

The Center for Primary Care Informatics: CPCI for the C-Suite



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CHCANYS Annual Conference
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Agenda

- Introductions
- Defining the Need
- Creating a Data Culture & Promoting Adoption
- Tools to Support Success
- Case Studies
 - Settlement Health
 - William F. Ryan Community Health Center
- Questions

Introductions

- Warria Esmond, MD, Chief Medical Officer, Settlement Health
- Barbara Hood, MBA, Chief Information Officer, William F. Ryan Community Health Center
- LuAnn K. Kimker, RN, MSN, Director of Clinical Innovation, Azara Healthcare
- Lisa Perry, MBA, MPP, Sr. Vice President, Quality and Technology Initiatives, CHCANYS



Do We Agree About What Work Is Useful?



All you've done is chisel all day! Do something useful, like helping your brother drag those rocks up the hill.

Population Health Management

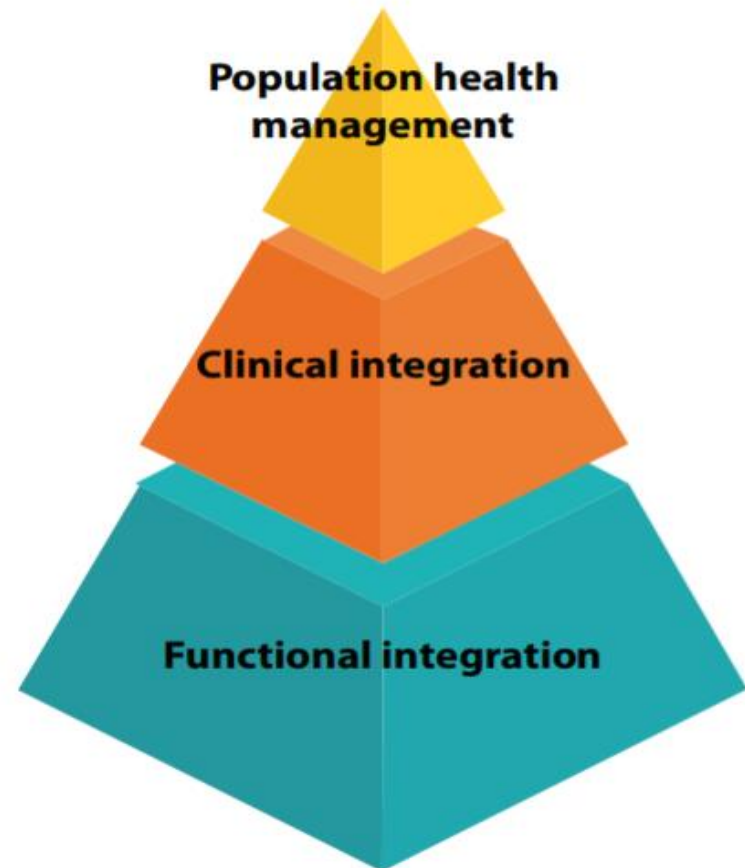
What it is....

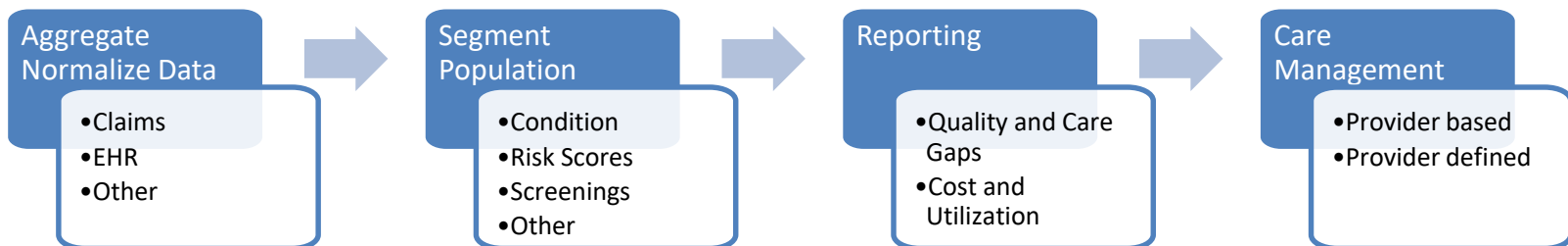
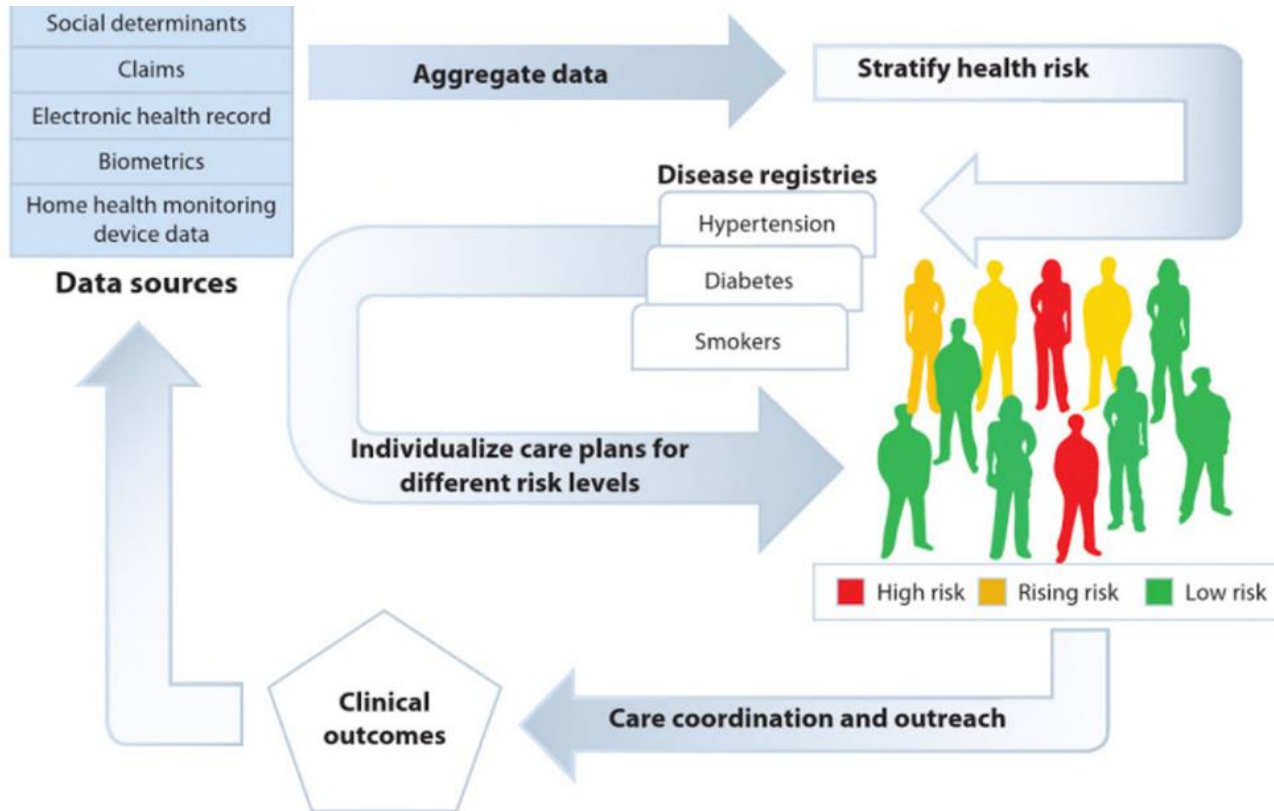
“...a data driven healthcare delivery model that provides individualized care plans to populations based on health risks and conditions.”

