

Regional Data Exchange in New York City: The NYCLIX Project

Mark Lipton, MD
Director, Clinical Informatics, NYU Medical
Center

Vice-Chair of Board, NYCLIX, Inc.

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Background / Motivation

- There are quality problems in health care
- EHRs can help, but dissemination is slow
- Interoperability increases the value of EHRs
 - Have access to data that others have entered
 - EHRs become a window into the world of data
- Pioneering organizations are showing the way
 - Santa Barbara, Indianapolis, Massachusetts, etc.
- Federal policy (ONC) targeting interoperability
- Pilot funding opportunities



New York City region* statistics

- 11.8 million people
- 96 hospitals
- 1.7 million admissions
- 4.7 million ED visits
- 22 million hospital clinic visits
- 1.5 million in Medicare Part A
- 2.7 million in Medicaid
- Uninsured
 - Statewide – 17.2%
 - NYC – 25%



* NYC, Westchester, parts of NJ and Connecticut₃

Patient movement in NYC

- Study of Bronx Medicaid managed care program
 - 30% of ED visits at other than member's primary hospital
- Queens, 2002, Medicaid health plan
 - 21% of ED visits outside primary hospital
- Concur with numbers from other cities



GNYHA, Health Care News In-Depth, July 25, 2005

Origins of NYCLIX

- June 2004 –GNYHA IT Subcommittee: What might be a suitable joint project?
 - Regional data interchange
- 2nd half of 2004
 - Worked out competitive concerns
 - Decided care of patients is paramount (!)
 - Discussed what should be initial use case
 - High clinical value - make data available to ED physician
 - Lower competitive issues
 - GNYHA served as “honest broker”
 - City / State DOH, payers, home health, medical societies, local foundations at table early



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NLM grant

- Realized many details to be worked out
 - Legal, technical, financial, governance, etc.
- Applied for NLM IAIMS planning grant
 - 2 year, \$300K
 - Goal: Create a plan
- Organized into subcommittees to write grant
- Submitted 6/1/2005; Awarded full amount
- Meanwhile
 - Sought other funding sources
 - Did risk analysis (what are greatest barriers to success?)



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HEAL Grant Program

- October 2005 – NY State announces 4-year \$1B bond act for health restructuring and health IT
- Phase 1 – \$50M available for HIT projects
 - 2 year projects
 - EHR, eRx, or community-wide data sharing
 - Projects must include data interchange (!)
 - Must include > 1 organization
 - Must be aligned with Federal HIT policy
 - Matching program – State to fund 50%, up to \$10M



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Aims of NYCLIX HEAL proposal

- Build a technical infrastructure
- Implement data exchange in ED + clinics
- Support public health activities
 - Disease surveillance and reporting
- Evaluate impact on cost, quality, safety
- Create a plan to extend NYCLIX
 - Technical, legal, governance, business, etc.
- Awarded \$2.3 Million (applied for \$9.8 M)



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NYCLIX HEAL participants

- Continuum Health Partners
 - *Beth Israel Medical Center – Petrie Division
 - *St. Luke's Roosevelt Hospital
- Health and Hospital Corporation
 - *Bellevue Hospital
 - *Kings County Hospital
- Institute of Urban and Family Health
- *Memorial Hospital for Cancer and Allied Diseases
- *Mount Sinai Medical Center
- *New York Presbyterian Medical Center
- *New York University Medical Center
- North Shore – Long Island Jewish Health System
 - *Long Island Jewish Hosp.
 - *Staten Island Hospital
- *Saint Vincent Catholic Medical Center
- Visiting Nurse Service of New York



* = user, all are sources

NYCLIX participant -- locations

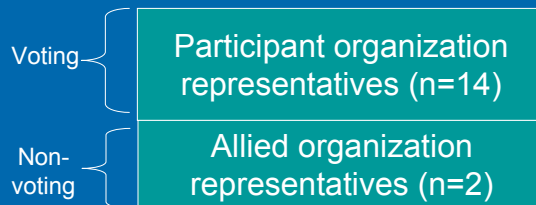


NYCLIX Governance

- NYCLIX Board
 - NYCLIX needed to incorporate to apply for HEAL grant
 - Board comprised of members of participant organizations
 - Also, non-voting “interested parties”, DOH, foundations (UHF)
- Steering Committee
 - Composed of subcommittee chairs (legal, technical, evaluation, clinical advisory etc)
 - Has operational responsibilities to do the heavy lifting



