Utilizing Health Information Technology to Enhance Coordination of Care Within and Between Clinical Practices

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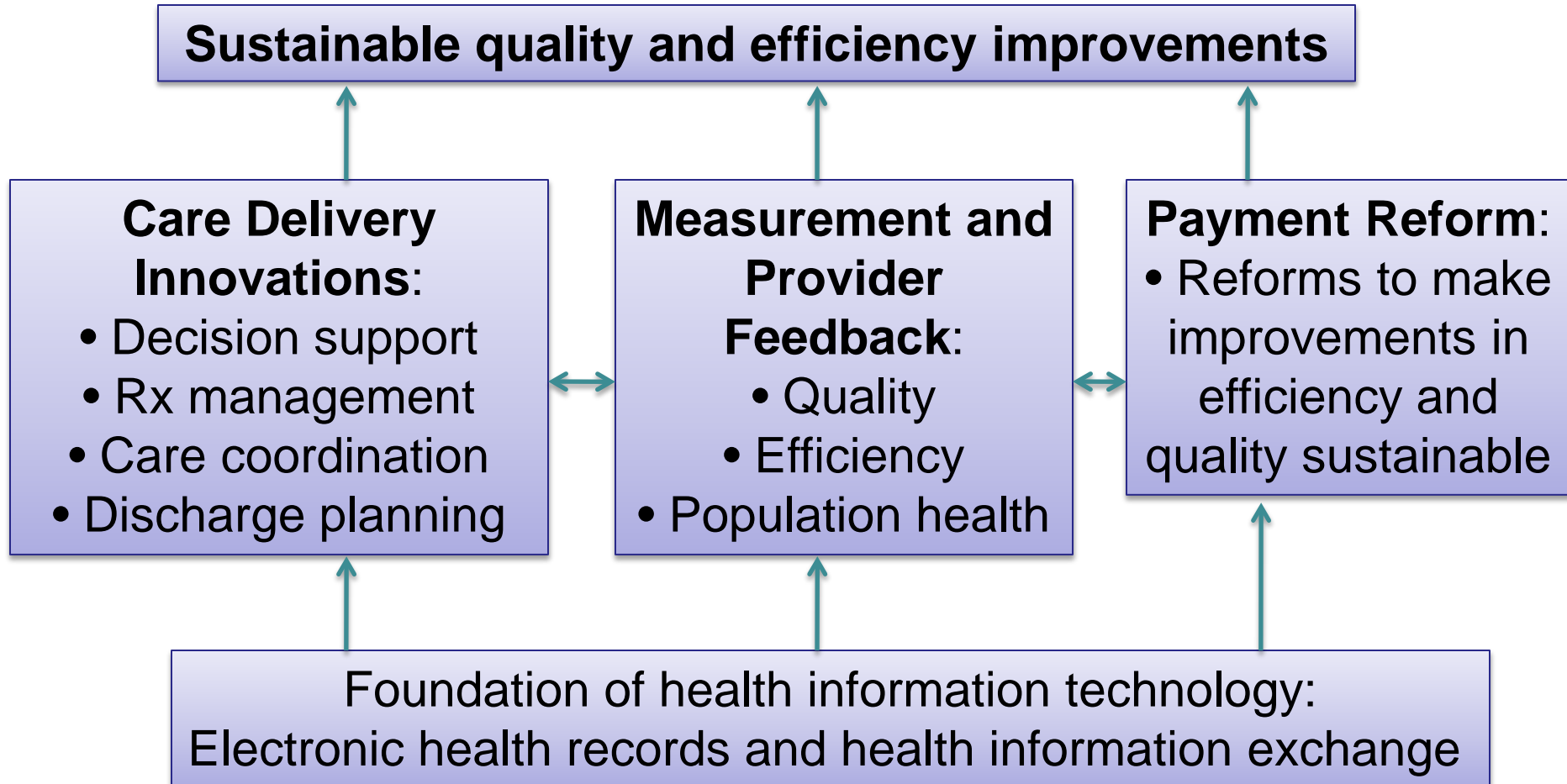
Beacon Community of the Inland Northwest

June 27, 2013

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Overview

- Drivers of increased need for care coordination
- Care coordination challenges
  - Within organizations
  - Between organizations
- Beacon Community of the Inland Northwest
  - Description
  - Resources supporting care coordination
  - Status
- Lessons learned

Major Elements of Health Reform

Sustainable quality and efficiency improvements

Care Delivery Innovations:
- Decision support
- Rx management
- Care coordination
- Discharge planning

Measurement and Provider Feedback:
- Quality
- Efficiency
- Population health

Payment Reform:
- Reforms to make improvements in efficiency and quality sustainable

Foundation of health information technology:
Electronic health records and health information exchange

MB Butin, SH Jain and D Blumenthal. 2010. Health Information Technology: Laying the Infrastructure for National Health Reform. Health Affairs 29(6).

