

Safety Net Analytics Program

Learning Session #14– October 8, 2015

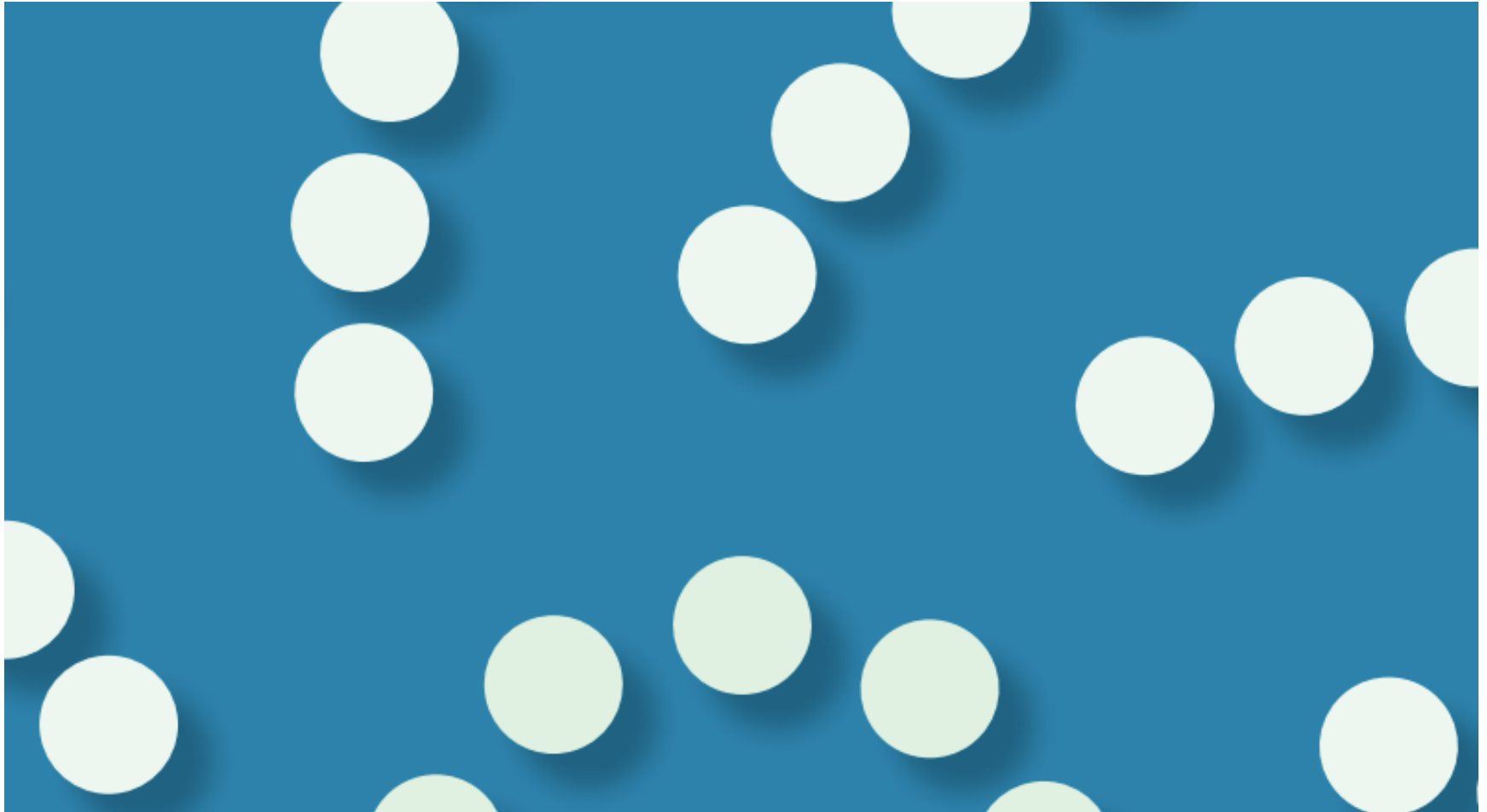


*Thanks for joining us - the
webinar will begin shortly!*

Safety Net Analytics Program

Developing an Analytics Strategy

Learning Session #14 – October 8, 2015





Program Updates

1. November 10th Knowledge Building Session

- **Waterfront Hotel – Jack London Square – Oakland, CA**
- 8:30 – 9:00 Registration and Breakfast, 4:30 Conclusion

