PRIMARY CARE COALITION OF MONTGOMERY COUNTY, MD
CENTER FOR COMMUNITY-BASED HEALTH INFORMATICS
8757 Georgia Ave, 10th Floor, Silver Spring, Maryland 20910

The Second Health Information Technology Summit

A Regional Approach to connecting the Safety Net with Mainstream Healthcare using Health Information Technology

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Agenda

- Our Situation
- The Opportunity
- Overall Vision and Strategy
- Starting with a Success
- Vision for Health Information Exchange -- MeDHIX
- MeDHIX – Planning First
- MeDHIX – Implementation
- Lessons Learned

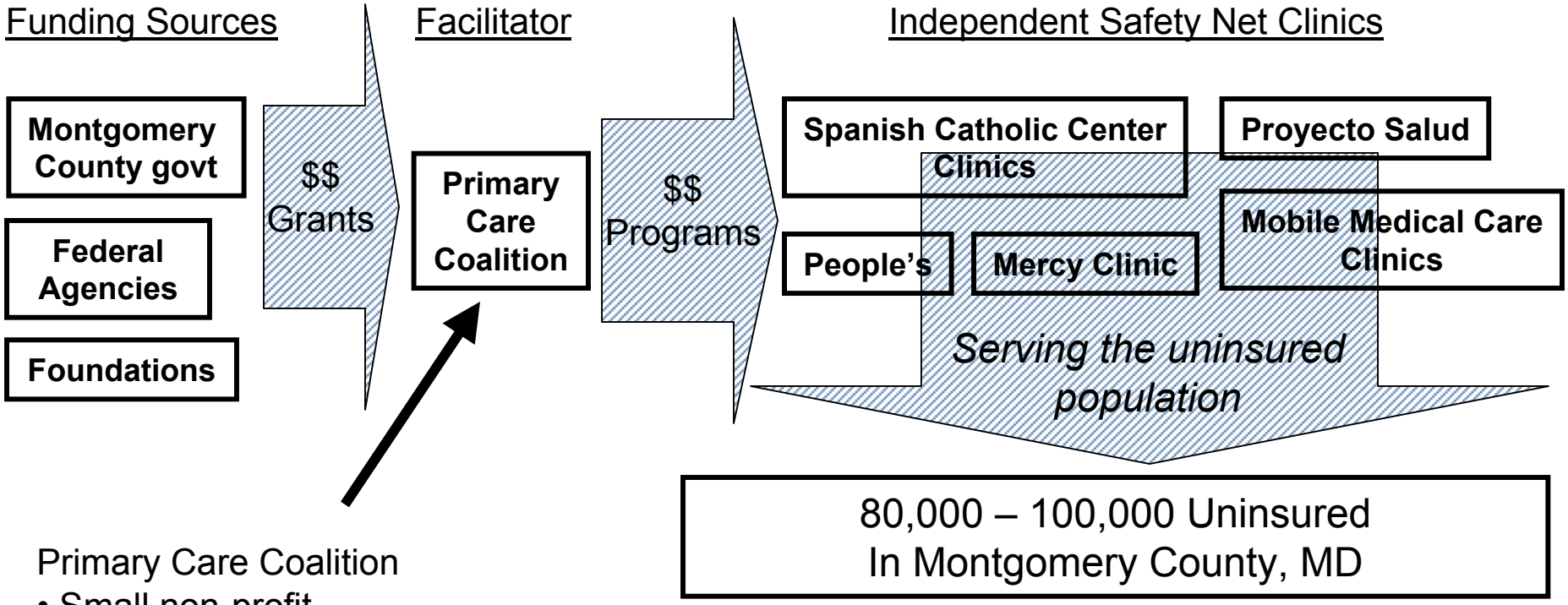
Our Situation in Montgomery County, Maryland

- Wealthy county but with 80,000+ low-income, large immigrant population
- No FQHC's – not eligible
- No University hospitals
- No County government primary care clinics
- Multiple, independently run non-profit safety net clinics serving less than 20% of uninsured population
- A need for county-wide sense of cohesiveness to improve access, quality and safety
- A receptive County government:
  - recognizing 'the buck stops here'
  - funding a percentage of need, receptive to increases, with accountability

Need:

- 'Virtual' comprehensive system of care for the uninsured
  - Maintain clinic independence
  - Build cohesiveness through shared record system
  - Link funding increase to accountability

Our Situation



Primary Care Coalition
- Small non-profit
- Focused on access, quality for uninsured in the county
- Program oriented
- Manage county funding
- Leverage federal funding oppty's

Uninsured Clinical Care assessment in our county

Cost, safety and appropriateness

- Most uninsured residents don't have a primary care "medical home" – they view the local Emergency Department as their primary point of care
  - 36% of ED visits by uninsured categorized as Non-emergent or Emergent/Primary Care Treatable
  - Only 10% of uninsured using Safety Net clinics annually
- Anecdotal evidence of duplicate/unnecessary ED and clinic tasks

Safety Net situation

- Safety Net clinics often compromised of volunteers, increasing difficulty in providing continuity of care
- IT systems comprised of standalone MS Access programs
  - No commonality of data
  - Primarily to count patients and events for funding needs
  - At best, limited IT skills
  - Old, plagued, equipment
- Generally with waiting lists for new patients, specialty providers
- Focused on today (not on future interconnectivity!)
- County government increasingly seen as source of funding