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Payment Drivers

- New models being tested by public and private sector payers
  - Global Payments
  - Accountable Care Organizations
  - Bundled Payments
  - Medical Homes
  - Gainsharing
  - Adjustments for Readmissions or Hospital Acquired Conditions
  - Pay for Performance

Common Elements of New Models

- Population-based health care
  - Tracking needs and assuring delivery of care proactively across an entire patient population
  - Actively coordinating care within and between health care organizations
- Use of performance measures and other patient population information to
  - Calculate payment
  - Assess quality and efficiency of care
  - Identify any negative consequences

Meaningful Use Framework

- Focused on five health policy priorities

  - Improving quality, safety, efficiency, and reducing health disparities
  - Engage patients and families in their health
  - ***Improve care coordination***
  - Improve population and public health
  - Ensure adequate privacy and security protection for personal health information

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Typical Care Coordination Tasks

- Maintaining patient continuity with the primary care provider/primary care team

- Documenting and compiling patient information generated within and outside the primary care office

- Using information to coordinate care for individual patients and for tracking different patient populations within the primary care office

- Initiating, communicating, and tracing referrals and consultations

- Sharing care with clinicians across practices and settings

- Providing care and/or exchanging information for transitions and emergency care

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Care Coordination Challenges

- Within organizations
  - Lack of time
  - Limitations on current staff roles
  - Inappropriate workflows
  - Unsupportive technology
  - Perverse incentives

- Between organizations
  - All of the above
  - Complex communication pathways
 - Different organizational cultures

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Beacon Communities

"Demonstrate the vision of the future where hospitals, clinicians and patients are meaningful users of health information technology, and together the community achieves measurable improvements in health care quality, safety, efficiency and population health."

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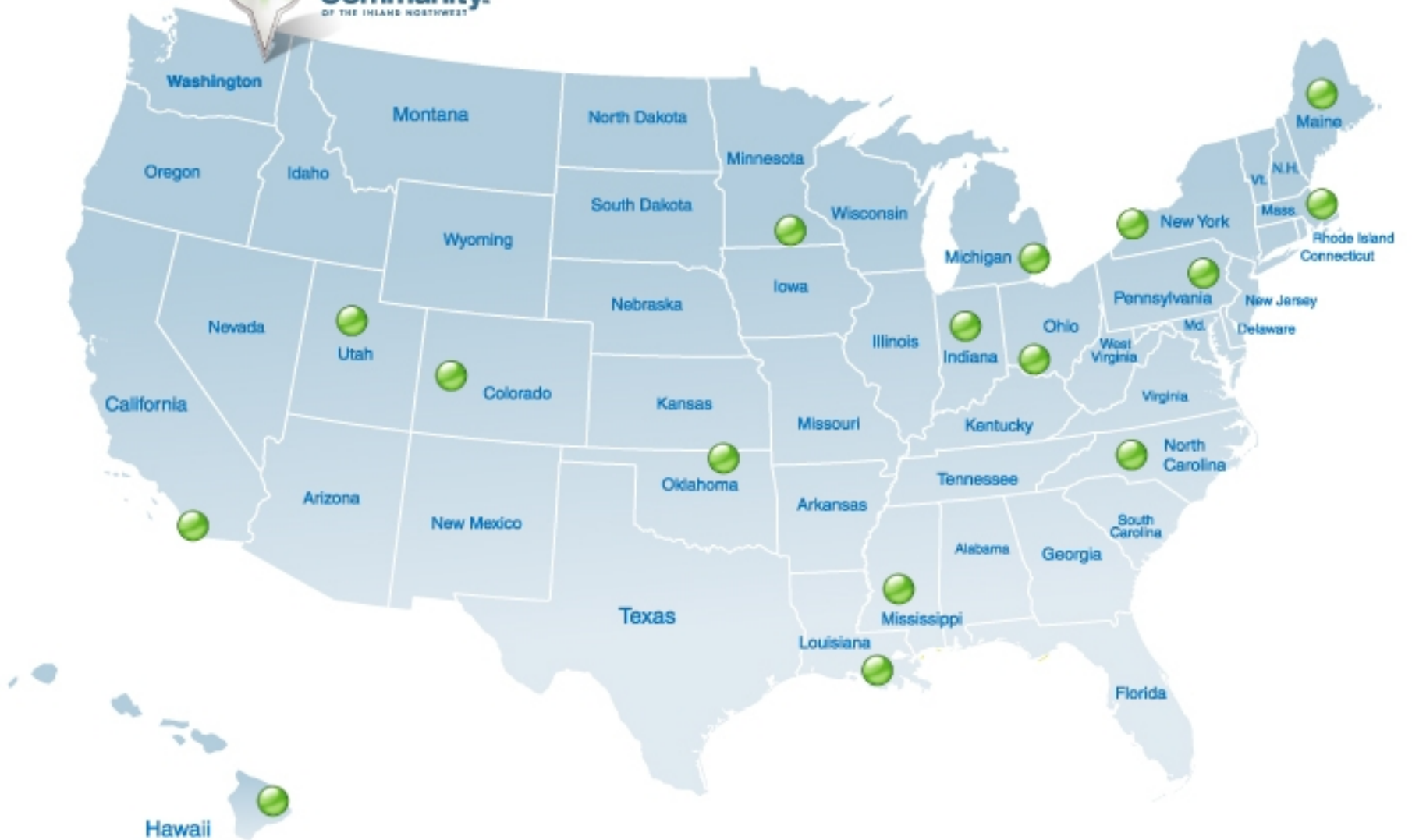
Communities with BCIN Participants

