets’ phenomenon: savings may not accrue to investor
- Hospitals capacity to access capital for long-term investment in IT
  - Hospital operating margins have been steadily declining since 1996; one in three hospitals nationwide had negative Medicare operating margins in 2001. (*AHA, The State of Hospitals’ Financial Health*)
  - Hospitals are having difficulty accessing the funding needed to invest in capital projects like adding expensive information systems. Wall Street sees hospitals as a risky investment, leading to higher interest rates for funding. Six times as many hospitals had bond downgrades versus bond upgrades in 2001. (*AHA, The State of Hospitals’ Financial Health, S & P Hospital Credit Analysis*)
  - Limited availability of charitable contributions

# Criteria for Design of NHII Financing Approach

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- Criteria related to intended results:
  - Scale of investment commensurate with NHII goals
  - Co-investment by stakeholders to define commitment
  - Investment closely tied to standards compliance
  - Investment in field research to promote rapid learning and innovation
  - Investment mechanism supports rapid movement from successful demonstration to broad-scale implementation
- Criteria related to successful implementation:
  - Leverage public investment with public-private partnership
  - High degree of regional and local flexibility
  - Involve clinicians as well as institutional providers
  - Maximize improvement in consumer/patient experience

# Participants in an NHII Financing Program

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- Healthcare Entities
  - Hospitals and Hospital Based Health Systems
  - Providers Organized as Health Plans (e.g. Kaiser, Group Health)
  - Community Health Centers
  - Nursing Homes
  - Veterans Administration and Indian Health Service
  - Medical Groups
  - Private Physicians
  - Newly created consortia
- Tax status - for profit v. not for profit
- Set asides:
  - Rural
  - Providers – independent practitioners
  - Safety Net Providers

# Key Financing Requirements by Geographic Span

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- Federal Level
  - Development and maintenance of standards
  - Incentives to support investment:
    - Individual providers and systems
    - Community-wide projects
  - Capital financing vehicles
- Regional Level
  - Telecommunications infrastructure
  - Technical assistance
  - Training
- Local/System Level
  - Hardware/Software
  - Telecommunications infrastructure
  - Staffing
  - Training



# Review of Options for Federal Funding

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## Potential financing program models:

- Federal Technology Grant Program
- “Hill Burton” Healthcare IT Infrastructure Program
- Federal Reimbursement Incentives to Support Healthcare IT Infrastructure investment
- Healthcare IT Public-Private Partnership Program

# Review of Options for Federal Funding

- Creation of Federal Technology Grant Program
  - Grant approach consistent with IOM:
    - Crossing the Quality Chasm: proposed \$1 billion Innovation Fund
    - Fostering Rapid Advances in Health Care: funding for IT demonstration projects
  - Mechanism: federal legislation appropriates funds for grant programs
  - Selection process developed and administered by the federal government
  - Legislation proposing such programs has been introduced in the House and/or Senate:
    - Legislation proposes grants funding for (i) IT systems that reduce adverse events, medical errors or medication errors; (ii) projects which promote interoperability across hospital services or departments; (iii) electronic communication of patient data across the spectrum of health delivery; (iv) CPOE of bar coding applications; (v) electronic communication of data in hospitals that provide services to low-income populations; and (vi) improved clinical decision support systems
    - Majority of bills contemplate project award caps in terms of either total dollars or percentage of project costs
    - Several bills require project sponsors to contribute non-federal matching funds
    - Several bills require 20% of available dollars be allocated to rural hospitals
    - Several bills provide that grants not exceed the “applicable percentage” (a percentage of total Medicaid, Medicare, SCHIP revenues determined by the Secretary) of costs incurred by applicant for the Project

# IOM Rapid Advances Recommendations

## Data exchange platforms in 40 “communities” over a 3-year period

- “Community” refers to a marketplace: a geographic area that serves a particular population, specifically not focused on a single health care system or enterprise within that market
- A community might be as large as a state or metropolitan area
- 18-month pilot projects would likely include:
  - Formation of a public-private partnership
  - Establishment of a data exchange platform to provide interconnectivity, maintain security and confidentiality of patient data
- Legal protections for these pilot projects may be necessary
- Government would need to provide start-up funding, but all stakeholders should contribute to the ongoing operation of the platform
- Program should consist of “rolling pilot projects”
  - Begin with “about a dozen” pilot projects
  - As each set reaches the implementation stage, government should accept applications for the next set

# IOM Rapid Advances Recommendations

## Model state-of-the-art information and communications technology infrastructures in 8 to 10 communities

- Competitive selection to serve as pilot sites for advanced ICT infrastructures
- Public and private resources targeted to achieve a “paperless health care environment”
- Rapid migration of applications to the platform, including:
  - insurance enrollment, eligibility checking, claims processing
  - clinical knowledge management, decision support
  - Telemedicine, disease management, public health alert systems

## Small-scale, 12-month pilot projects focused on specific ICT applications. Pilot projects should also be conducted to test and refine applications in key areas

- Consumer applications
- Chronic care management
- Public health surveillance

# Financing Track Workgroup Recommendations

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The government will need to take steps to facilitate the development of the NHII, including establishing the “rules of the road” and removing legal or other barriers to NHII development.