PHM uses

- data aggregation
- risk stratification and
- analytics

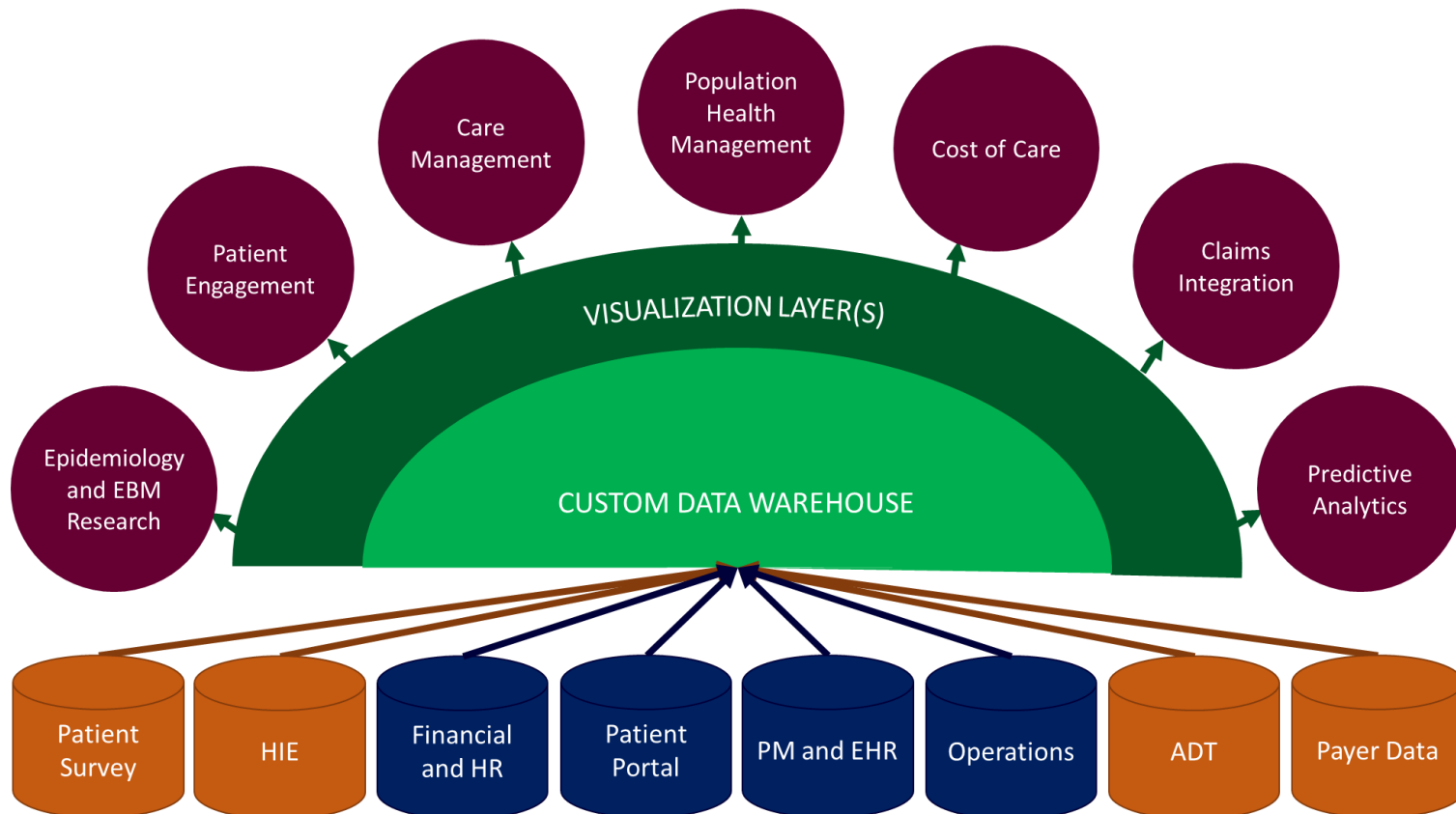
to design and monitor the effectiveness of treatments and interventions tailored to individual health profiles.