Shaded area represents Spokane Referral Region as defined by Dartmouth Atlas
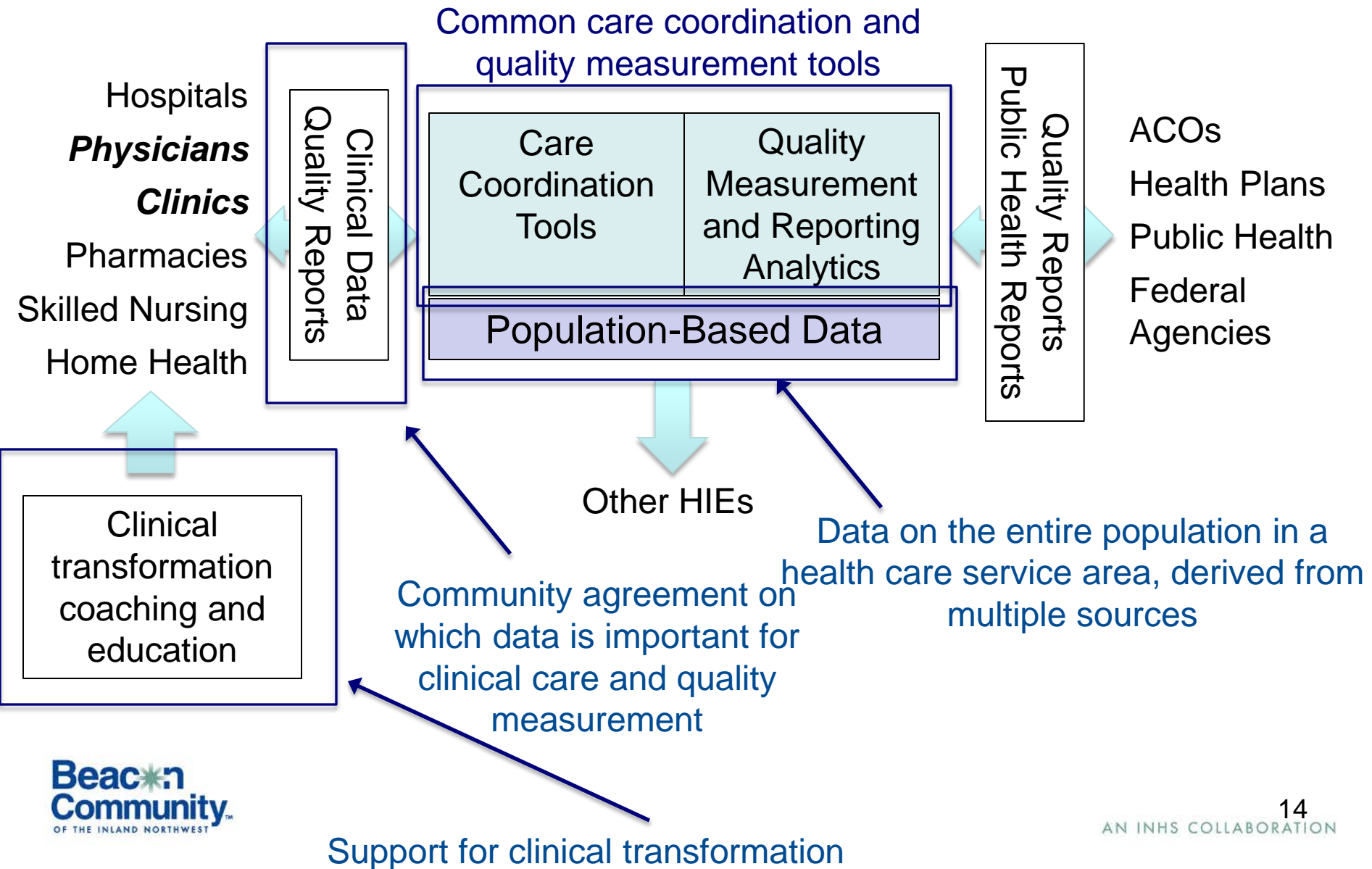
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BCIN Project Overview