2. Peer Sharing – Breakout Sessions

- 6 Questions for Reflection, 6-7 PowerPoint Slides
- Sharing in Small Groups, 15 minutes each
- Due **November 3rd** by 5:00 p.m. (CCI will make posters for you)

3. Check In Appointments

- Sign up link available later today
- Roadmap updates will be postponed until December

4. Upcoming Learning Sessions

October 27th 12:00 p.m. – 1:00 p.m. (Tuesday) – Case Study: The Build Option, Lifelong Medical Care

Dr. Ben Mansalis, Associate Medical Director – Lifelong Medical Care

Safety Net Analytics Program (SNAP):

Issues to Consider in Developing an Analytics Strategy and Selecting Tools

October 8, 2015

Dale Sanders



Agenda



- Analytic frameworks for the brain
 - Closed Loop Analytics
 - Healthcare Analytics Adoption Model
 - Patient/Consumer Engagement Model
 - Population Health Data Management
- Strategic analytics options and vendors
- Related, random advice

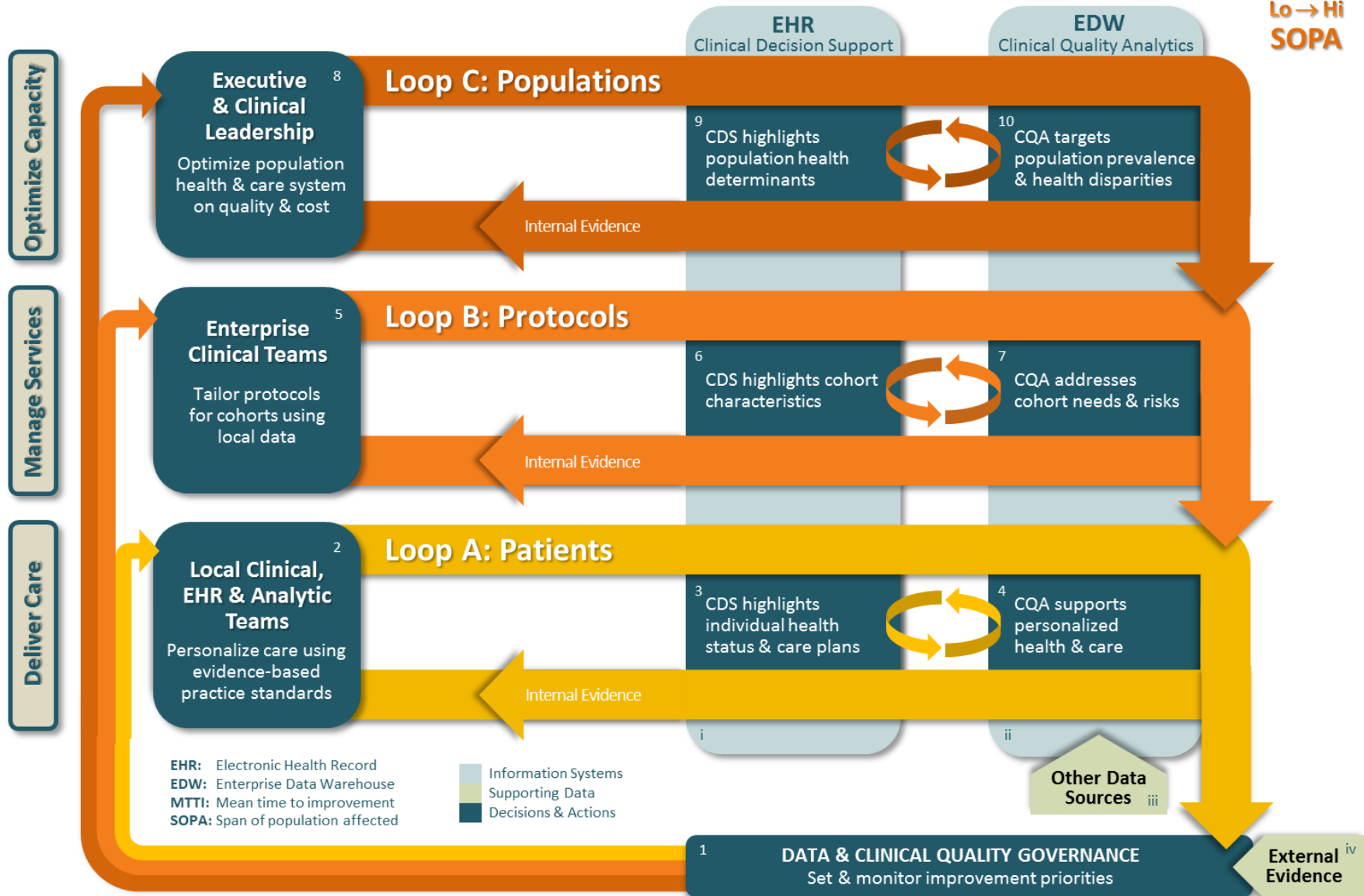
'Closing the Loops' on Clinical Outcomes to Optimize Quality