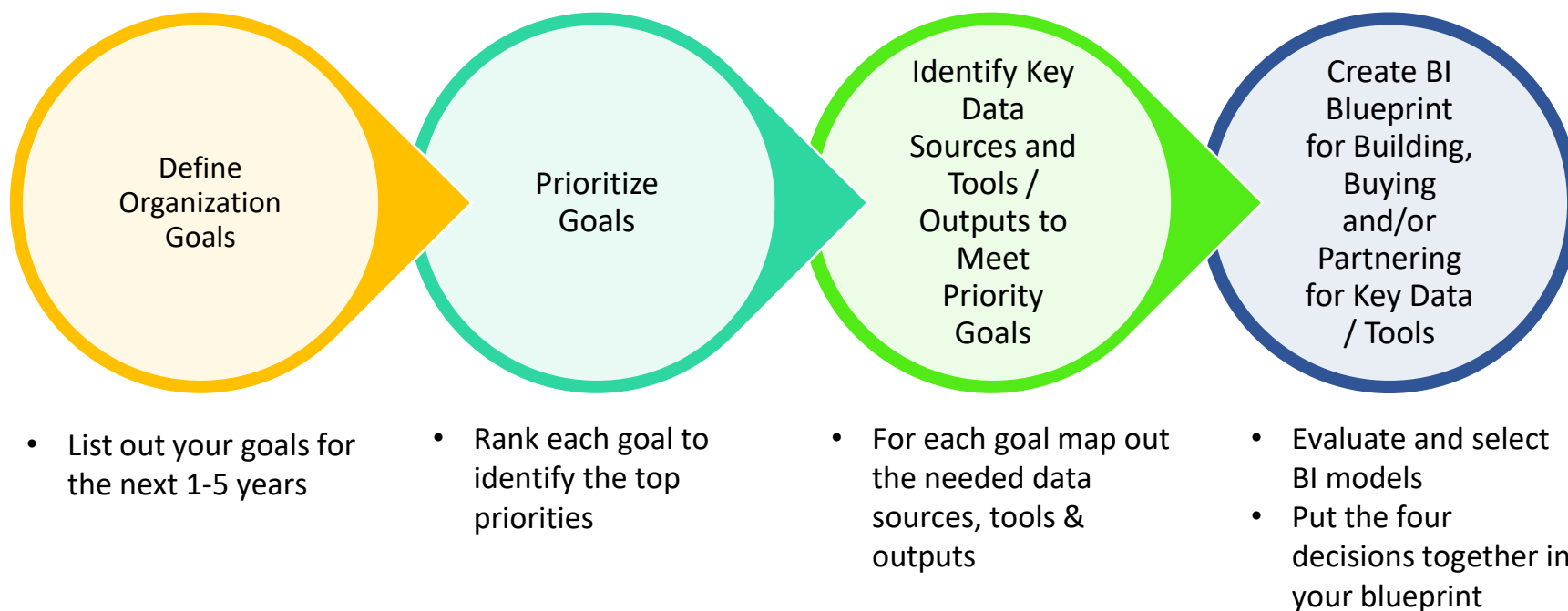


Business Intelligence

A set of data analysis and visualization tools that collect data from a variety of sources, and arrange and display the information optimally for analytics.



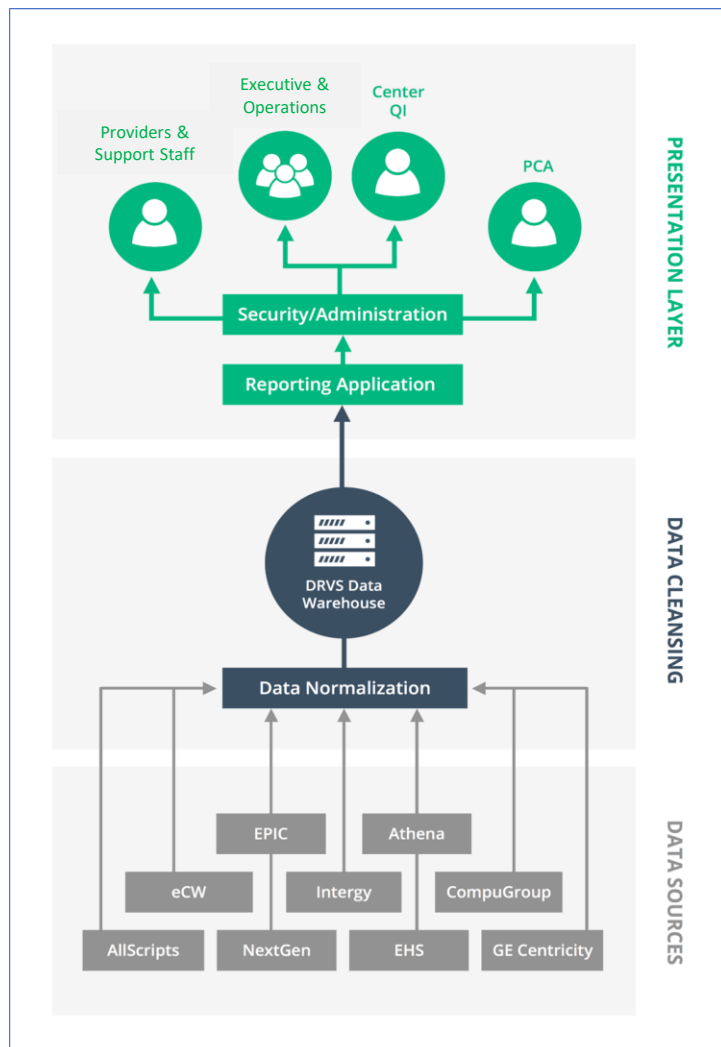
Building Your Strategy



CHCANYS' Center for Primary Care Informatics (CPCI)

The CPCI:

- ❖ Extracts data from EHRs
- ❖ Integrates data from external sources e.g., RHIOs, payers
- ❖ Calculates performance metrics
- ❖ Provides dashboards and reports for performance monitoring
- ❖ Provides clinical and operations workflow tools