- Goals
  - Help assure consistent care for individuals with chronic disease and other conditions (starting with diabetes) who see many different providers across the region
  - Combine information from different data sources (ambulatory and inpatient) and different organizations so that physicians have a more complete record for clinical decision-making

- Approach
  - Enable and promote common strategies for coordination of care, reinforced by common measures and quality reports
  - Establish a technology infrastructure to facilitate delivery and coordination of care and quality measurement across unaffiliated health care organizations

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Current Status of Diabetes Care

- Individual physicians and hospitals working to improve care
  - Some use of diabetes registries or tools within or addition to EHRs to manage care for individuals
  - Some coordination of care within and between practices; variations in post-discharge coordination
  - Variation in available care coordination based on size and capacity of each organization
- Gaps in patient records due to lack of information from other providers

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Elements of the BCIN Intervention

Common care coordination and quality measurement tools

Hospitals
Physicians
Clinics
Pharmacies
Skilled Nursing
Home Health

Clinical Data
Quality Reports

Care Coordination Tools	Quality Measurement and Reporting Analytics
Population-Based Data	

Quality Reports
Public Health Reports

ACOs
Health Plans
Public Health
Federal Agencies

Clinical transformation coaching and education

Other HIEs

Community agreement on which data is important for clinical care and quality measurement

Data on the entire population in a health care service area, derived from multiple sources

Support for clinical transformation

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Clinical Transformation

- Clinical transformation tools to support coordinated care and improved outcomes
  - Care Coordination Readiness Assessment (CCRA)
  - Assistance in workflow redesign
  - Coaching and education resources
  - Health Information Exchange
  - Disease management and care coordination dashboards
  - Quality measurement and reporting

- Implemented across care settings to promote consistency in care, for all patients in the region with Type 2 Diabetes

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Diabetes Management Target Elements

Based on national standards and workgroup recommendations

- Assessment
  - Clinical Assessment
  - Social Assessment
  - Environmental Assessment
  - Educational Needs
  - Readiness to Change

- Case Management
  - Continuous Glucose Monitoring System
  - Medical Nutrition Therapy
  - Insulin Therapy
  - Glucose Patterns

- Referred for Specialty Services
  - Eye Exam
  - Foot Exam
  - Additional Lab Tests

- Referred for Diabetes Self-Management Education
  - Education Classes
  - Education Consults
  - Patient Support Services