The Opportunity

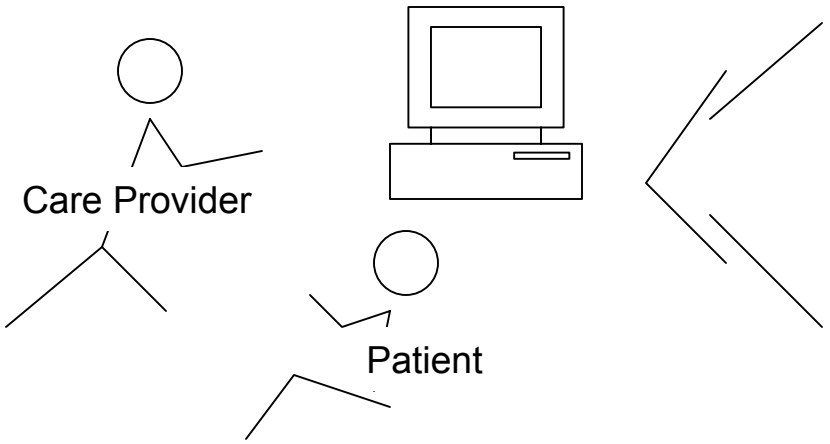
Twin opportunities, both leveraging IT:

1. Focus on Quality within the Safety Net world through
   - Sharing of health information within the Safety Net clinics
   - Establishing clinic programs of care with metrics, accountability
2. Tackle the Cost, Quality, Safety Opportunities through
   - Sharing of health information between the Safety Net clinics and Mainstream Healthcare

A Vision Evolved…

Overall Vision and Strategy

Our vision – a system where patient health information is available at point of care



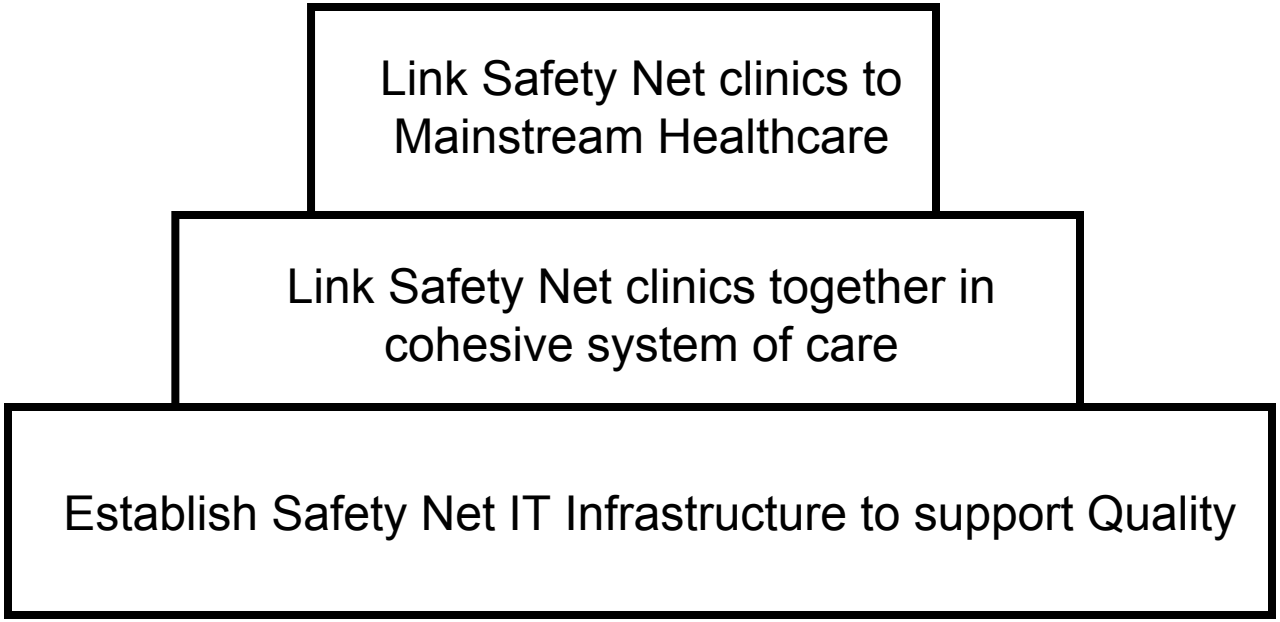
A vision where….

- Patient's health record includes visits to all Safety Net clinics, as well as visits to Specialty Care and Emergency Dept's
- Provider's care delivery is based on full suite of health information, with decision support tools that leverage *complete* health record
- Clinic EHR system is the focal point, facilitating:
  - *quality* (to Planned Care/Disease Management guidelines, use of online medical info),
  - *efficiency* (avoiding duplications), and *safety* (eg automated Adverse Drug Interaction)

With a phased strategy to get there…..

Overall Vision and Strategy

Three layer strategy…..



…focusing on the lower layers first, in preparation for the Quality/ Cost/ Safety benefits of the top layer