This will require:

- Establishment and ongoing maintenance of national data standards and functionalities
- Identification of necessary changes in laws or regulations at national or state levels, including removal of barriers that impede collaborative efforts by hospitals and physicians to invest in IT
- Creation of model laws and regulations
- Establishment and enforcement of penalties for violations of rules, particularly regarding confidentiality and security

# Review of Options for Federal Funding

- Creation of “Hill-Burton” Program
  - Involves direct funding of hospitals based on statutory funding formula and federal conditions of participation
- Creation of Reimbursement Incentives to Support Capital Investment in IT Infrastructure
  - Physician practices:
    - Reimbursement for utilization of ambulatory CPOE, EMR or other
    - Reimbursement for electronic reporting of clinical data
    - Reimbursement for reporting of data on quality performance
    - Reimbursement for quality performance, electronic reporting required
  - Hospitals and delivery systems:
    - “Pass-through” of certain capital costs
    - “Add on” to reimbursement rates, subject to meeting conditions of participation

# Review of Options for Federal Funding

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- Public-private partnership model [“PPP Model”]
  - Blends resources and assets from both sectors
  - Public interest is usually ensured through coupling of:
    - Oversight process
    - Private sector participants’ long-term business interests
  - Key characteristics of public-private partnerships include:
    - Compelling public policy need for investment
    - Recognition that adequate investment unlikely or excessively costly, delayed the PPP
    - Structure that enables government to reduce its costs while improving quality of services for the public
    - Financial platform “free-standing”: allows projects to be privately financed and operated, based on revenues received for delivery of goods and services

# Federal investments in America's essential infrastructure needs

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The Federal government has a long and successful track record of partnering with the private sector to meet America's essential infrastructure needs:

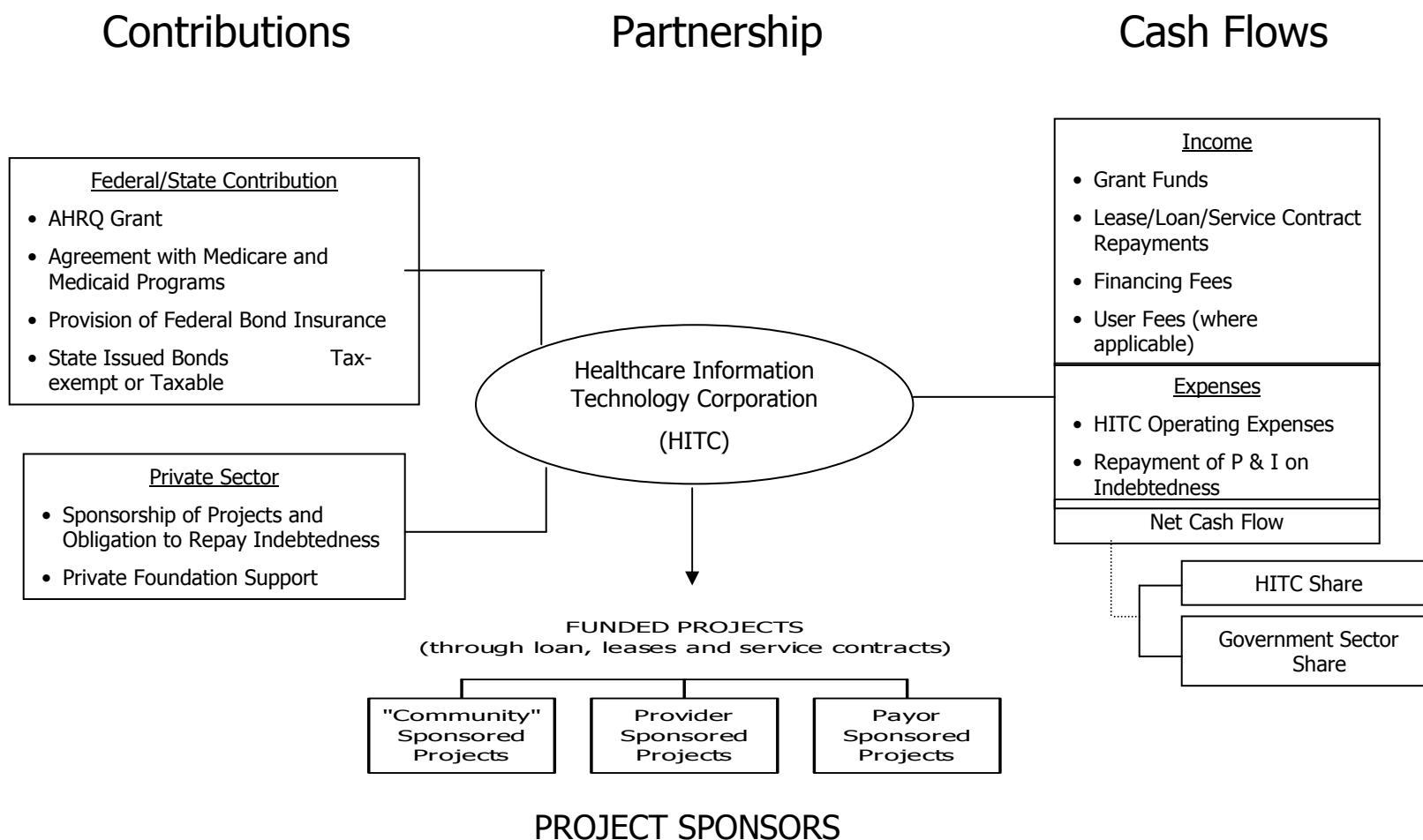
- Transportation
  - State Infrastructure Bank Pilot Program (US DOT)
    - Provided seed funding in 1996 and 1997 out of existing federal grant allocations for highway and transit infrastructure programs to 32 State administered revolving loan funds ("RLF").
    - State administered RLF programs have entered into over 245 loan agreements to provide over \$2.8 billion to private and public entities undertaking highway construction projects and transit capital projects.