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Care Coordination and Disease Management
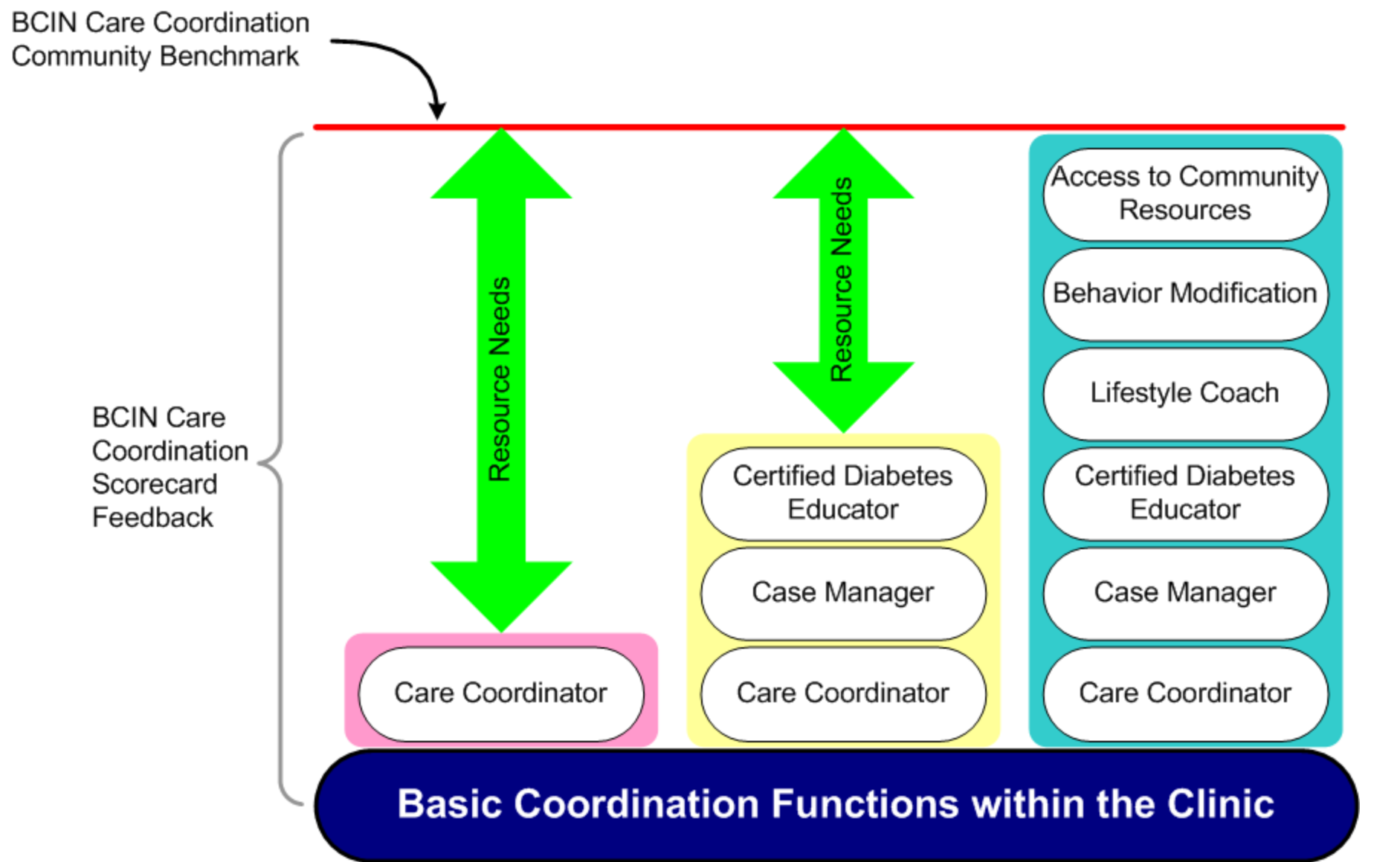
Care Coordination Readiness Assessment

- Comprehensive tool based on Medical Home Index, Care Coordination Atlas, and others

- 5 Domains with objectives & measures
  - Organizational Capacity
  - Care Coordination
  - Clinical Management
  - Quality Improvement
  - Technical Infrastructure

- Done in consultation with key facility staff

- Used to determine capacity for care coordination and future QI projects

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Care Coordination Readiness Assessment

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Domain 1: Organizational Capacity

Objective
1.1 The Care Coordination Mission of the Practice
1.2a Access to Care
1.2b Access to Care
1.3 Internal Communication Strategies
1.4a External Communication Strategies

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Domain 2: Care Coordination

Objective
2.1 Adopts clinical evidence-based guidelines
2.2 Staffing Capacity
2.3 Internal Continuity of Care
2.4 External Continuity of Care
2.5 Transition of Care
2.6 Medication Reconciliation

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Domain 3: Clinical Management

Objective
3.1 Staffing Capacity
3.2 Clinical Services
3.3 Integration of self-management support into the practice setting
3.4 Access to Diabetes Education services
3.5 Patient/Family Involvment

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Domain 4: Quality Improvement

Objective	Measure	Level of Importance to Practice	Variation Among Providers in the Practice
4.1 Staffing Capacity			
4.2a Monitors Performance Measurement Indicators Across the Practice			
4.2b Monitors Performance Measurement Indicators Across the Practice			
4.3a Applies Quality Improvement Across the Practice			
4.3b Applies Quality Improvement Across the Practice			
4.4 Patient/Family Feedback			

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Domain 5: Technical Infrastructure