Start with a Success

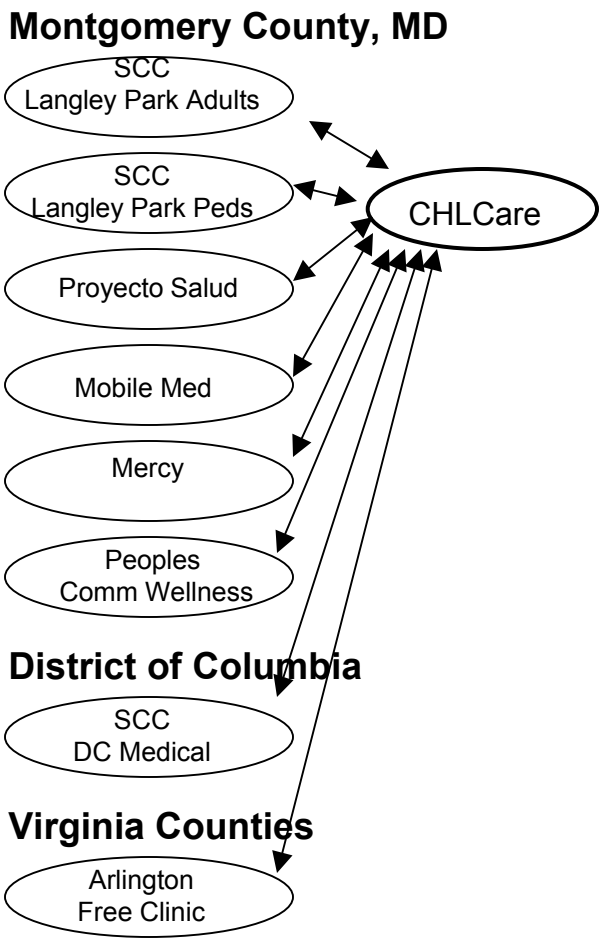
Tackling the first two layers first…

- 2001-2004 HRSA grant:
  - Helped establish association of the clinics – Community HealthLink
    - Stakeholder buy-in
    - Forum for Quality Improvement
  - Funded development of CHLCare , a *Shared* Electronic Health Record
    - *Shared* to:
      - Support data consistency
      - Single patient records across all clinics
      - Single, web-based system to simplify support, enhancements, local clinic needs
      - Hosted to facilitate a single linkage for data exchange with regional mainstream healthcare organizations
    - Focused on Safety Net needs
    - Platform for future Planned Care/Disease Management, Referral Management, Pharmacy Management….

….with results to date of….

Start with a Success

Safety Net Clinics

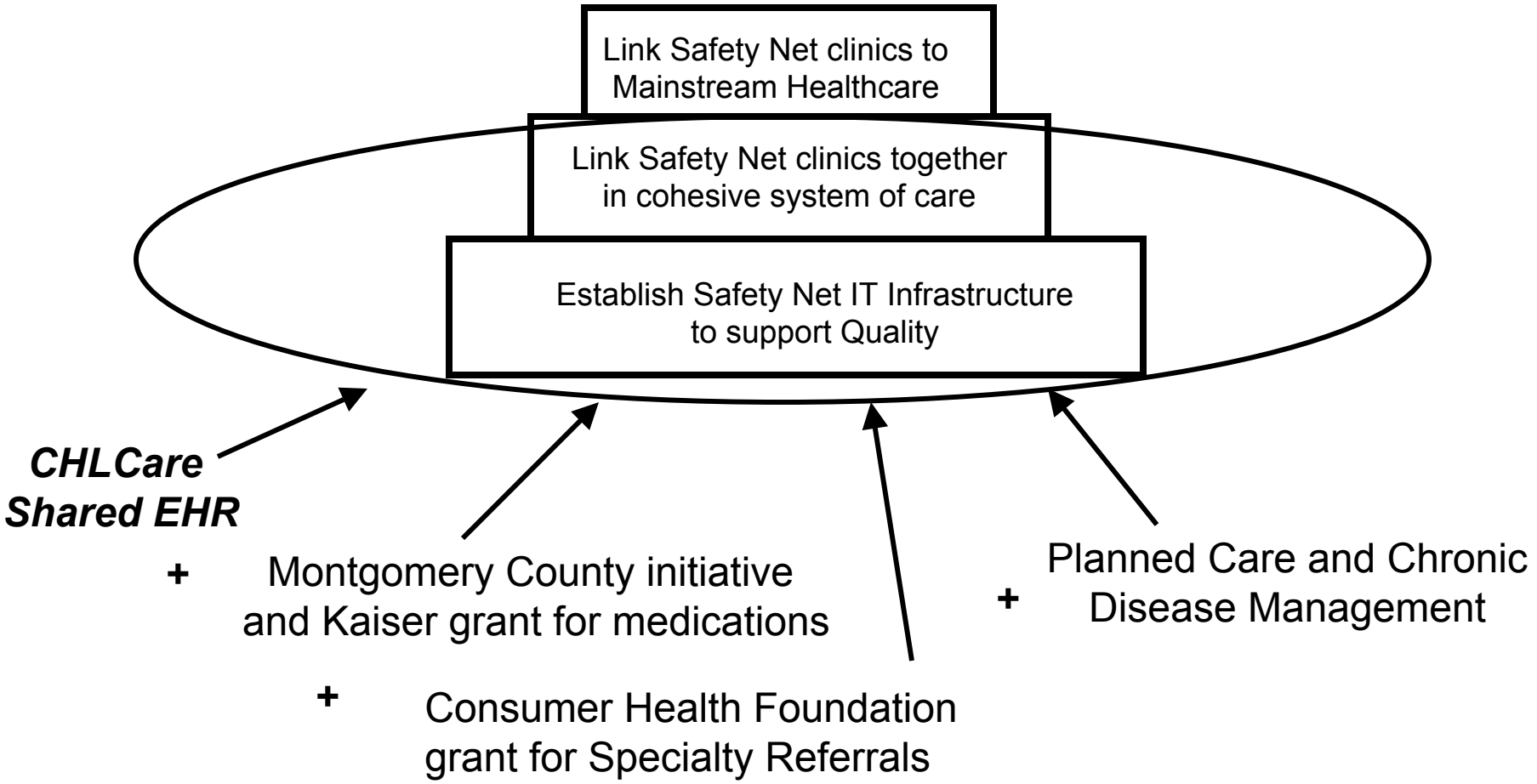


CHLCare Status:

- In operation since July 2003
- 6 Clinic organizations included
  - Prior MS Access data converted to CHLCare
  - Over 30 clinic sites
  - 80% of the county's safety net clinic visits
- Records on 50,000 patients / 120,000 visits
- Visit records are thin, but many include ICD9's and CPT's
- Inclusion of one clinic in DC and a VA clinic in process of converting to CHLCare
- Baseline for the clinics
  - capturing finance records
  - managing appointments for volunteer and paid staff
  - ICD9 and CPT coding, etc
- Single system, positioned for Clinic Planned Care and Mainstream interconnection