INTEGRATION & ADOPTION OF CPCI

CREATE THE CULTURE, REALIZE THE ROI

Rationale for CHCANYS Centralized Data Warehouse

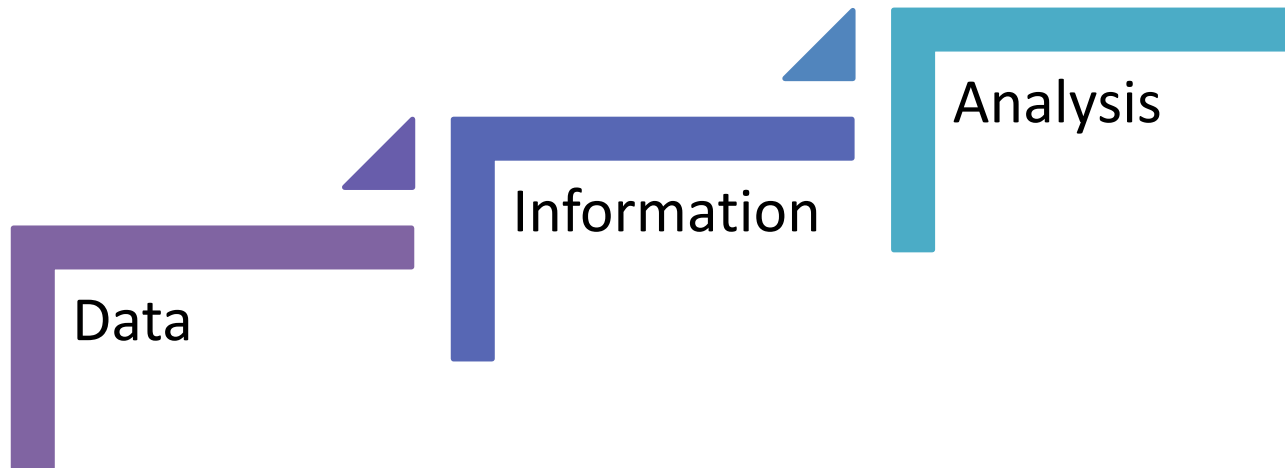
- Benchmark & Collaborate
- Improve care delivery (at POC)
- Support care management and population health
- Measure performance - tell your story
- Implement & enhance cost-effective IT capacity
- Integrate with State & local Systems (e.g. HIE)
- Respond to external data requests
 - Payers (Affinity, United Healthcare, Healthfirst, HealthPlus)
 - Government (DSRIP, PPS)
 - Academic institutions/researchers
 - Patients
 - Funders

This doesn't have to be you.



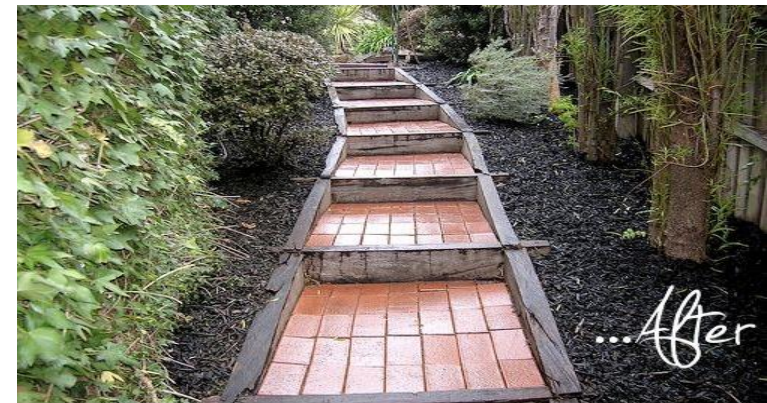


Take Care of Your Data – It's A Valuable Commodity



Requires

- Time
- Talent
- Treasure



Essentials of an Effective Data Program

- Leadership and Vision
 - Embedding data in the culture of the organization
- Frequent presentation of data throughout the organization
 - Leadership (all levels), Performance/Quality Improvement, Operations, Clinical Care Teams, Providers, Nursing, Finance, IT
- Commitment to validate the data & keep it clean
 - Data Governance – standard workflows; change control
 - Data Hygiene
- Resources to maximize adoption of data tools by clinical, operations and administrative staff
- Training and Education
 - Must be a learning organization



Return on Investment

3 – 22%
Relative Change

	Measure	Average Baseline	Average at End of Intervention	Relative Percent Change	% of Sites with Improvement > 5%
CDC Project	Breast Cancer Screening	34.2%	41.8%	22.2%	41.7%
	Colorectal Cancer Screening	36.7%	44.8%	22.1%	50.0%
	Cervical Cancer Screening	41.7%	45.0%	7.9%	41.7%
Healthy Hearts	Aspirin Use	78.0%	85.3%	8.8%	63.2%
	ASCVD Statin Therapy	71.0%	77.1%	8.4%	52.6%
	LDL Statin Therapy	67.0%	72.9%	8.2%	36.8%
	Tobacco Screening	78.0%	84.8%	7.9%	36.8%
	Hypertension Control	63.0%	65.7%	3.0%	36.8%

Forms the basis for incentives from MCOs, NYS VBP, and HRSA

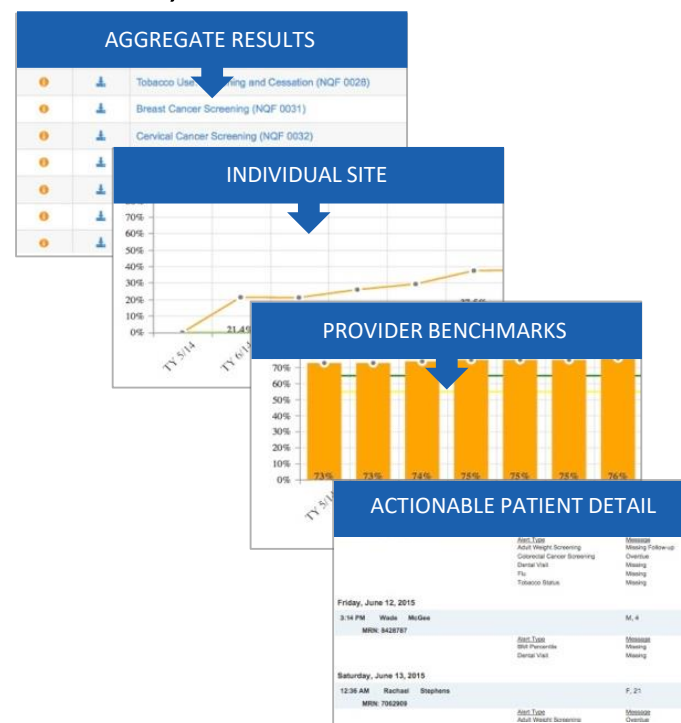
33-66% of the sites
5%+ Improvement

CPCI TOOLS FOR SUCCESS

CPCI Capacity

CPCI Supports Clinical Quality and Cost Management by Integrating Data Tools into Everyday Practice:

- Dashboards
- Clinical Quality Measures – graphs, tables, scorecards, dashboards
- Patient Visit Planning
- Referral Management
- Registries
- Panel Management
- Payer Integration
- Enrollment data
- Claims/total medical expense
- Utilization
- RHIO data
- Risk-scoring
- Operations & Finance measures
- Substance use/pain management





Panel Management

Active Pts, Past 3 Yrs

TY September 2017

12,574

Pts w/ Qualifying Encounter in past 3 years

Average Panel Size

September 2017

11,813

Pts w/ Qualifying Encounter

Panel Age Stratification

September 2017

Age	Numerator	% Total
18-25	1,593	13
26-45	3,825	32
3-6	747	6
46-64	2,706	23
65 +	606	5
7-17	2,119	18
<= 2	217	2

Active Pts, Past Yr

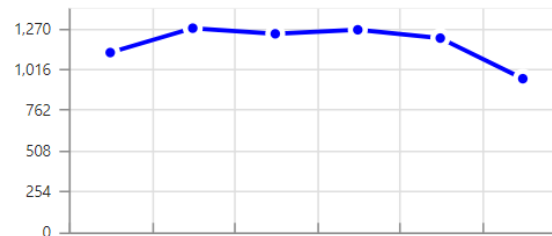
TY September 2017

8,869

Gap

Pts with F2F Encounters

September 2017



Pts with F2F by Risk

September 2017

Patient Risk	Denominator	% Total
High	871	90.8%
Low	13	1.4%
Moderate	75	7.8%

Inactive Pts (No visit in past year)

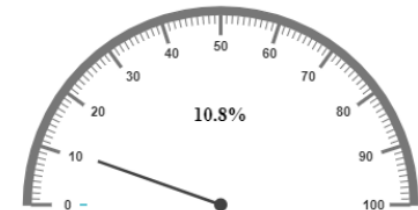
TY September 2017

3,705

Pts without Qualifying Encounter in past 12 months

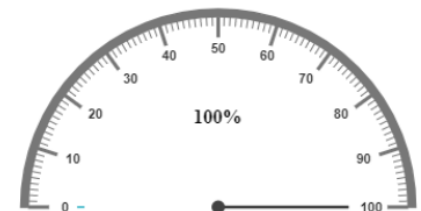
Provider Continuity, Past Yr

September 2017



Usual Provider Assigned

TY September 2017





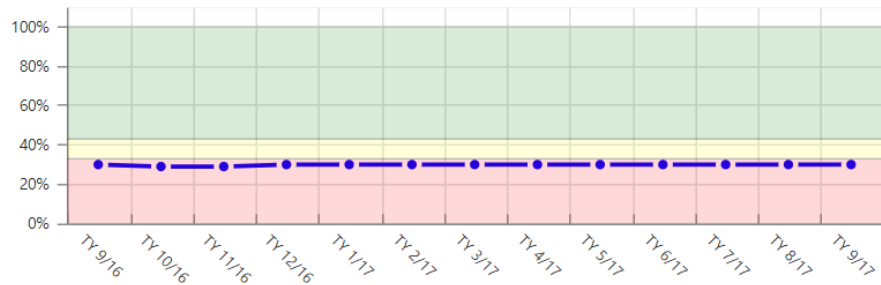
Attribution and TME

Attributed Members

13,470

Members Eligible During the Period

Timeline Trend



Matched Members Group By Cost

Cost Group	Match Rate	Matched Members	Members
No Cost Data	29%	10	35
\$0-5k	30%	3,821	12,837
\$5k-10k	20%	8	40
\$10k-25k	36%	50	138
\$25k-50k	30%	127	420

Unmatched Members

9,454

Unmatched Members

Matched Members Group By Age

Age	Match Rate	Matched Members	Members
<= 2	30%	72	241
3-6	30%	258	867
7-17	31%	753	2,430
18-25	30%	550	1,844
26-45	30%	1,284	4,321
46-64	29%	877	3,072
65 +	32%	222	695

Matched Members Group By Last Encounter

Last Encounter	Matched Members	% Total
No Encounter	691	17%
0-180	1,460	36%
181-365	889	22%
366-720	800	20%
>720	176	4%
Total	4,016	



Member Matching / Enrollment Dashboard

CHCANY DEFINING NEW DIRECTIONS
Community Health Care Association of New York State