Using Information Technology, Local Data and Analytics to Generate Evidence for Improvement

MTTI



Lo → Hi
SOPA



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Healthcare Analytics Adoption Model



Level 8	Personalized Medicine & Prescriptive Analytics	Tailoring patient care based on population outcomes and genetic data. Fee-for-quality rewards health maintenance.
Level 7	Clinical Risk Intervention & Predictive Analytics	Organizational processes for intervention are supported with predictive risk models. Fee-for-quality includes fixed per capita payment.
Level 6	Population Health Management & Suggestive Analytics	Tailoring patient care based upon population metrics. Fee-for-quality includes bundled per case payment.
Level 5	Waste & Care Variability Reduction	Reducing variability in care processes. Focusing on internal optimization and waste reduction.
Level 4	Automated External Reporting	Efficient, consistent production of reports & adaptability to changing requirements.
Level 3	Automated Internal Reporting	Efficient, consistent production of reports & widespread availability in the organization.
Level 2	Standardized Vocabulary & Patient Registries	Relating and organizing the core data content.
Level 1	Enterprise Data Warehouse	Collecting and integrating the core data content.
Level 0	Fragmented Point Solutions	Inefficient, inconsistent versions of the truth. Cumbersome internal and external reporting.

SI PATIENT/CONSUMER ENGAGEMENT ADOPTION MODEL™

STRATEGIC OUTLINE FOR HEALTH SYSTEM EXECUTIVES

Level 5 Community Engagement

Engagement strategies are integrated into the communities we serve.
Population analytics and outreach for screening, disease management and care
Community health resources and data integrated into care model
Community partnerships for education, wellness, healthy choices
Patients, consumers, community representatives included in care design

Level 4 Organizational Engagement

Core organization processes have adapted to prioritize personal engagement in health.
Using care management based on at-risk environment, HRA, and socio-economics
Economic incentives for healthy lifestyle
Actively refer patients to community and other resources
Implemented alternatives to face-to-face appointments for targeted populations

Level 3 Return on Engagement

Outcomes, costs or satisfaction have improved as a result of engaging people in care.
Results achieved from use of health coaches, other personalized follow up
Data showing correlation of engagement with outcomes and cost
Demonstrated results from health risk assessment or disease management compliance
Successful results from using personal health data

Level 2 Engagement in Health

People actively participate in their health or care as a result of engagement offerings.
Demonstrated use of self-service tools, remote monitoring, or wearables
Use of data on predicted efficacy, costs, and patient preferences in the care model
Patients contribute to MD notes and/or portal data
Targeted populations are self monitoring at home, and reporting data

Level 1 Engagement Services Offered

We offer tools and services to help engage people in their care and health.
Executive accountability for patient engagement
Wellness, fitness, and health literacy education & tracking
Strategic plan includes engagement for at-risk, or all patients
Portal data & other communication options

Population Health Management

The Ordered Checklist for a 3-5 Year Journey



1. **Registries:** Evidence-based definitions of patients to include in the PHM registries
2. **Attribution & Assignment:** Clinician-patient attribution algorithms
3. **Precise Numerators:** Discrete, evidence based methods for flagging patients in the registries that are difficult to manage in the protocol, or should be excluded from the registry, altogether
4. **Clinical & Cost Metrics:** Monitoring clinical effectiveness and total cost of care (to the system and the patient)
5. **Basic Protocols:** Evidence based triage and clinical protocols for single disease states
6. **Risk Outreach:** Stratified work queues that feed care management teams and processes for outreach to patients

Population Health Management

The Ordered Checklist for a 3-5 Year Journey



7. **External Data:** Access to test results and medication compliance data outside the core healthcare delivery organization
8. **Communication:** Patient engagement and communication system about their care
9. **Education:** Patient education material and a distribution system, tailored to their status and protocol
10. **Complex Protocols:** Evidence based triage and clinical protocols for comorbid patients
11. **Coordination:** Inter-physician/clinician communication system about overlapping patients
12. **Outcomes:** Patient reported outcomes measurement system, tailored to their status and protocol

