From Data to Action: 
Key Steps and Strategies for Using Data to Improve Care

August 17, 2017
Webinar Reminders

1. Everyone is muted.
   - Press *7 to unmute and *6 to mute yourself.

2. Remember to chat in questions!

3. Webinar is being recorded and will be posted and sent out via email.
# Today’s Focus

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>12:00-12:05</td>
<td>Welcome and Overview (5 mins)</td>
</tr>
<tr>
<td>12:05-12:45</td>
<td><strong>From Data to Action:</strong> <em>Key Steps and Strategies for Using Data to Improve Care</em></td>
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<tr>
<td></td>
<td>• Boris Kalikstein, Consultant</td>
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<td>• Pivotal Moment Consulting</td>
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<tr>
<td>12:45-1:00pm</td>
<td>Questions, Next Steps &amp; Closing (15 mins)</td>
</tr>
</tbody>
</table>

*Please remember to fill out the post webinar brief survey!*
Voices on the Webinar

Boris Kalikstein
Consultant
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Diana Nguyen,
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Low-Intensity Track: 4 Part Data for Pop. Health Series

Part 1: Building a Data-Driven Culture for Pop. Health Management
- July 19, 2017 @12-1pm
- Faculty: SA Kushinka, CCI & Jerry Lassa, Data Matt3rs

Part 2: Design Thinking for Data Visualization
- July 27, 2017 @ 12-1pm
- Faculty: Andrew Frueh, Health Catalyst

Part 3: Tableau in Action
- August 10, 2017 @ 2-3pm
- Faculty: Dr. Jason Cunningham, West County Health Centers

Part 4: From Data to Action: Key Steps and Strategies for Using Data to Improve Care
- August 17, 2017 @ 12-1pm
- Faculty: Boris Kalikstein, Pivotal Moment Consulting
FROM DATA TO ACTION

KEY STEPS AND STRATEGIES FOR USING DATA TO IMPROVE CARE

Boris Kalikstein
Pivotal Moment Consulting
GOALS FOR IMPROVEMENT

✓ EMR

✓ Data

✓ Dashboard

SO WHAT?!
"The numbers have no way of speaking for themselves. We speak for them. We imbue them with meaning." – Statistician Nate Silver

Data is *bits* of information

Processed ➔ Interpreted ➔ Organized ➔ Structured ➔ Presented

Information provides context for data
Having an EMR and collecting data does not translate into action

- EMRs
  - Thousands of data points
  - Visually aggregates the data points on EMR screens
  - Providers and teams mentally evaluate the data to convert it into information that drives patient care
THE GOAL OF A DATA DRIVEN CULTURE

THE SAME THING --- MAKE A DIFFERENCE IN PATIENT LIVES

So why do I need data?

Why do I need information?
# Data Driven Outreach

<table>
<thead>
<tr>
<th></th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<th>Saturday</th>
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<tbody>
<tr>
<td>Week #1</td>
<td></td>
<td>Prenatal Chronic Pain Pap Mgt CMD</td>
<td>CM Dep BHP Dep Blue PR Dep</td>
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<td>Week #2</td>
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<td>CM Dep BHP Dep Green PR Dep</td>
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<td>Week #3</td>
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<td>Week #4</td>
<td></td>
<td>Coumadin Diabetes(half)</td>
<td>CM Dep BHP Dep Orange PR Dep</td>
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# Data Driven Outreach

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<td>CM Dep&lt;br&gt;BHP Dep&lt;br&gt;Blue PR Dep</td>
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### DATA DRIVEN REGISTRY

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>DOB</th>
<th>Visit</th>
<th>BP Sys</th>
<th>BP Dias</th>
<th>Tobacco</th>
<th>Eye Exam</th>
<th>SM Goal</th>
<th>Foot Exam</th>
<th>LDL Date</th>
<th>LDL</th>
<th>A1c Date</th>
<th>Value</th>
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<td>Bonnie</td>
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<td>1/1952</td>
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<td>80</td>
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<td>04/03/2008</td>
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<td>Emilio</td>
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**Group Visit**
- Bonnie: No
- Angelica: Yes
- Elva: Yes
- Emilio: Yes

**Values**
- Bonnie: LDL 59, A1c 7.80
- Angelica: LDL 90, A1c 8.90
- Elva: LDL 65, A1c 8.60
- Emilio: LDL 88, A1c 10.30
DATA DRIVEN REGISTRY