# Federal investments in America's essential infrastructure needs

- Water and Wastewater Services
  - Clean Water State Revolving Fund (US EPA)
    - Program provides annual grants to State RLF programs, which in turn provide funding for projects involving water pollution control and abatement.
    - Total federal appropriation for FY 2002 set at \$1.3 billion.
    - Since the late 1980s, CWSRF programs have been financed with over \$20 billion from federal and State governments.
  - Drinking Water State Revolving Fund (US EPA)
    - Program provides annual grants to State RLF programs, which in turn provide funding for projects involving the provision of safe drinking water, including installation and replacement of treatment and storage facilities and transmission and distribution systems.
    - Total federal appropriation for FY 2002 was approximately \$850 million.
    - DWSRF programs have been funded with over \$12 billion from federal and State sources since 1997
  - Brownfields Initiative (US EPA)
    - Program makes grants to States and local governments and non-profits to set up RLF programs, which in turn will provide funding for projects that prevent, safely clean up and reuse brownfield sites.
    - Initial grants are available in amounts of up to \$1,000,000. \$100 million will be available to make up to 200 grant awards in FY 2003.

# Overview of Public-Private Partnership Program



# Structure of Public-Private Partnership Program

- Key Structural Features
  - Federal/State funds used to create Revolving Loan Fund program which supports healthcare IT infrastructure projects.
  - Initial funding could come from allocation of dollars used in connection with administration of Medicare and Medicaid programs
    - Medicare/Medicaid funding used for establishment of reserve fund to pay for costs attributable to project financing defaults, or
    - Alternatively, Medicare/Medicaid funding used to pay annual financing costs based on portion of project attributable to Medicare/Medicaid beneficiaries
  - Federal government provides qualified projects with insurance allowing for low borrowing rates. Initial funding by Medicare and Medicaid programs can be leveraged to create larger capital financing program.
  - State government issue tax-exempt and taxable bonds to fund qualified projects
  - Project sponsors obligated to repay project indebtedness. Funds collected in excess of funds required to repay debt service used to fund additional projects

# Structure of Public-Private Partnership Program

- Project sponsors obligated to pay financing fees which fund operations of administration of program by not-for-profits, Healthcare Information Technology Corporations, the Boards of which consist of private citizens and government appointed designees.
- Based on other RLF programs, other features of the public-private partnership program may include:
  - The requirement that Fund administrators put up matching funds equal to up to 20% of the federal contribution. The match could be in the form cash, labor, materials or services.
  - Broad enabling legislation to ensure that Fund administrators have:
    - Liberal project selection authority to ensure that the Fund can meet the needs of its particular constituency;
    - The ability to provide a wide selection of credit facilities to eligible projects, including low or no interest loans, credit enhancements, such as lines of credit and payment guarantees, subordinated loans, risk pooling and extended repayment schedules; and
    - The authority to provide technical assistance to eligible projects, including assistance with the funding applications, financial plan preparation and project design.