Dashboards - Health Plan Enrollment Matching i



Period Type

Trailing Year

Selected Patients for Matched Members x

Filtered by : InverseNumerator x

Plan	Name	Member Number	Matched	Eligibility Start	Eligibility End	EHR MRN	Age	DOB	Age Group	Sex
Group Health	BOCZAR, BRENDAN	4080A	N	1/4/2017	5/30/2017		30	5/4/1987	20-34	M
Group Health	AMRINE, KIMBER	4084A	N	4/29/2017	8/24/2017		25	9/21/1991	20-34	F
Community Health Plan	HILLSETH, CONNIE	4089A	N	5/27/2015	5/30/2017		10	12/27/200	5-12	M
Group Health	GOLD, KIMIKO	4095A	N	2/23/2017	8/4/2017		8	7/17/2008	5-12	F
United Health Plan	KARABIN, ARNULFO	4098A	N	7/25/2016	8/27/2017		46	12/28/197	45-64	M
Group Health	ALGEE, JESSIKA	4118A	N	7/18/2015	6/23/2017		15	5/30/2002	15-19	F
United Health Plan	LEB SOCK, GLINDA	4109A	N	2/25/2017	5/27/2017		29	10/15/198	20-34	F
Group Health	DERUITER, LEANA	4159A	N	5/28/2015	7/28/2017		43	1/5/1974	35-44	F
Group Health	HEININGER, GERARD	4160A	N	4/12/2017	7/4/2017		38	8/21/1978	35-44	M
United Health Plan	KAYS, FRED	4163A	N	3/7/2017	6/1/2017		52	5/28/1965	45-64	F
United Health Plan	BELUE, HYMAN	4206A	N	8/1/2015	6/5/2017		51	3/17/1966	45-64	M
Community Health Plan	KUZMINSKI, WM	4222A	N	7/29/2015	7/18/2017		23	4/27/1994	20-34	M
Group Health	BECKLEY, RUFUS	4242A	N	5/22/2015	8/30/2017		6	4/27/2011	5-12	M
Community Health Plan	KARCZ, CARISA	4254A	N	9/11/2016	7/28/2017		57	3/3/1960	45-64	F

1 of 28 pages (460 items)

Members

Matched Members

8,106

6,893

16,962

22,206

51,553

26,721

Members

8,881

11,354

104,603

28,600

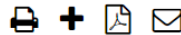
141,748

United



Clinical Quality – HEDIS Member vs Patient Measures

Dashboards - Cervical CA - Member vs Pt Results i



Period: September 2017 |
 Providers: Providers |
 Plans: HealthFirst |
 Update

of Members Assigned

TY September 2017

10,663

Members Eligible During the Period

Eligible Members

TY September 2017

4,107

Members w/ Qualifying Visit

Eligible Patients

TY September 2017

2,092

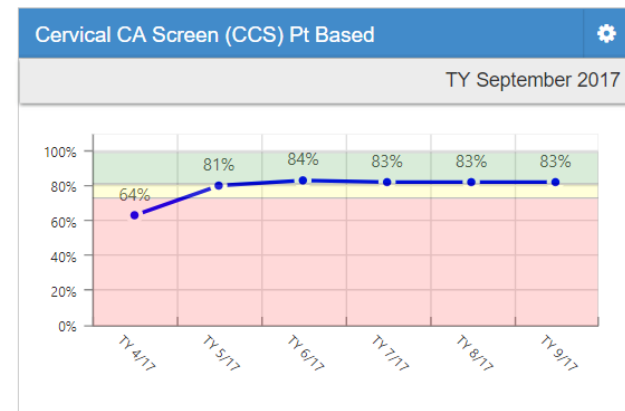
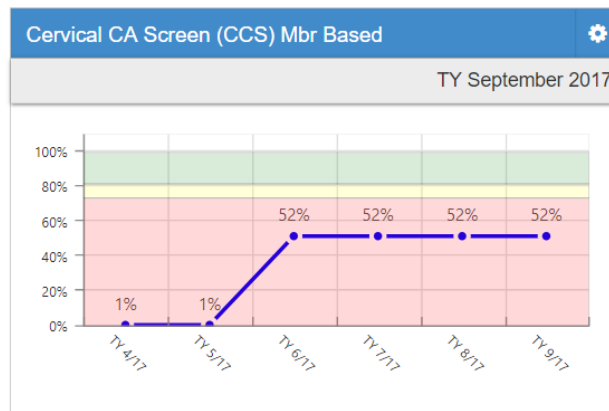
Pts w/ Qualifying Visit

Unmatched Members

TY September 2017

3,603

Unmatched Members





Hypertension

Patients with Hypertension

1,804
Pts w/ HTN

Undiagnosed Hypertension

37
Pts w/ 2 readings of BP >= 140/90 on separate visits

Risk Level of HTN Pts

Patient Risk	Denominator	% Total
High	1,687	94%
Low	7	0%
Moderate	110	6%
Totals	1,804	

HTN Provider vs Ctr

Selected
85%

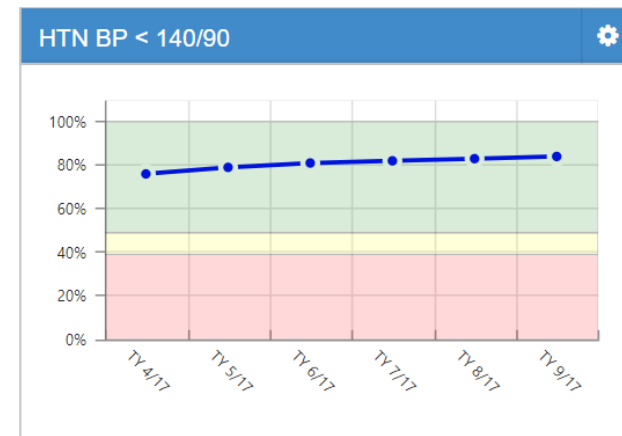
Center Average
85%

HTN BP Control by Age

Age	Result	Numerator	Denominator
15-19	73%	38	52
20-34	84%	509	606
35-44	86%	351	410
45-64	84%	522	618
65 +	86%	102	118

HTN BP Control

Pts w/ HTN	1,804
Pts w/ BP >= 140/90	269 15%



HTN Comorbidities

Cerebral Palsy	513
Chronic Non-malignant Pain	1,505
COPD	866
Coronary Artery Disease	1,464
Coronary Artery Disease No MI	1,382
Depression/Bipolar	1,320
Diabetes	1,136



Favorites



Visit Planning



Dashboards



Reports



Measures



Registries



Admin

Dashboards - Cancer Screening Gaps i



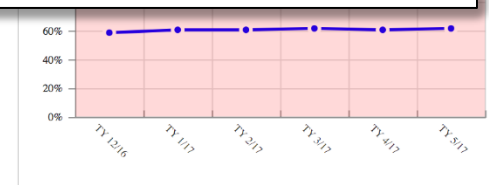
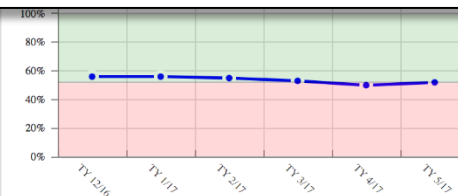
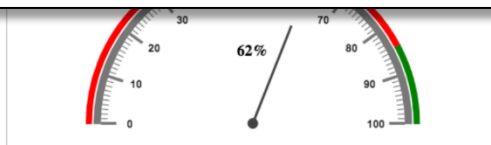
Period Type Period Centers Providers