High Risk

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
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<tr>
<td>Bonnie</td>
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<td>11/13/2008</td>
<td>110/72</td>
<td>122</td>
<td>80</td>
<td>Current</td>
<td>05/01/2007</td>
<td>11/13/08</td>
<td>05/15/2008</td>
<td>04/03/2008</td>
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Group Visit No

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<tr>
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<th>LDL</th>
<th>A1c Date</th>
<th>Value</th>
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<tr>
<td>Angelica</td>
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<td>03/26/2009</td>
<td>115</td>
<td>69</td>
<td>Never</td>
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<td>03/26/2009</td>
<td>02/15/2008</td>
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<td>Group Visit</td>
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</tbody>
</table>

Group Visit Yes

Diabetes Planned Care Ruler

- If more than six months, make apt
- Otherwise, see BP, LDL, & A1c rules

- If above 130, apt every month
- If above 90, apt every month

- If current smoker, GM to review for Tobacco Cessation Counseling

- If not within one year, put on list for DM Eye Exam/GV

- If not within one year, GM to set goal with patient

- If not within one year, make apt

- If above 130, apt every month
- If between 110 - 130, apt every 3 months
- If above 90, apt every 6 months

- If above 9, apt every month
- If 7.0 - 9.0, apt every 3 months
- If below 7.0, apt every 6 months
TRANSFORMING DATA INTO INFORMATION
WAREHOUSING

EMR Database \rightarrow Staging Database \rightarrow BI Database

Data Cleanup Manipulation

DATA \rightarrow INFORMATION
START WITH THE BIG PICTURE
CASCADE THE MESSAGE

- Asthma Goal: 91% [Green] Current: 92.19%
- Hypertension Goal: 75% [Green] Current: 77.71%
- Immunization Goal: 89% [Yellow] Current: 85.00%
- Cervical Cancer Screening Goal: 88% [Red] Current: 71.26%
- Diabetes Goal: 84% [Yellow] Current: 76.58%
- Tobacco Screening Goal: 95% [Yellow] Current: 87.70%
- Childhood Weight Mgmt Goal: 55% [Yellow] Current: 53.66%
- Adult Weight Mgmt Goal: 53% [Green] Current: 55.25%
MAKE IT MANAGEABLE
### Patient Details

**Kevin**

<table>
<thead>
<tr>
<th>DOB:</th>
<th>Age: 49</th>
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<tr>
<td><strong>Preferred Contact Method:</strong></td>
<td><strong>Home Phone:</strong></td>
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<tr>
<td><strong>Alternate Phone:</strong></td>
<td><strong>Day Phone:</strong></td>
</tr>
<tr>
<td><strong>Secondary Phone:</strong></td>
<td><strong>Cell Phone:</strong></td>
</tr>
<tr>
<td><strong>Email:</strong></td>
<td><strong>Language:English</strong></td>
</tr>
<tr>
<td><strong>ACO:</strong> N</td>
<td><strong>Medicaid Nbr:</strong></td>
</tr>
<tr>
<td><strong>My CLINICA Connection Status:</strong></td>
<td><strong>Enrolled</strong></td>
</tr>
<tr>
<td><strong>OB Status:</strong></td>
<td><strong>Groups:</strong></td>
</tr>
</tbody>
</table>

**PCP:** Dryden, Kevin  
**PDP:** Missing PDP  
**Hygienist:**

**Last Visit:** 11/18/2015 Dryden, K-DIA  
**Last WCC:**  
**Payer:** Medicaid FQHC  
**Next appt:**

### Visits and Appointments

**Last Dental Visit:**  
**Next Dental Visit:**

### Outreach Details

#### Clinical

**Date Reviewed:** 12/17/2015  
**Comments:** Lvm informing pt to RCTC and schedule apt for DM, IH  
**Call Attempt:** 2nd Call  
**Call Status:** Left message

#### Dental

**Date Reviewed:**  
**Comments:**  
**Call Attempt:**  
**Call Status:**

### Clinical

**Past Due - Diabetes Eye Exam**  
**Past Due - Diabetes Foot Exam**  
**Past Due - High Blood Pressure > = 140/90** (Diabetes, )  
**Past Due - Last A1c > 9 on 11/18/2015**  
**Past Due - LDL (Cholesterol) Lab**  
**Past Due - Tdap/TD Vaccine**  
**ACO Care Team Score is 3**
**CLOSE THE LOOP**