# Roles in a Public-Private Partnership Program

- Role and Responsibilities of Parties Participating in Healthcare Information Technology Public-Private Partnership Program
  - Regional Healthcare Information Technology Corporations(HITC)
    - Organize as tax-exempt 501 (c) (3) corporation
    - Independent Board of Directors, with two Board Members appointed by Secretary of HHS
    - Small Executive and Technical Staff
    - Responsible for selecting IT projects to be financed, providing financing and administering contracts with Project sponsors
    - Sources of Funding: Initial funding for first three years from grants, thereafter become self-sustaining through generating fees from Project financings
  - Federal Government
    - Provide AHRQ grant to fund HITC operating expenses in first three years of operations
    - Contract with HITC to provide for direct payment from Medicare for services determined to be for the benefit of Medicare beneficiaries

# Roles in a Public-Private Partnership Program

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- Approve State requests for Federal Financial Participation with respect to direct payment from states for services determined to be for the benefit of Medicaid beneficiaries
  - Provide insurance as credit enhancement for Bond Financing in which HITC is borrower
- State Government
- Issue Tax-exempt and Taxable Debt to support HITC Projects
  - Contract with HITC to provide for direct payment from Medicaid for services determined to be for the benefit of Medicaid beneficiaries
- Private Sector
- Develop and sponsor information technology projects
  - Contract with HITC for financing of Projects
    - Receive proceeds from bond issues to pay for Project costs
    - Agree to pay financing fees and debt service to HITC
  - Private foundation support for HITC operating costs

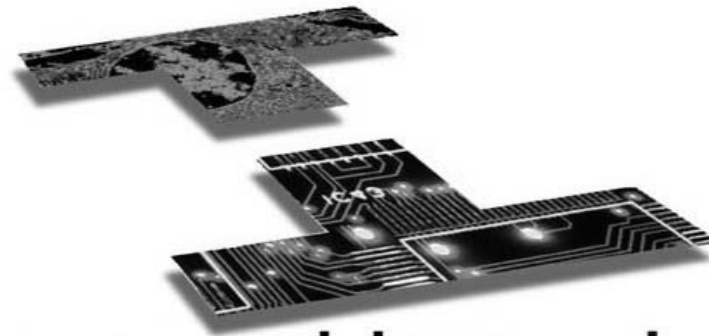
# Legal Framework for a Public-Private Partnership Program

- **Medicare**
  - Currently authorizes Part A intermediaries to provide “consultative services” to enable institutions to establish and maintain fiscal records, and authorizes Part B carriers to assist with respect to utilization review requirements
  - Would need to amend statute to direct intermediaries and carriers to fund initiatives financed by HITCs
- **Medicaid**
  - Currently provides matching funds to states for costs incurred in connection with the design, development, installation and operation of mechanized claims processing and information retrieval systems
  - Would need to amend statute to provide matching funds for state expenditures for broader range of initiatives
- **FHA**
  - Currently makes mortgage insurance available to hospitals for constructing and equipping new hospitals, rehabilitating existing hospitals, adding new facilities or equipment, or rehabilitating or replacing a portion of an existing hospital structure
  - Would need to amend statute to cover health care entities other than hospitals, and to authorize FHA to insure loans financed by HITCs
- **State Bond Issuing Authorities**
  - May require state legislation to issue bonds to HITCs, unless there exists general authority to lend to 501(c)(3)s
  - Under IRS regulations would need to qualify projects costs as capital as there are limits on the amount of working capital that can be financed through the tax-exempt bonds

# Financing Workgroup: Initial Options

- Payment changes (either budget-neutral or modest increase)
  - Payment of an additional fee (PMPM management fee) by public and private purchasers to providers who have certain minimum IT capabilities and use them to provide safer, more effective care to patients
  - Purchasers share savings realized from systems usage with providers
  - Adopt Medicare CPT codes for certain ICT activities not amenable to either “gain-sharing” or management fee activities
  - Purchasers make one-time only payments to offset the loss of productivity associated with conversion from paper to computer-based records
- Revolving loan funds, with loan guarantees
- Direct public support for safety net providers
- Tax incentives
- Public domain software
- Reduced regulatory or other burdens
- OR, the Government could pursue a package including all three interrelated paths:
  - establish a healthcare information technology grant and revolving loan fund
  - implement, in coordination with the private sector, payment changes which reward providers for effective use of information technology
  - remove legal barriers which impose obstacles to intelligent information technology investment.





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