Start with a Success

- Establishing the core infrastructure – CHLCare
- Building out the quality programs



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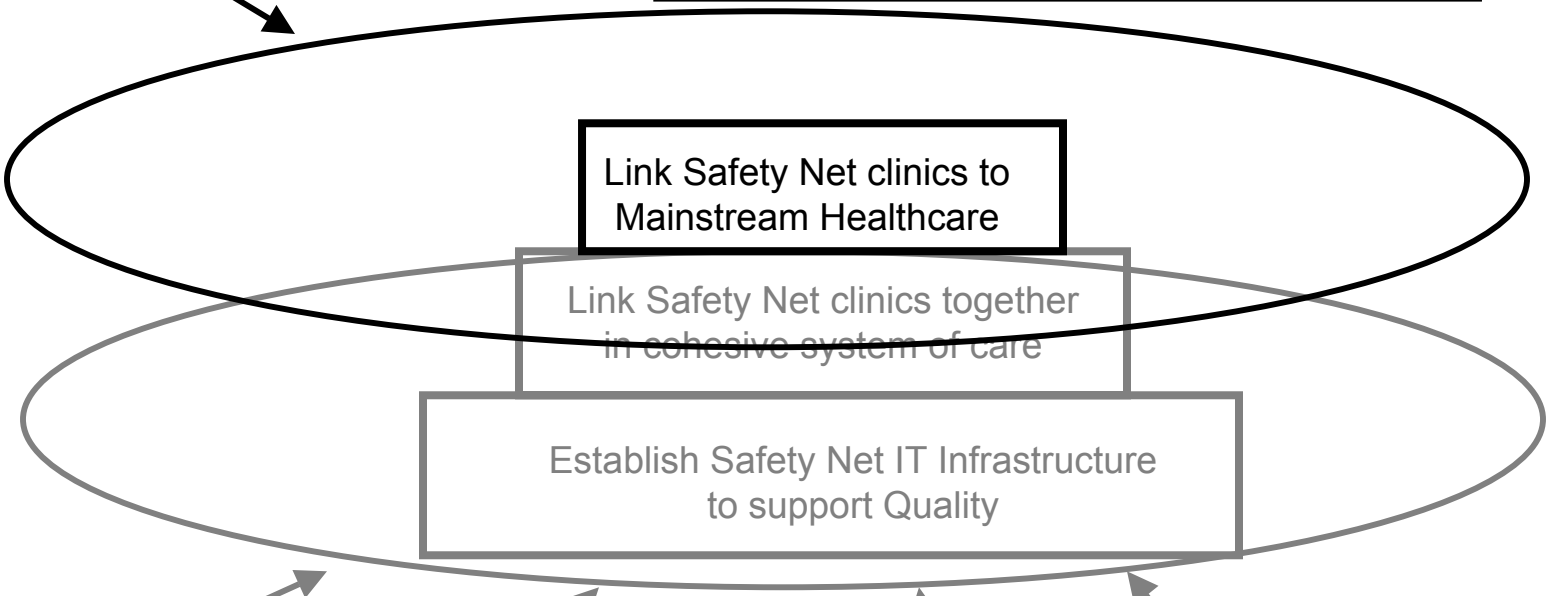
MeDHIX
Health Information Exchange

Positioning to link the Safety Net clinics to Mainstream Healthcare



CHLCare Shared EHR

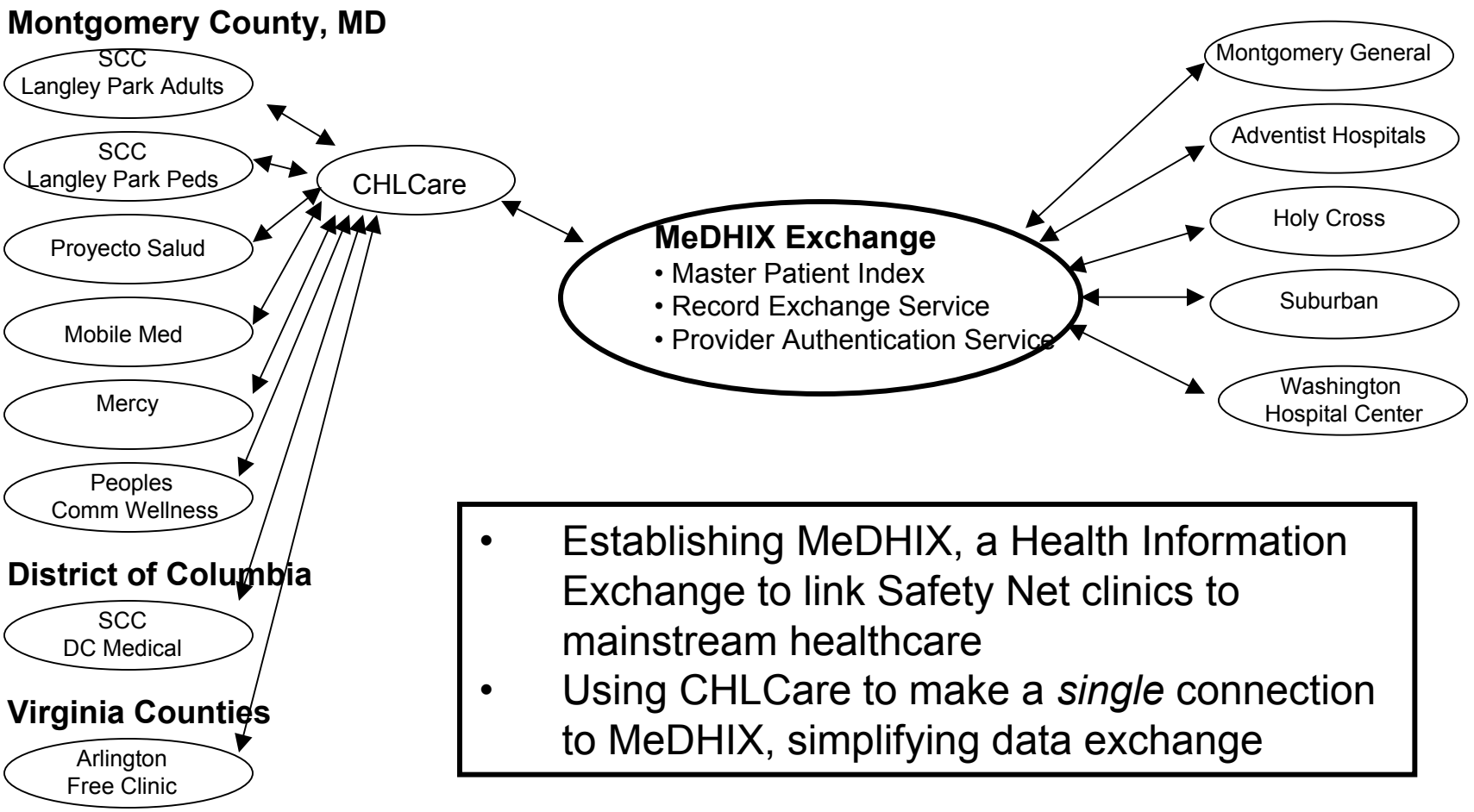
\+ Montgomery County initiative and Kaiser grant for medications