NYCLIX Board of Directors



NYCLIX Subcommittees

Business Subcommittee

Mark Lipton, MD (Chair), NYU, Laurel Pickering, New York Business Group on Health (Co-Chair), Janet Carr, MD, GHJ, Ken Ong, MD, Saint Vincent's Catholic Medical Center, Patricia Skarulis, MSKCC, Shelly Sinclair (Bank of America)

Evaluation Subcommittee

Gil Kuperman MD, (Chair), NYPH, Steve Christiansen, MD, NS, George Hripsak, MD, Columbia, Neil Calman, MD, IUFH, Mark Callahan, MD, Weill-Cornell, Rita Lukafka, PhD, Columbia, Mark Lipton, MD, NYU, Susan Stuard, MBA, GNYHA, Pravene Nath, MD, NYU, Rainu Aushal, MD, Weill-Cornell, Rachel Block, UHF, Glenn Martin, MD, HHC, Jason Shapiro, MD, Mt Sinai / Columbia

Legal Subcommittee

Ryan M. Wyatt (Chair), Associate General Counsel, Hospital for Special Surgery, Elizabeth G. Herries, Esq., Senior Associate General Counsel, Mount Sinai Medical Center, Irene M. Koch, Esq., Associate General Counsel, Maimonides Medical Center, Lynn F. Lowy, Esq., Associate General Counsel, NYU Medical Center, Deborah Brown, Esq., Associate General Counsel, Greater New York Hospital Association, Susan Stuard, Associate General Counsel, NYU Medical Center

Clinical Advisory Subcommittee

Jason Shapiro, MD, Chair, Mt. Sinai, William Goldberg, MD, NYU/Bellvue, Pravene Nath, MD, NYU/Bellvue, Donald Barton, MD, Elmhurst, Stuart Kessler, MD, Elmhurst, Phillip Fairweather, MD, Elmhurst, Buz Abrams, MD, Jacobi/Monte, Peter Fromm, RN, NY Downtown, Paris Lovett, MD, Columbia, Ben Stein, MD, NS-LIJ, Peter (Rusty) Peacock, MD, King's County, Gabriel Wilson, MD, St-Lukes-Roosevelt, Carol Barsky, MD, SVCMC, Ken Sable, MD, Maimonides, Gregg Almond, MD, Metropolitan

Technical Subcommittee

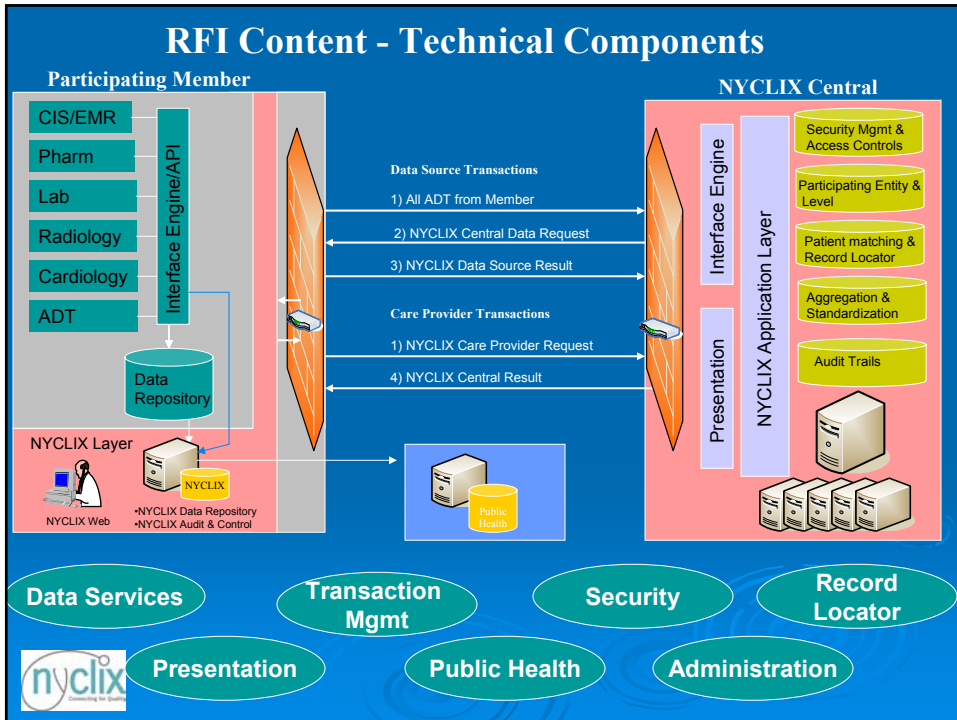
Paul Conocenti (Chair), NYU, Barbara Leto, Montefiore, David Artz, MD, Memorial, Farzad Mostashari, MD, NYDOHMH, George Hripsak, MD, Columbia, Jason Shapiro, MD, Mt Sinai and Columbia, Joseph Kannry, MD, Mt. Sinai, Mark Moroses, MD, Maimonides, MaryAnn Fattorini, Montefiore, Nader Mherabi, NYU, Wendy Milazzo, NYU, Pete Gallinari, Healthserve, Richard Minott, HHC, Roger Logan, Hebrew Home, Soumitra Sengupta, PhD, Columbia, Stu Myer, VNS, Tony Delise, Montefiore, Gil Kuperman, MD, NYPH, Mark Lipton, MD, NYU, Susan Stuard, MBA, GNYHA

