

Characteristics	Ohio	Michigan	Rhode Island	New Jersey	Maine
Population¹	11,594,163	9,909,877	1,055,173	8,938,175	1,330,089
No. of Hospitals²	220 hospitals and 13 health systems (of which 172 are acute care hospitals)	154 hospitals	13 Hospitals	112 Hospitals (72 acute care Hospitals)	37 hospitals
No. of Active Physicians in the State³	32,438	26,948	3,656	25,930	4,174
Statewide HIE(s)	OHIP - CliniSync	MiHIN is a “network of networks” connecting 7 sub-state HIEs	RIQI - CurrentCare	NJHIN New Jersey Health Information Network “Network of Networks”	HealthInfoNet (HIN)
Other HIEs	HealthBridge – Cincinnati-based HIE that supports OH, IN, & KY: - 50 hospitals (20 in OH) - 800 physicians practices - 7,500 physicians - 6 labs	7 Sub-state HIEs <ul style="list-style-type: none"> • Great Lakes Health Connect • Michiana HIN • Southeast Michigan HIE • Upper Peninsula HIE • Henry Ford Health System • Jackson Community Medical Record • Northern Physicians Organization 	N/A	6 Regional HIEs <ul style="list-style-type: none"> • Jersey Health Connect • Camden HIE • Highlander • NJSHINE • Trenton HIE • Virtua HIE 	N/A
Participation Stats for CT HIE Presentation	CliniSync - 4886 Physicians & offices - 15K Providers - 8M Individuals - 150 Hospitals & health systems - 365 LTC Facilities	Great Lakes Health Connect - 4K+ Physicians & offices - 18K Providers - 6.5 M Individuals	CurrentCare - 4677 Physicians & offices - 4900 Individuals - 400+ entities (primary care/ specialty practices, CHCs, LTC facilities & visiting nurse agencies) - 13 hospitals (including L+M)	Jersey Health Connect - 8K Physicians & Offices - 6M Individuals - 32 Hospitals - 456 Outpatient Sites (Practices, BHC, LTC)	HealthInfoNet - 37 hospitals - 1.5M Individuals - 38 FQHCs - 456 Ambulatory Sites (includes physician practices, FQHCs, LTC sites & BH agencies) - 2,349 ME Clinicians and support staff active users

State Stats

¹ United States Census Bureau. Population Estimates July 1, 2014 (v2014) <http://www.census.gov/quickfacts>.

² Information from respective State Hospital Association, where available.

³ Association of American Medical Colleges. 2015 State Data Snapshots. <https://www.aamc.org/data/workforce/447978/2015statedatabooksnapshots.html>.

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Consent Model for Statewide HIE	Opt-out ⁴	Opt-Out	Opt-In	Mandatory	Opt-out (opt-in for behavioral health/ sensitive information)
Legal Entity Status	OHIP- CliniSync private, nonprofit	GL-HC Public/private collaboration, Nonprofit	RIQI- CurrentCare nonprofit	JHC Non-profit	HIN Independent, nonprofit
Financials⁵	Start-Up/Implementation: \$43.8M Annual Operating Cost: \$5M-\$8M	Start-Up/Implementation: Private Funding Annual Operating Cost: \$9M	Start-Up/Implementation: \$28M (through 2011 Go-Live) Annual Operating Cost: \$9M-\$11M	Start-Up/Implementation: Private Funding Annual Operating Cost: \$5.8M	Start-Up/Implementation: Private Funding Annual Operating Cost: \$6.5M
Staffing	24	34	64	7 + contractors	25
Funding history -Statewide Cooperative Agreement (HIE) -Regional Extension Center (REC) -Beacon Community (Beacon)	Federal Grants: 2010 \$12.8M ONC - HIE \$28.5M ONC - REC	Federal Grants: 2010 \$14.9M ONC - HIE \$16.2M ONC - Beacon \$19.6M ONC - REC	Federal Grants: 2005 \$ 5.0M AHRQ 2010 \$ 5.2M ONC - HIE \$15.2M ONC - Beacon \$ 6.0M ONC - REC Additional Funding Sources: \$3.7M Annual budget \$1.5M HIE bridge funding from payers \$2.5M CVS Caremark Charitable Trust \$0.8M Congressional appropriation	Federal Grants: 2010 \$11.4M ONC - HIE \$23.0M ONC - REC	Federal Grants: 2010 \$ 6.5M ONC - HIE \$12.7M ONC - Beacon \$ 4.7M ONC - REC \$ 0.5M ONC - Workforce 2012 SAMHSA 2013 SIM HRSA (connect to the VA)
Pricing Model⁶⁷ (Note pricing model may have changed since discussions)	Reports and Results: No cost to providers; 100% paid by hospitals \$1500 CAH/ \$2000 non CAH PMPM \$300/physician/year with sliding scale for large practices to contribute/publish data to HIE, receive ADT notifications and Public Health Reporting ⁸	- Core participating fee - One time project fee -Solution/Service fees (ongoing)	Subscription based model	\$130K per Hospital/year	Subscription based model ⁹ Subscription Fee \$200-\$600 per physician/year Hospital: \$1K/bed/year One-Time Implementation Fee \$5K for physicians \$25K for hospitals

⁴ “CliniSync switched from an opt-in to an opt-out model effective 12/11/15 due to administrative burden in gathering consent”; B.Shipley interview with Ohio CliniSync Communications Director D.Howe; Dec. 15,2015.