\+ Consumer Health Foundation grant for Specialty Referrals

\+ Planned Care and Chronic Disease Management

Vision for HIE -- MeDHIX

Here's the vision in a diagram….

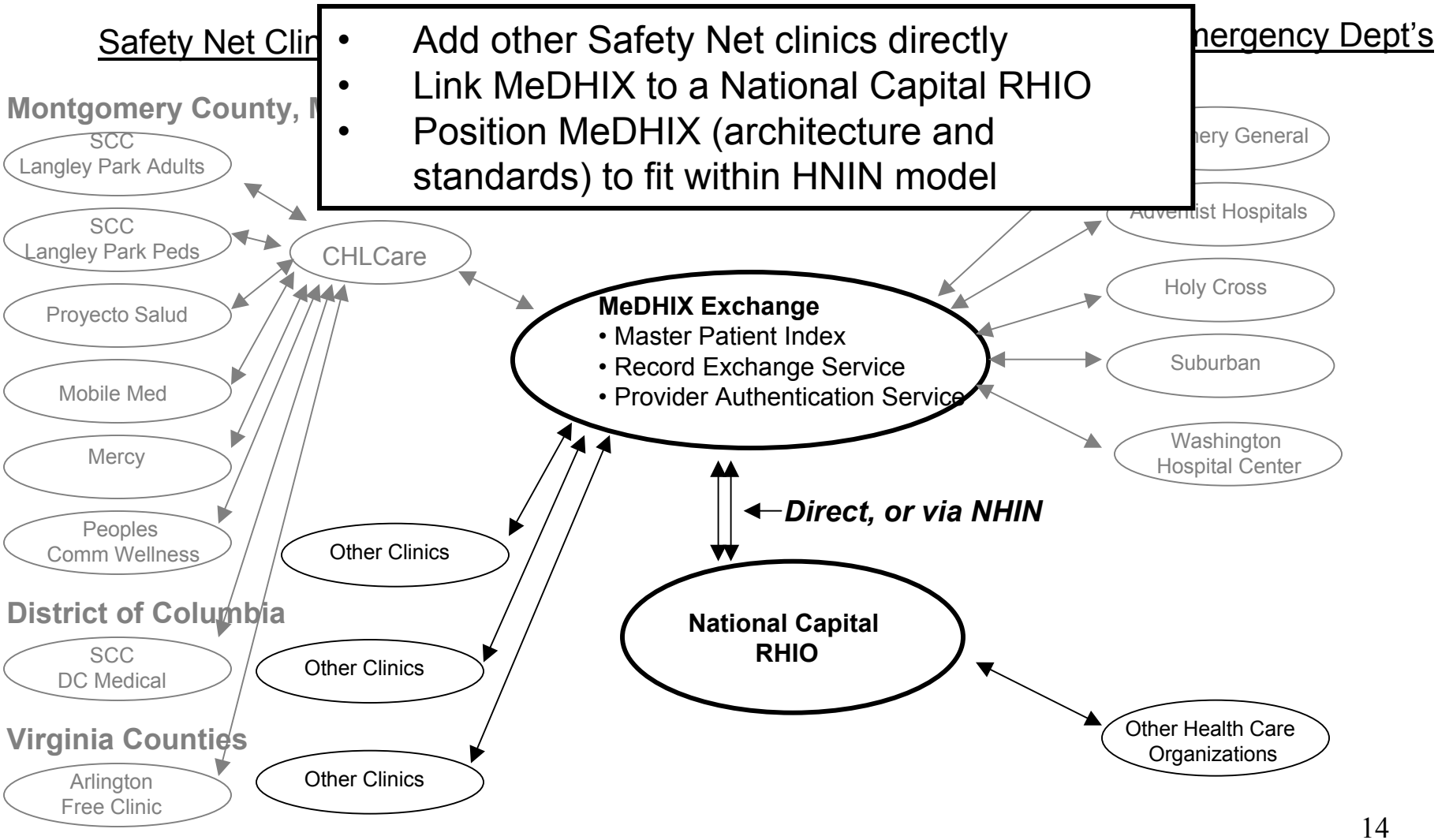


- Establishing MeDHIX, a Health Information Exchange to link Safety Net clinics to mainstream healthcare
- Using CHLCare to make a *single* connection to MeDHIX, simplifying data exchange

Vision for HIE -- MeDHIX

Here's the vision in a diagram….