Communications Subcommittee

Eric Goldberg, MD (Chair), NYU
Gil Kuperman, MD, NYPH
Mark Lipton, MD, NYU

Legal Committee

- Created bylaws for NYCLIX, Inc.
- Participation agreement
 - Between NYCLIX and each participant
 - Establishes rights and obligations of member
 - Must supply data
 - Fiscal responsibilities
 - Restrictions on use of data
 - Obtain patient consent for making PHI available
 - Comply w/ NYCLIX security policy



Technical Committee

- Developed desired technical architecture
- Beginning vendor selection process
 - Request for information
 - Creating a high-level design document / project charter

Evaluation Committee

- Identifying evaluation measures
 - Usage
 - Financial
 - Perspective of hospital
 - Perspective of payers/ purchasers
 - Quality and safety
 - Identifying conditions amenable to increased data availability
 - Provider perceptions
 - Patient satisfaction
- Developing experimental design



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Clinical Advisory Group

- Identified desired data elements
 - EKGs, Discharge summary, meds, labs, etc.
- Will identify workflow, but first identified status of ED systems at participants
 - EHR
 - Electronic tracking, but paper records
 - All paper
- Looking for next frontier of delivery of clinical value
- Working with technical committee regarding usability issues



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Communications Committee

- Newsletter
- “NYCLIX 101” slide deck
- Web sites
- More grants
- Will focus on lay and industry press
- Must establish patient/consumer communications plan



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Business Committee

- Responsible for identifying sustainability model
- Most critical aspect of project (perhaps not urgent)
- No magic bullets
- Received 2 years of funding from HEAL – then what??
- Hope to have evaluation studies that show impact
- Have some success in bringing business and payer leaders to the table
- Trying to formulate BUSINESS PLAN
- Following closely what other RHIOs are doing



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Organization – Status

- Board – meeting monthly
- Steering Committee – every 2 weeks
- Executive Committee – every 2 - 4 weeks sets Board agenda
- Subcommittees – meeting regularly
- High engagement among participants
 - Nearly 100% attendance at all Board meetings (!)
- Planning process well underway
- Making best use of time until we receive implementation grant funding



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What's easy

- Getting clinician consensus on value of clinical data exchange
- Finding IT people at most healthcare organizations willing to enter conversation
- Creating a high-level governance template
- Finding collaborative resources (UHF, eHI)
- Finding eager and willing vendors, consultants, pundits, and philosophers



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What's not

- Managing a mega-effort with volunteer army of IT and clinical professionals
- Getting buy-in from senior management of healthcare organizations
- Legal & Privacy – lots of concern among security officers, patients, physicians
- Technical – varying levels of technical readiness among participants to play ball. Must compete with high demand of other HIT projects
- Creating a business plan – No persuasive ROI studies are available



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NYCLIX Issues

- Should we explore new use cases and/or extend current use case?
- Should we partner with other RHIOs or continue flying solo?
- How do we best integrate patient, business, and payer constituencies in our plans?
- How do we rationalize costs among likely benefactors of NYCLIX participation?



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