⁵ Review of 2013 IRS 990 Tax Forms.

⁶ Statewide HIEs have found that fee models based on transactions discourage use; HIEs are currently using subscription based models with a sliding scale cost depending on subscriber size; subscribers include providers, hospitals, payors and state.

⁷ Additional research required to identify current statewide HIE operating budgets and current subscription fee schedule.

⁸ B.Shipley interview with Ohio CliniSync Communications Director D.Howe; Dec. 15,2015.

⁹ B.Shipley interview with Maine HIN’s COO, S. Alfreds; Dec. 14,2015.

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HIE Informational Session	Functionalities/Services Provided					
	ADT/ Results Delivery	✓	✓	✓	✓	✓
	Analytics and Reporting Tools		✓			✓
	CCD sharing	✓	✓	✓		✓
	Clinical results inbox	✓				
	Community Health Record	✓	✓			
	Direct Secure Messaging	✓	✓	✓	✓	✓
	EHR Integration				✓	
	EMPI	✓	✓		✓	✓
	ePrescribing	✓				
	Health Plan Services	✓				
	Imaging	✓	✓		✓	
	Meaningful Use Support	✓	✓			
	National Prescription Drug Monitoring Database (PDMP) Integration	✓				
	Personal Health Record				✓ ¹⁰	✓ ¹¹
	Provider Directory	✓	✓		✓	✓
	PQS & Quality Reporting	✓			✓	
	Public Health Reporting/State Registries	✓	✓			✓
	Referral/ Referral Management	✓	✓			
	Telehealth				✓	
Viewer				✓	✓	
Best Practices/ Lessons Learned						
Patient / Consumer	<ul style="list-style-type: none"> - The Circle of Trust is very fragile - Consumer/patient are always a priority; must decide how the best fit in your model 		<ul style="list-style-type: none"> - Keep focus on Patients/Consumers and all decisions /actions should be based on this principal - Community decision-making process can be slow, but the outcomes are worth the time and effort 	- Dedicated Patient Portal		
Use	<ul style="list-style-type: none"> - Potential partnership model to maximize investments already made and to leverage a sustainability model - Don't believe half of what you hear about capabilities 	<ul style="list-style-type: none"> - Run it like a business - Start with easier items to build momentum of success - Minimize upfront investments-structured agreements to pay for infrastructure 	<ul style="list-style-type: none"> - Change to value based purchasing will drive use of the system - Educate individuals to adopt/use the system early on - Develop system that can include and link a patient's 	<ul style="list-style-type: none"> - Establish support staff early on for implementation - Develop Patient ID standards at the start - Establish dedicated HIE reps for each organization (member) with defined roles/responsibilities. 	<ul style="list-style-type: none"> - Develop the Service and Product Infrastructure - Expand HIN HIE and Analytics Products into National and Regional products 	

¹⁰ Rhode Island describes the PHR as a consumer portal.

¹¹ Maine will utilize the "blue button" for PHR and CCD Sharing. Funding under SIM initiative.

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HIE Informational Session		<ul style="list-style-type: none"> - Absolutely critical to keep providers in their EMR experience - Vendor must be a "Technology Partner" and have leverage to facilitate this relationship - Hospitals are the key starting point 		clinical data with their claims data		
	Local Leadership	<ul style="list-style-type: none"> - Don't create the theory of HIE and hope participants come – solve real problems - Champions are key-facilitate conversations with EMR companies 	- Don't create the theory of HIE and hope participants come – solve real problems	<ul style="list-style-type: none"> - Create a vision that recognizes that an HIE's power is about what can be accomplished collectively for the betterment of patients; actively engage in driving that vision to reality - Appropriate governance, management and performance management measurement process must be in a place to drive sound decisions, ensure progress and provides transparency 	- Open governance structure	
	Collaboration and Transparency	<ul style="list-style-type: none"> - Grassroots efforts are key - Define your "Customer" - Paying stakeholders must "buy-in" and have a voice in your direction 		<ul style="list-style-type: none"> - Critical to gain trust of health care community and individuals - Listen carefully to respond - Seek broad stakeholder input early and often 		
	Policy	<ul style="list-style-type: none"> - Low pricing and community approach is a key for buy-in - Don't believe half of what you hear about capabilities - Your model must be flexible. Directions and priorities change every 12-24 months 	<ul style="list-style-type: none"> - HIE is not fundamentally about technology, but workflow and people - Implement in a highly focused way - Consider more, those who have been successful like you rather than "HIE by the book" – consider partnerships. - There is not "End" to the HIE's development. 	<ul style="list-style-type: none"> - Should drive technology yet be considered in conjunction with technical, operational and sustainability - Opt-out will generally allow for the greatest use of the HIE and avoid duplicate of systems; but may limited types of data that can be included. - Role of government may change over time 	<ul style="list-style-type: none"> - Vendor neutral model - Patient identification standards - Support population health 	