Selected Patients for Cervical Cancer Screening (NQF 0032)

Filtered by : InverseNumerator

Center ID	Center Name	Name	MRN	Gender	Date of Birth	Medicaid-Number	Usual Provider
1	Access Community Health	MCCONNAUGHY, BERRY	1866627	F	6/1/1979	2012846	Augustine, Greg
1	Access Community Health	BACKMAN, AVIS	6439768	F	8/19/1965	1754729	Bridgewater, Bill
1	Access Community Health	HARKRIDER, ANTONINA	4713471	F	10/5/1974	3098046	Winslow, Francine
1	Access Community Health	KINNARD, BRYANNA	5157110	F	2/1/1972	4250814	Fritz, Renata
1	Access Community Health	FORTUNE, FAITH	1574462	F	7/15/1989	2841839	Smith, Joe
1	Access Community Health	ANDAYA, TONISHA	4680516	F	7/2/1987	4439938	Decelles, Larry
1	Access Community Health	BRUSON, ROSALIA	7503505	F	3/27/1992	7479864	Augustine, Greg
1	Access Community Health	LANHAM, CIRA	8182670	F	9/13/1977	2164966	Smith, Joe
1	Access Community Health	SITTO, LYNELL	6663797	F	10/27/1965	5342634	Gunther, Eric
1	Access Community Health	HOULTON, CLARENCE	5918547	F	12/17/1992	2025085	Crowley, Patrick
1	Access Community Health	MATUSZAK, MAIRA	1234939	F	4/14/1969	3462533	Winslow, Francine

1 of 19 pages (321 items)



Dashboards - Cancer Screening Gaps i



Dashboards - UDS 2016 vs Current i



Period: September 2017 |
 Centers: Centers |
 Providers: Providers |
 Service Lines: Primary Care |
 Update

UDS Performance - 2016					
Measure	Result	Numerator	Denominator	Exclusions	
Appropriate Rx for Asthma	87%	3,780	4,333	465	
BMI Screening & Follow-Up 18+	63%	167,704	266,524	12,946	
CAD Lipid Therapy	63%	3,431	5,419	0	
Cervical Cancer Screening	51%	58,356	114,667	16,726	
Child Wt Screening /BMI/Nutritional/Physical	49%	36,972	75,282	329	
Childhood Immunization Status	21%	1,436	6,742	0	
Colorectal Cancer Screening	31%	30,972	100,259	767	
Depression Screening & Follow-Up	62%	154,208	250,405	58,613	
DM A1c > 9 or Untested	32%	12,634	39,291	0	
DM A1c < 8	57%	22,227	39,317	0	
HIV and Pregnant	0%	16	14,544	0	
HIV Linkage to Care	63%	22	35	0	
HTN Controlling High BP	59%	50,135	85,421	916	
IVD Aspirin Use	65%	8,676	13,337	1,571	
Tobacco Use: Screening & Cessation	87%	162,216	187,172	0	

UDS Performance - Current TY					
Measure	Result	Numerator	Denominator	Exclusions	
Appropriate Rx for Asthma	85%	3,909	4,581	550	
BMI Screening & Follow-Up 18+	61%	170,173	276,811	12,093	
CAD Lipid Therapy	66%	3,581	5,456	0	
Cervical Cancer Screening	49%	57,711	117,032	19,111	
Child Wt Screening /BMI/Nutritional/Physical	50%	37,182	74,729	300	
Childhood Immunization Status	23%	1,607	6,883	0	
Colorectal Cancer Screening	33%	35,409	105,860	719	
Depression Screening & Follow-Up	66%	170,034	257,649	60,607	
DM A1c > 9 or Untested	33%	13,662	41,456	0	
DM A1c < 8	56%	23,090	41,456	0	
HIV and Pregnant	0%	19	13,142	0	
HIV Linkage to Care	100%	40	40	0	
HTN Controlling High BP	60%	52,672	87,170	797	
IVD Aspirin Use	65%	8,027	12,314	1,457	
Tobacco Use: Screening & Cessation	87%	164,076	188,582	0	

Vertical sidebar with settings gear icons and a color-coded legend for the current year (TY 2017).

CPCI: Continuing Enhancement

- CPCI was founded to support long term goal of ensuring CHCANYS members are successful in a value-based payment model
- CPCI has evolved as member needs evolved, and has provided significant benefits both at the individual member level and overall network level
- CPCI is a nationally recognized model for FQHC data integration
- National and regional trends indicate the need for sophisticated data analytics capacity will continue to grow
- Regional trends indicate CPCI must continue to evolve to meet additional member needs

Recommended CPCI Enhancements to Support:

1. Contract Negotiation
2. Performance Improvement
3. Care Management
4. Delegated Credentialing

Azara's Roadmap for Product Development

- Includes most of the recommended enhancements
 - Development Timeline runs from now through Q3 2018
 - Includes:
 - Risk Scoring - Now to Q4 2017
 - Care management passport – Q4 2017 to Q1 2018
 - Tools for match rate & outreach improvement – Q4 2017 to Q2 2018
 - Proactive Gap Reporting – Q1 2018
 - Contract Dashboards – Q1 to Q2 2018
 - Drilldown into Total Medical Expense and Claim Line Detail – Q1 to Q3 2018
 - Transactional care plans – Q2 2018 to Q3 2018

A TALE OF TWO CITIES

CASE STUDIES

C-Suite-PCI

Tools for Success

Presented by: Barbara Hood
Chief Information Officer

The William F. Ryan Community Health Network

“where healthcare is a right, not a privilege”

- Founded 50 years ago in 1967
- One of the first 6 pilot FQHCs
- 18 locations throughout Manhattan
- Serving over 47,000 patient annually
- NCQA Level 3 PCMH
- Joint Commission accredited
- 90% live at or below 200% FPL
- 57% receive Medicaid
- 12% receive Medicare
- 11% privately insured
- 19% uninsured

CPCI Journey

- Implemented in 2013, by the Informatics team over 8 weeks
- QI department was non-existent; IT-Informatics took leadership
- A comprehensive data management platform that meets reporting needs and is in-line with local, state and federal quality guidelines
- A proactive user-friendly tool for disease management & closing care gaps
- Thorough data validation process to ensure data integrity prior to deployment
- Project management approach to implementation & end-user adoption
- Scalability: New tools/features would be added, i.e., PVP, HIV Registries, etc.