Healthcare Analytics Market Categories



Category	Vendor
Healthcare EDW Platform Solutions (including tools & apps for ACO analytics)	<ul style="list-style-type: none"> • Caradigm Intelligence Platform • Health Catalyst • IBM Healthcare Data Model • Oracle Healthcare Data Model • Recombinant (Deloitte)
Healthcare Analytics as a Service	<ul style="list-style-type: none"> • Birst (not healthcare specific) • GoodData (not healthcare specific) • Explorys • Humedica • Lumeris • Premier Alliance • Truven Analytics Suite
Domain Specific Healthcare Analytics (Point Solutions)	<ul style="list-style-type: none"> • AltaSoft • Crimson Suite • EPSI • Lawson • MedAnalytics • Medventive • Midas • Omnicell
Healthcare EHR-Centric	<ul style="list-style-type: none"> • Allscripts Sunrise • Cerner PowerInsight/Health eIntent • Epic Clarity, Cogito & Healthe Planet • McKesson Horizon • Meditech Data Repository • Siemens Decision Support

Category	Vendor
Cross-Industry Development Platform	<ul style="list-style-type: none"> • Dimensional Insights • IBM Smarter Analytics • Information Builders • Microsoft BI Platform • Microstrategy • Oracle OBIEE • SAP • Sybase IQ • Teradata
Cross Industry Visualization & Exploration Tools	<ul style="list-style-type: none"> • BusinessObjects • Cognos • QlikView • SAS • SPSS • Tableau
Big Data, Hadoop, Cross Industry Development Platforms	<ul style="list-style-type: none"> • Cassandra • Cloudera • CouchDB • GNS • HBase • MongoDB • Riak

Vendors listed are noteworthy in their category but the list of vendors is not exhaustive.

Strategic Analytic Options in Healthcare

Category	Pros & Cons	Example Vendors
Buy & Build from an Analytics Platform Vendor	<ul style="list-style-type: none"> • Highest degree of analytic flexibility and adaptability • Requires a data driven culture with high aspirations and views analytics as a clear business differentiator • Best suited for a culture with a higher degree of data literacy and data management skills • Slow initial time-to-value plagues some vendors • Inconsistent ROI track record, but when ROI occurs, it's big 	<ul style="list-style-type: none"> • Caradigm Intelligence Platform • Health Catalyst • IBM Healthcare Data Model • Oracle Healthcare Data Model • Recombinant (Deloitte)
Buy from an Analytics Service Provider	<ul style="list-style-type: none"> • Best suited for cultures that want to avoid the details of analytics and data management, but aspire to improve basic internal and external reporting • Inter-organizational benchmarking and comparative analytics is a natural part of the business model and service • Limited analytic flexibility and adaptability • Substantive ROI is not well-documented nor widely acknowledged 	<ul style="list-style-type: none"> • Explorys • Lumeris • Optum/Humedica • Premier Alliance • Truven Analytics Suite
Buy "Best of Breed" Point Solutions	<ul style="list-style-type: none"> • Leverages expertise and very specific analytics applications in business and clinical areas that are not always available in other options • Does not facilitate data integration; i.e., does not provide a single analytic perspective on patient care and costs • Costly and complicated to maintain 	<ul style="list-style-type: none"> • AltaSoft • Crimson Suite • EPSI • MedeAnalytics • Medventive • Midas • Omnicell
Buy from your EHR Vendor	<ul style="list-style-type: none"> • Offers the possibility of "closed loop analytics" driving analytics back to the point of care, in the EHR and clinical workflow • No proven track record with analytics to date from the EHR vendors • Tend to be very focused on analytics that are specific to the EHR vendor's data • Less flexible and adaptable to new sources of data and analytic use cases, especially complex ones 	<ul style="list-style-type: none"> • Allscripts Sunrise • Cerner Health eIntent • Epic Cogito & Healthe Planet • McKesson Horizon • Meditech Data Repository • Siemens Decision Support

Random, Related Advice



1. Pooling data, pooling analytics resources, budgeting
2. Sharing a Chief Data Officer or Chief Analytics Officer
3. Data governance in shared environments
4. Local data governance: data quality, data literacy, data exploitation
5. Trusting the cloud and hosted solutions
6. Population Health = Public Health
7. Care Management & patient engagement
8. HIEs are overrated... beware
9. Pros and cons of EHR vendors in the analytics space
10. Pros and cons of specialty vendors in the analytics space



Ask me anything 😊