- Add other Safety Net clinics directly
- Link MeDHIX to a National Capital RHIO
- Position MeDHIX (architecture and standards) to fit within HNIN model



Vision for HIE -- MeDHIX

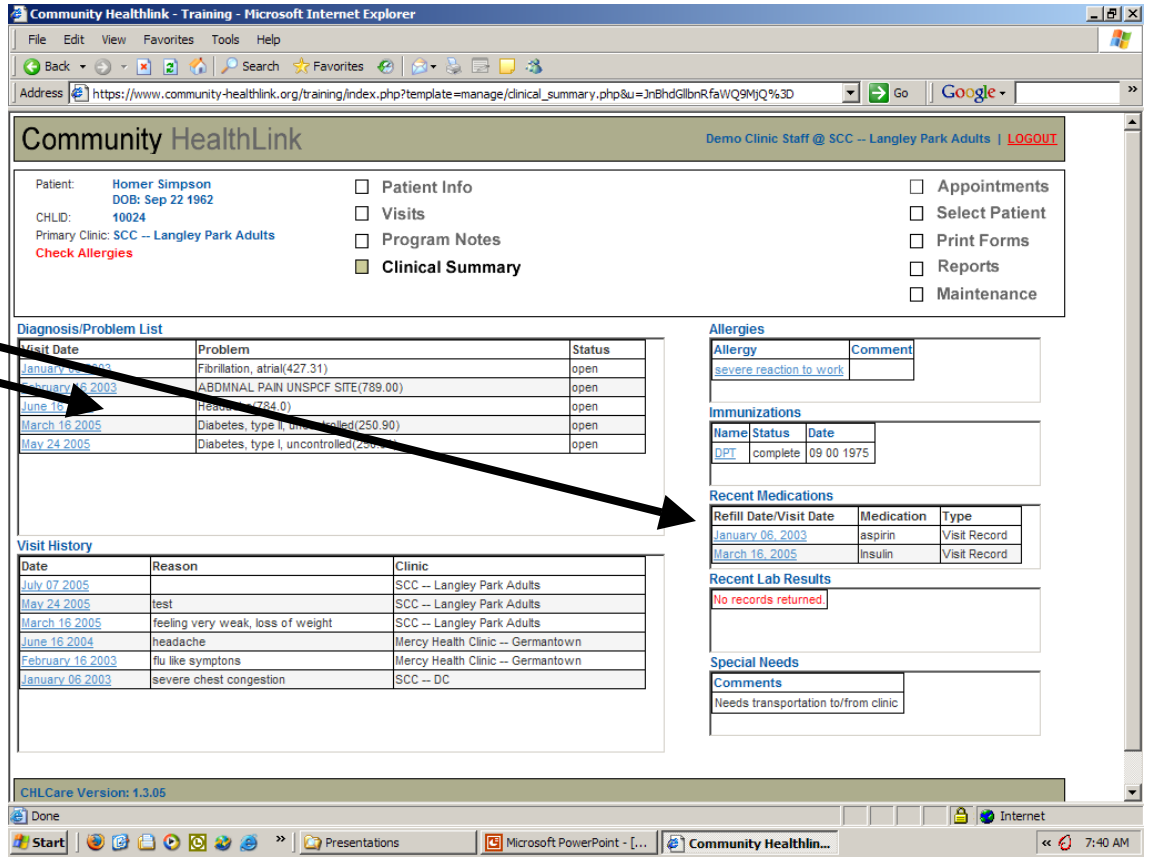
The Safety Net clinic provider will see all data through *one system*….

Health Information from the Hospital ED's systems will be displayed natively within CHLCare:

- Ex. CHLCare Clinical Summary screen will show data from clinic visits as well as hospital visits together
- CHLCare decision support (such as future Adverse Drug Interaction lookup) will use hospital visit data as well as clinic visit data

Full integration is the key

View of CHLCare, showing Clinical Summary for a patient



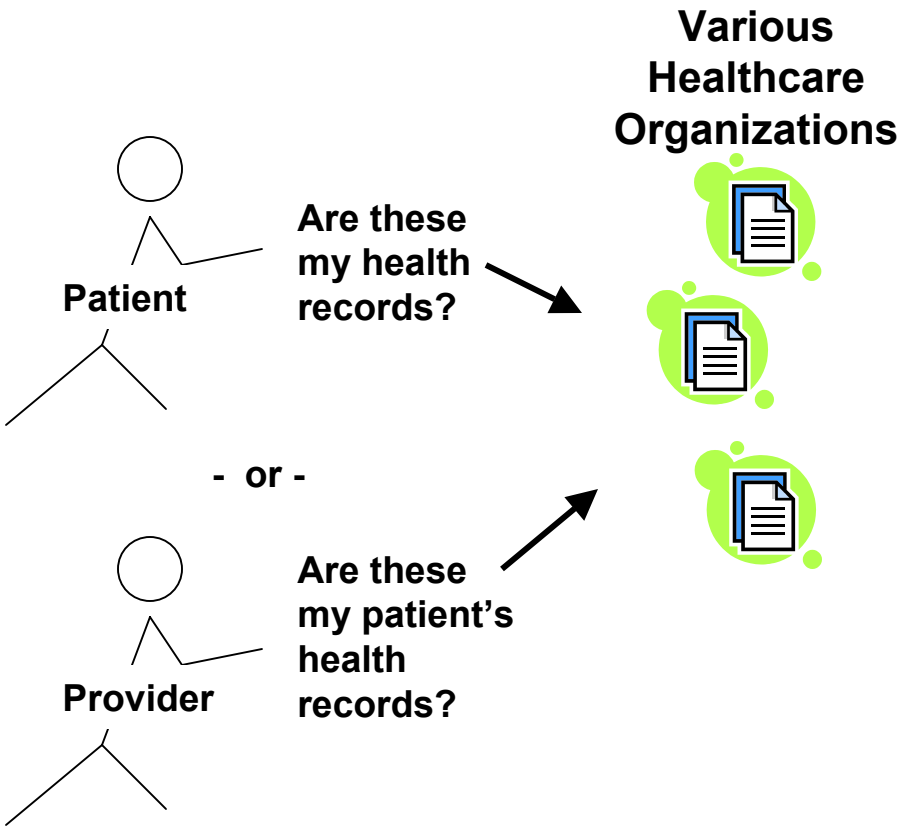
Our Plan for connecting Safety Net Clinics to Mainstream via MeDHIX