Executive Buy-In

- Leadership must understand the value of data
- Foster a network-wide data culture

I ♥ Data

- Adopt a project management approach
- Encourage shift to being a more data-driven organization by leveraging the tool
- Resource the project appropriately:
 - Staff
 - Time
 - Funding
 - Build Technical Capacity

Staff Composition

Informatics Team:

- Configurations
- Data Validations
- New Enhancement Designs
- New Alert Requests
- Workflow designs

Health IT Training Coordinator:

- Configurations
- Feature enhancements
- Staff training and provisioning

IT Help Desk:

- Create and terminate accounts
- Ensure data feed is current from EMR

End User:

- Utilization of registries
- Utilization of PVP (daily)
- Population Health Management

Value of CPCI

- Shifts healthcare delivery from a reactive to proactive approach
- Improves quality incentive reimbursement and quality care compliance
- Leveraged PVP tool for daily operations and point of care screenings
- Leveraged CPCI reporting for DSRIP reporting & program monitoring
- Continued to add value to the PVP for initiatives like:
 - RHIO consent taking
 - Patient Portal connections
 - Geriatric Functioning Assessment
 - Learning Assessment
- HIVQual data reporting time and effort significantly reduced
- Generates scorecards for provider performance
- Dependable and stable platform with minimal additional burden to IT staff



Settlement Health's Journey with CPCI

Warria Esmond MD
Chief Medical Officer
Settlement Health and Medical Services
CHCANYS Conference
October 25th, 2017



Settlement Health



FQHC in East Harlem, New York since 1977

2 clinical sites

14,000+ unduplicated patients

70% Hispanic, 23% African American

50% primary language Spanish

12 FTE Providers – including CNMs/NPs

Women's Health

Pediatrics

Internal Medicine

Family Medicine

Podiatry

Nutrition

Settlement Health

A watercolor-style illustration of a multi-story brick hospital building. The building has several windows and a logo on the upper right side. In the foreground, there are some green bushes and a person walking. The sky is light blue with some clouds.

Involved in multiple transformation projects

Transforming Clinical Practice Initiative (TCPI)

Dramatic Performance Improvement (DPI)

Delivery System Reform Incentive Payment
(DSRIP)

Patient Centered Medical Home (PCMH)

CHIPA

The Beginning

A watercolor illustration of a multi-story brick building. The building has several windows and a logo on the upper right corner. Two vertical banners hang from the building, one orange and one purple, both with text that is partially obscured. In the foreground, there is a sidewalk with a person pushing a stroller and another person walking. The sky is light blue with some clouds.

What were our goals for an electronic health record?

Participation in PCHIC helped define the true goals of EMR implementation for 26 safety net providers in New York City

Data, Data, Data

Thoughts Along the Way

The background is a watercolor-style illustration of a multi-story brick building. Two vertical banners hang from the building; the left one is orange and says 'Settlement' and the right one is purple and says 'Health'. In the foreground, there are some green bushes, a person pushing a stroller, and another person standing near a doorway on the right. The sky is light blue with some clouds.

What does it take to leverage the power of the Electronic Health Record?

How to get reproducible, reliable data?

How to develop good data for provider feedback?

How to meet future reporting expectations?

How to develop a “dashboard” for the organization?

Why Implement a Data Warehouse Solution?

Partnership/Shared Resources/Economy of Scale seemed to be a wise and cost effective strategy to realize the goals of data and reporting

Difficult to justify the expense necessary to accomplish a “robust” data strategy

Worked closely with other GE Users in NYC – Charles B. Wang

~ 2010 HRSA Funded HCCN for GE Users – first data warehouse developed

2013 Implemented Azara data warehouse

Where Are We today?

CPCI used across organization

BPHC reporting

Quality Improvement

Pre Visit Planning

Care Management Team

DSRIP

Referral reconciliation

Satisfying curiosity/Answering questions that arise

And more....

Drivers of Successful Data Use

A watercolor-style illustration of a multi-story brick building. On the right side of the building, there are two vertical banners: one orange with the word 'Settlement' and one purple with the word 'Health'. Above the banners is a circular logo featuring stylized human figures. The sky is light blue with soft clouds. In the foreground, there's a sidewalk with a person pushing a stroller and another person walking near a building entrance.

Leadership

What is important to the success of the organization?

How do we develop a culture of data driven care?

Organization wide QI activities

HRSA Expectations

Population Based Reporting

Focus on Quality and Performance

Environment

Value Based Payment

Population Health

Practice Transformation

A watercolor illustration of a multi-story brick building. The building has several windows and a prominent logo on its upper right corner. Two vertical banners are attached to the building, one with the word 'Settlement' and the other with 'Health'. In the foreground, there is a sidewalk with a person pushing a stroller and another person walking. The sky is light blue with soft clouds.

Thank you!

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Highlights of Peer Experience: Ingredients for Success in Your Analytics Program

- Leadership Support & Champions
- Staff dedicated to Adoption and Data Quality
- Widespread sharing of the data in your FQHC
- A strong Change Control Process
- A structured Data Hygiene Program – start small!
- A plan for managing & maximizing your data systems



For more information, please contact CHCANYS' Quality & Technology Senior Team
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