*Indicates a MU measure

Objective	Measure	Level of Importance to Practice	Variation Among Providers in the Practice
5.1 Maintain interfaces to data repository	The practice maintains a clinical data repository that allows electronic access to patient information on an individual or population basis. ☐ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing	☐ High ☐ Medium ☐ Low	☐ High ☐ Medium ☐ Low
5.2 Generates patient reminders for preventive clinical services*	The information system has the ability to generate patient reminders for preventive or follow-up care targeted at the provider. ☐ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing	☐ High ☐ Medium ☐ Low	☐ High ☐ Medium ☐ Low
5.3 Policies for consistent data management	Data management policies and procedures require that patient data is entered in a standard manner across all providers and staff, in the appropriate field in the electronic medical record. ☐ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing	☐ High ☐ Medium ☐ Low	☐ High ☐ Medium ☐ Low
5.4 Privacy and Security	Policies and procedures are in place to assure that patient data is secure and that access is limited to individuals who have a specific need to see the information in order to deliver care to that patient or to conduct necessary administrative activities. ☐ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing	☐ High ☐ Medium ☐ Low	☐ High ☐ Medium ☐ Low
5.5 Maintain Data for Accuracy*	Providers and staff consistently record patient clinical data in the electronic medical record system important to care coordination, including: problem list, medication list, allergy list, test results and changes in key vital signs. ☐ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing	☐ High ☐ Medium ☐ Low	☐ High ☐ Medium ☐ Low
5.6 Procedures for Patient Access to Records*	Policies and procedures are in place to provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies, discharge summary, procedures), upon request within 3 business days. ☐ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing	☐ High ☐ Medium ☐ Low	☐ High ☐ Medium ☐ Low

The Beacon Community of the Inland Northwest is funded by a Cooperative Agreement from the Office of the National Coordinator; Award No: 90BC0011/01, CFDA: 93.727

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DCCRA Administration Example

Domain 2: Care Coordination			
Objective	**Measure**	**Level of Importance to Practice**	**Variation Among Providers in the Practice**
2.1 Adopts clinical evidence-based guidelines	The practice has intergrated the current *ADA Standards for Medical Care for Diabetes* into usual care.	☒ High ☐ Medium ☐ Low	☐ High ☒ Medium ☐ Low
	☐ Not Prepared ☐ Moderately Prepared ☒ Highly Prepared ☐ Actively Performing		
2.2 Staffing Capacity	The practice has a staff position dedicated to diabetes care coordination activities with FTE in proportion to the patient case load.	☒ High ☐ Medium ☐ Low	☒ High ☐ Medium ☐ Low
	☒ Not Prepared ☐ Moderately Prepared ☐ Highly Prepared ☐ Actively Performing		