Step One: 2004 AHRQ THQIT Planning Grant

- *Research* of existing regional projects, Institute of Medicine documents, status of federal plans for Regional Health Information Organizations and National Health Information Network (NHIN)
- *Encouraging* hospital participation in discussions, planning
- *Preparation* of hospital Emergency Department Workflows
- *Assessing* existing technology
- *Determining* the key stakeholder requirements and key issues to be addressed

Let's look at some of the Key Issues….

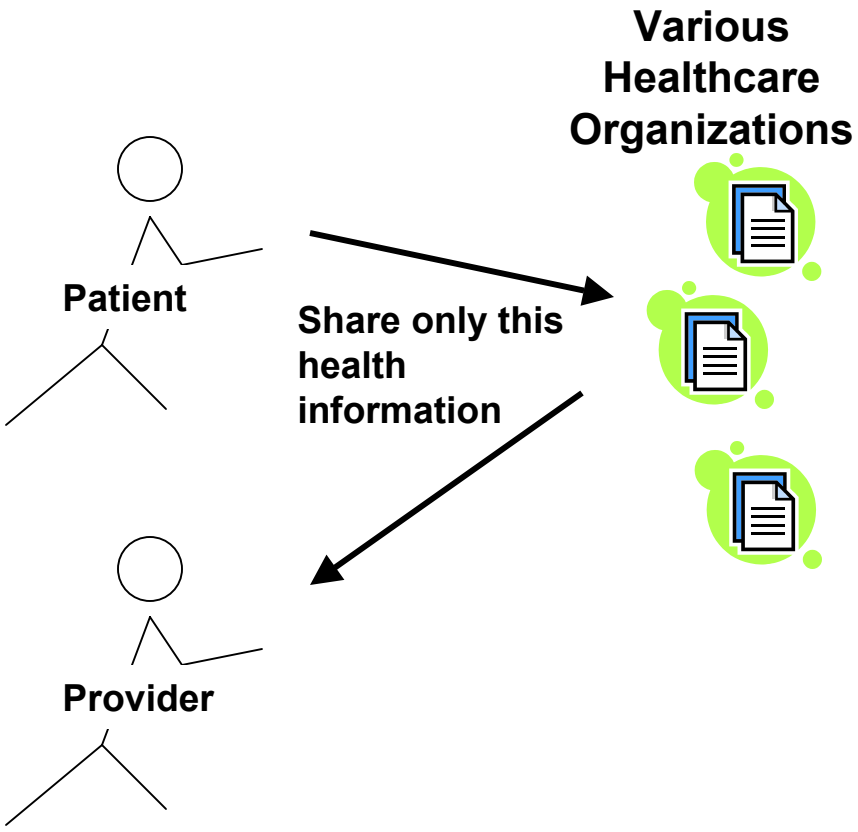
Key Issue # 1: How to match records to the patient



- Who should be responsible for the 'match'?
  - The provider at point of care?
  - The patient?
  - The patient and provider?
- Should matching be done just once and permanently stored? Or done each time at point of care?
- Who should educate the patient on the choices/decisions to be made about health information sharing?
- What are the implications to the healthcare providers?
  - impact on workflow, productivity
  - impact on liability
  - impact on quality, safety

Answers to these will likely impact public acceptance, the NHIN model, and the approach to technical implementation

Key Issue # 2: How much control should the patient have?