### Active Problem List

<table>
<thead>
<tr>
<th>Alerts</th>
<th>Active Problem List</th>
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</thead>
<tbody>
<tr>
<td>Past Due - Diabetes Eye Exam</td>
<td>11/13/2015 - Alcohol-induced chronic pancreatitis</td>
</tr>
<tr>
<td>Past Due - Diabetes Foot Exam</td>
<td>11/13/2015 - Continuous chronic alcoholism</td>
</tr>
<tr>
<td>Past Due - LDL (Cholesterol) Lab</td>
<td>08/17/2014 - Alcoholism - &gt;203.90</td>
</tr>
<tr>
<td>Past Due - Last A1c &gt; 9 on 11/15/2015</td>
<td>08/17/2014 - Iron deficiency anemia - &gt;280.0</td>
</tr>
<tr>
<td>Past Due - High Blood Pressure &gt; = 140/90 (Diabetes, )</td>
<td>08/17/2014 - Methamphetamine abuse - &gt;350.70</td>
</tr>
<tr>
<td>Past Due - Immunizations (Past Due - Tub/TD Vaccine, )</td>
<td>08/17/2014 - Pancreatitis - &gt;77.0</td>
</tr>
<tr>
<td>ACO Care Team Score is 3</td>
<td>05/17/2012 - Diabetes type 2, uncontrolled - &gt;200.0</td>
</tr>
</tbody>
</table>

### Active Medications

<table>
<thead>
<tr>
<th>Start Date</th>
<th>Stop Date</th>
<th>Brand Name</th>
<th>Generic Name</th>
<th>Dose</th>
<th>Instructions</th>
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<tbody>
<tr>
<td>12/1/2010</td>
<td>12/20/2010</td>
<td>TRUECOMFORT</td>
<td>BLOOD SUGAR</td>
<td>3 g</td>
<td>inject 10 U of Levemir SQ HS</td>
</tr>
<tr>
<td>12/1/2010</td>
<td>12/10/2010</td>
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### Diabetes - High Risk

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<thead>
<tr>
<th>Systol</th>
<th>Diastol</th>
<th>Eye Exam</th>
<th>Foot Exam</th>
<th>A1c (Last 2)</th>
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<tr>
<td>140</td>
<td>80</td>
<td>11/16/2015</td>
<td>11.5</td>
<td>05/10/2015 - 14.0</td>
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<td>05/10/2015</td>
<td>14.0</td>
<td>05/10/2015 - 14.0</td>
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<tr>
<th>Group Visit</th>
<th>Open Referrals</th>
<th>Future Labs</th>
<th>Diagnostics</th>
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<tbody>
<tr>
<td>No</td>
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</table>
WHAT DOES IT TAKE?

NOT A BETTER EMR!

NOT IT STAFF!

- SQL developers / Analysts
- Executive buy-in
- Clinical leadership
- Prioritization of where to start
- Accountability
- Iteration
What are your barriers / challenges?
- Engage leadership
- Frontline staff
- Current culture

What would help you be successful?

How will you make it actionable?
- Would someone know what to do by looking at it?
QUESTIONS?

Boris Kalikstein | boris@pivotalmomentconsulting.com | 720.289.9542

Pivotal Moment Consulting
pivotalmomentconsulting.com
Upcoming CCI Webinar & Workshop

Effective Communication
Strategies for Strengthening
Patient-Clinician Relationships

Webinar: August 29, 11:00 am – 12:00 pm
Workshop: September 7, 9:30 am – 4:00 pm

Objective: Learn and apply techniques to discover and identify patient vulnerabilities and resilience through eliciting patient narratives and developing shared care plans

Open To: Clinicians and members of their care team. Participants should plan to attend both the webinar and workshop

Limited 40 spots available
Register separately ASAP:

Webinar: Register here
Workshop: Register here
CONTACT INFORMATION

• Tammy Fisher: tammy@careinnovations.org
• Megan O’Brien: mobrien@careinnovations.org

THANK YOU!

Please remember to fill out the post webinar brief survey!!