Coaching and Education

- On- site coaching for QI activities
- Access to CME-approved continuing education for the entire care team (derived from Medical Home training)
  - Initial orientation session at the clinic to help care teams in a practice understand the why and how of practice transformation
  - Special training in diabetes assessment and coaching for care team, to help all members practice at top of their license
  - On-line learning modules on specific topics (based on needs from *Readiness Assessment*)
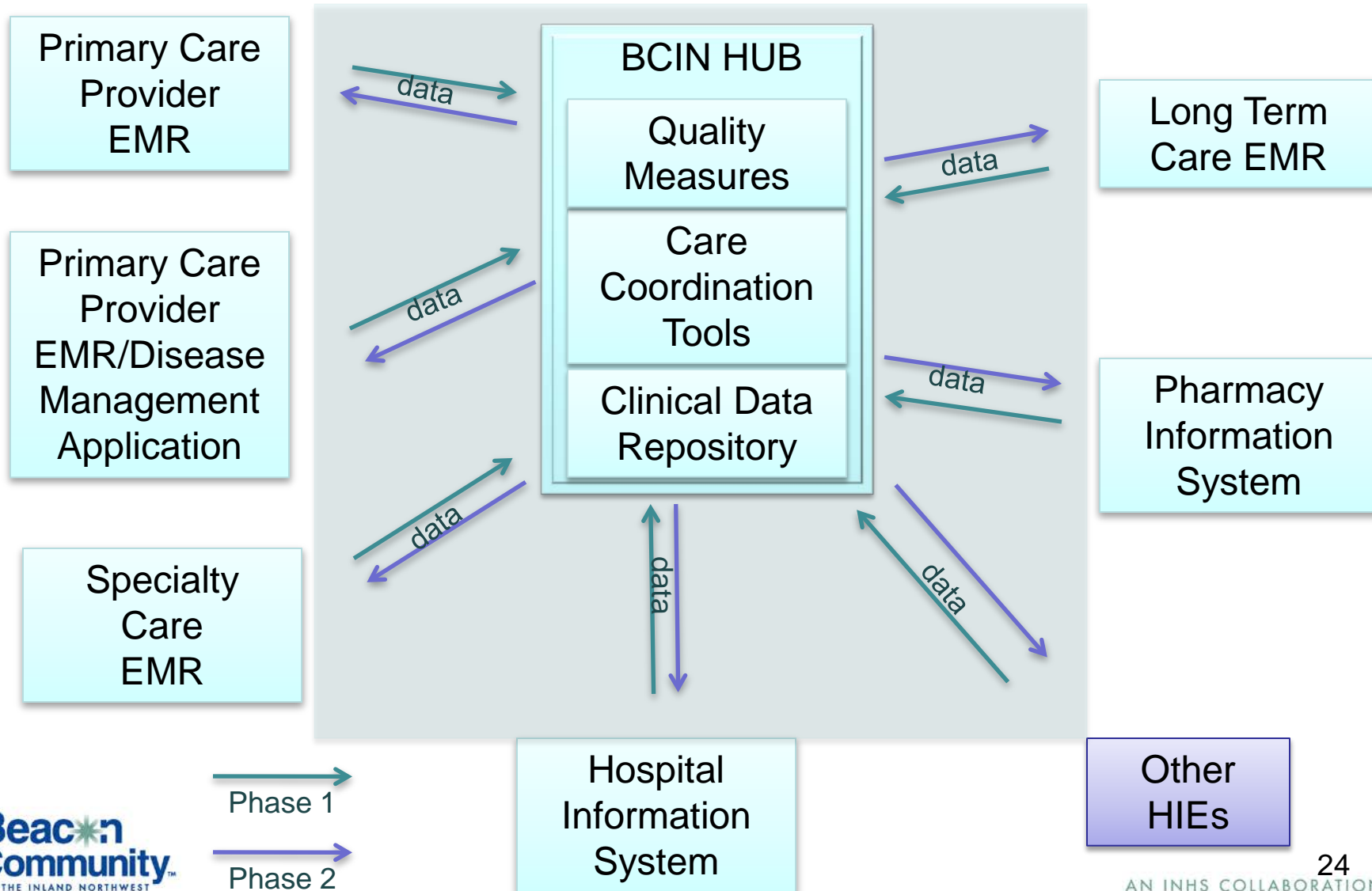
Other Resources