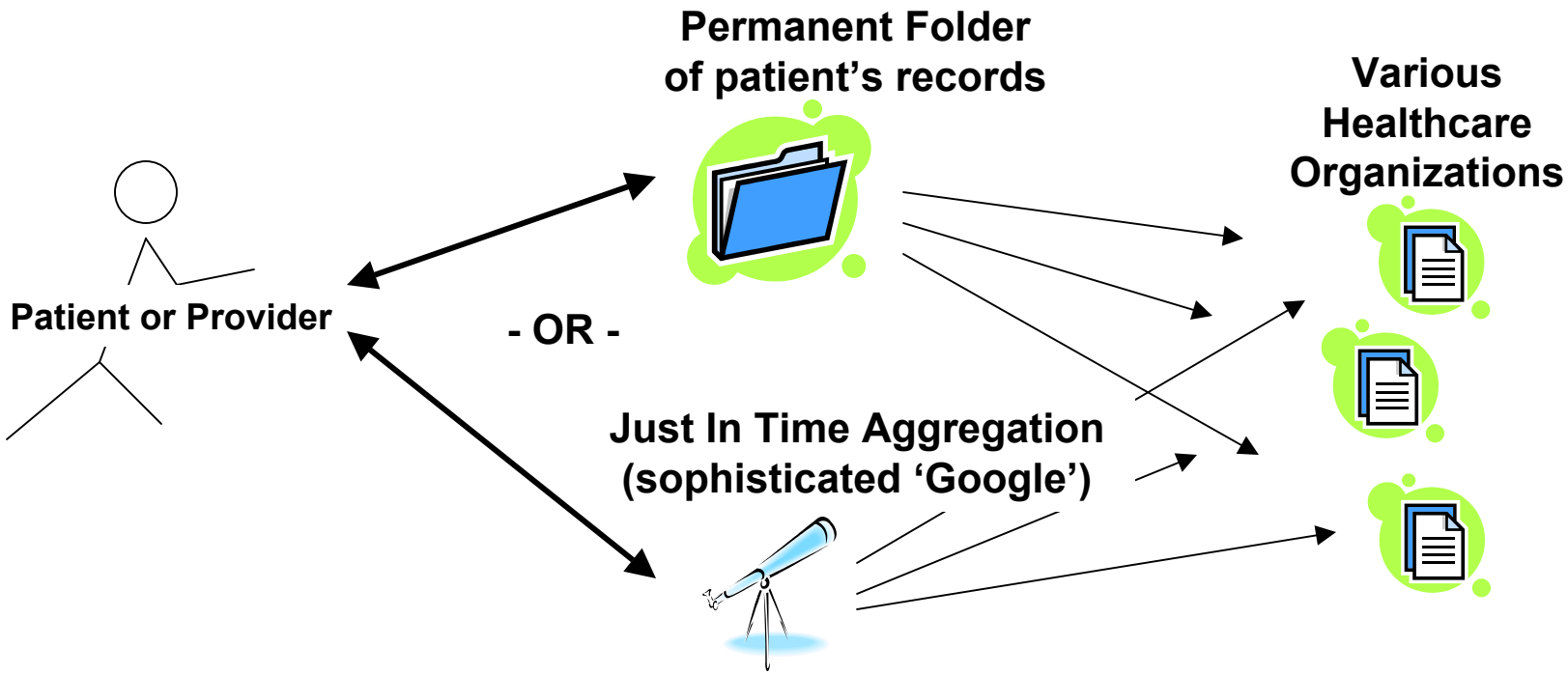


- Should the patient be able to permit just some health information to be shared?
  - Exclude whole records?
  - Exclude portions?
  - Permit to certain providers?

  The UK experience should be a guide: Assent, Dissent, Dissent Override
- Should participation be voluntary?
- Should the patient have access to their health information?
- Should the patient be able to challenge health information? Append modifications?

Answers to these will likely impact public acceptance, the NHIN model, and the approach to technical implementation

Key Technical Implementation Issue: Permanence or Just In Time?

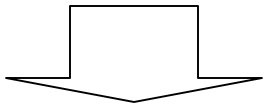


- Interoperability between RHIO's using these different implementation models could prove extremely difficult, at best.
- We hope that direction on which to use is driven by how best to address the fundamental issues (patient control of information sharing, how to match records, etc)

Our Plan for connecting Safety Net Clinics to Mainstream via MeDHIX

Step One: 2004 AHRQ THQIT Planning Grant

- *Developing* an Implementation strategy to fit the needs:
  - Demonstrate real value to both hospitals and Safety Net clinics
  - Avoid developing infrastructure ahead of federal direction setting
  - Use existing technology to move quickly, and keep the silver bullet for later!
  - Pace the program to clinic's data capture plan
  - Provide feedback on Key Issues to AHRQ, ONCHIT



Three Phase Implementation Plan

Our Plan for connecting Safety Net Clinics to Mainstream via MeDHIX

Phase One

- Leverage the work already done by Washington Hospital Center's Azyxxi aggregation/display system
  - Avoid Integration until Phase 2
- Achieve many, but not all, of the benefits
- Share Issues, 'lessons learned' with AHRQ, ONCHIT, others

Phase Two

- Establish integration once ONCHIT, HHS, others establish data sharing parameters
- Position MeDHIX as an integral part of the National Health Information Network

Phase Three

- Add additional participants, capabilities
- Link MeDHIX with National Health Information Network

Our Plan for connecting Safety Net Clinics to Mainstream via MeDHIX

Step Two: 2005 AHRQ THQIT Implementation Grant

Proceed with implementing the Three Phase Plan!

Lessons Learned

What we consider our "lessons learned"

- Develop a vision and strategy – share it, modify it, morph it, but use it to provide direction
- Recognize improbability of individually linking each Safety Net clinic to a Health Information Exchange
    - We were fortunate – most clinics were willing to move to a centrally managed Electronic Health Record system to facilitate HIE linking
- Start small, gain confidence, be successful one piece at a time
    - Our EHR is deliberately "thin" – we're now in the process of adding features
    - We started with just one clinic and gradually added others
    - CHLCare is now reasonably positioned to help make MeDHIX HIE successful
- Recognize what must be tackled immediately, and what can/should be postponed
    - We insisted on Shared/Centralized (Web-based) from the start
    - We've postponed the dicey issue of integration of external data – we'll wait until standards/interoperability issues are reasonably settled

Lessons Learned

What we consider our "lessons learned"

- Don't let the perfect be the enemy of the good
  - We did not hold off implementing CHLCare, awaiting Disease Management capability – we did an imperfect solution using CHLCare + CVDEMS
  - We will proceed with a phased approach for MeDHIX
  - We're accepting less-than-complete data capture at the clinics, simultaneously addressing the issue of critical mass and regional HIE, working multiple layers of the strategy concurrently
- Get the Stakeholders involved early and often
  - Don't assume that meeting attendance means commitment!
  - Don't assume lack of attendance means lack of commitment!
- Don't let HIPAA be an excuse! Privacy and security are more driven by stakeholders needs.
- Its not about IT
- Keep the patient's view, always