- Assistance in clinic work-flow re-design
- Access to Care Coordination Tools
  - Use of *BCIN Physician Portal*
  - Use of *BCIN Disease Management Tool*
    - Clinical triggers for diabetes patients (American Diabetes Assoc. Guidelines)
    - Care coordination triggers (referral coordination, medical management, communication with patient/family)
    - Care transition triggers (hospital → post-acute, rehab, SNF, LTC, home)
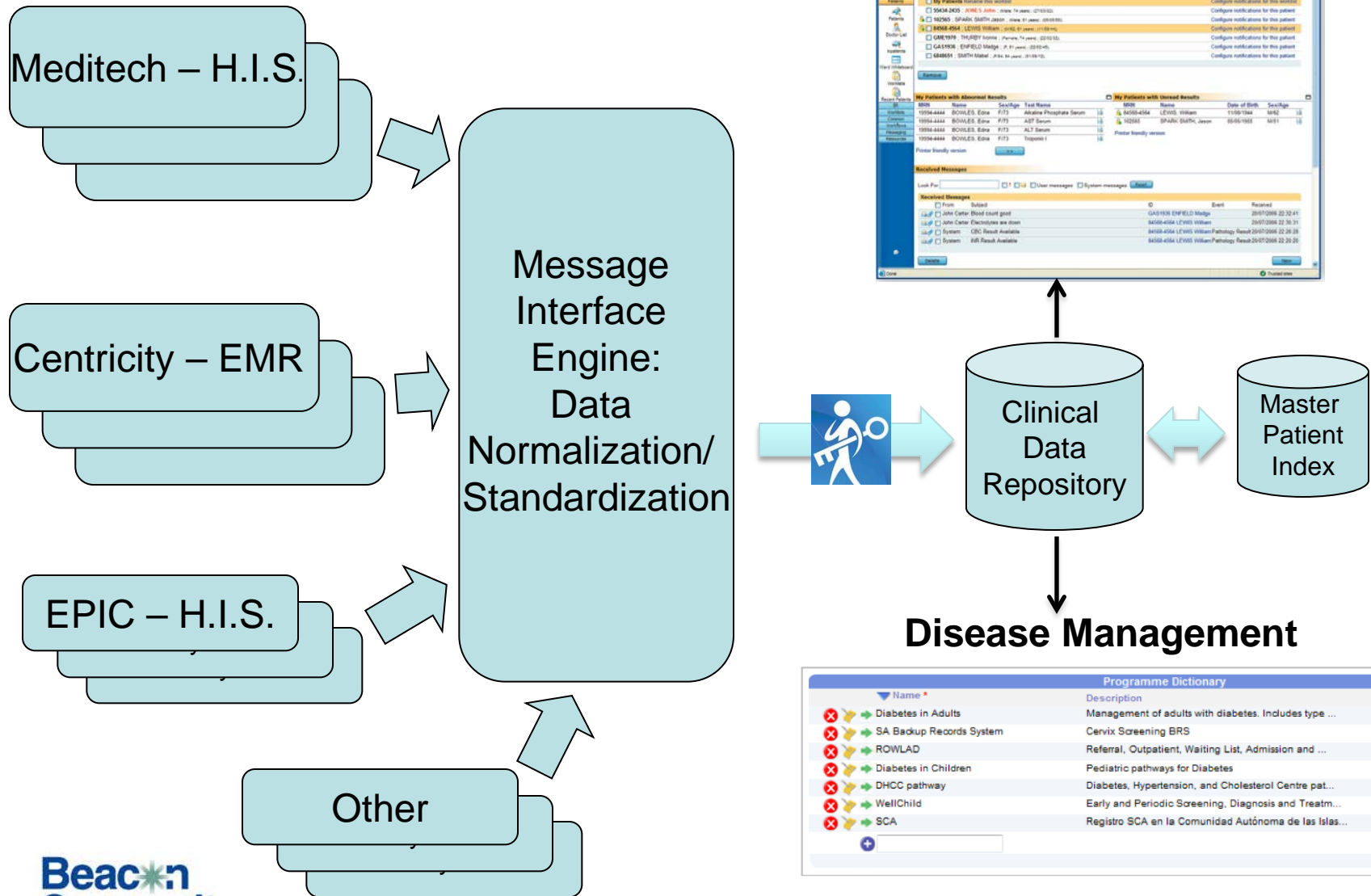
Technology Infrastructure

- Foundational System -- Orion

    - Includes HIE (utilizing Rhapsody engine) with master patient index, clinical data repository, physician portal and notification tools, disease management pathways

    - Data is not just moved, but is cleaned and standardized through an extensive testing and validation process

    - Provides a longitudinal record of patient care across settings, inpatient and ambulatory, for use by providers and care coordinators in direct patient care and in disease management

Technology Infrastructure

Web MD Portal / Clinical Document Browser

Meditech – H.I.S.

Centricity – EMR

EPIC – H.I.S.

Other

Message Interface Engine: Data Normalization/ Standardization

Clinical Data Repository

Master Patient Index

Disease Management

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Quality Measurement

- New business intelligence capacity to create quality analytics for providers
  - BCIN outcomes data reports
    - Clinical Outcomes
    - Preventative Care Metrics
    - Hospital/ED Utilization Rates
  - Provider-Specific (compared with performance goal)
  - Clinic-Specific (compared with other clinic providers and performance goal)
  - Identified provider information shared with each provider (de-identified for comparison with others)

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Overall Project Status

- Complete technological system live at sixteen clinics and one long term care facility, with eight more actively working on implementation

- Data being received from sixteen hospitals, with one more actively working on implementation

- Workflow redesign and practice transformation coaching underway in 16 primary care clinics

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Next Steps for BCIN

- Evaluation
  - Quantitative analysis of results in communities with high BCIN penetration to assess impact on clinical quality measures
    - Pre/post analysis of patient population affected by intervention
    - Comparison with clinical and financial results of patient populations in adjacent hospital referral regions

- Transition and expansion
  - Applying the BCIN model and platform to other diseases and conditions
  - Utilizing the BCIN tools in alternative payment pilots

Lessons Learned

- Technology alone will not improve care coordination. Practices also need:
  - New team roles and relationships
  - Modified workflows
  - Leadership commitment
- But technology is critical to making care coordination successful
  - Effective use of technology addresses many care coordination challenges, including lack of time and limited staff resources

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Lessons Learned

- Views on care coordination vary widely within a practice

  – An honest assessment of how much care coordination is really occurring is needed to help begin the transformation process and make it effective

- Important to begin making this shift even before funding models change

  – Practices that have begun addressing team roles, modifying workflows and implemented supportive technology will be ready

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Questions?

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