Clinica Patient Population

- 170,000 visits
  - Physical Health
  - Behavioral Health
  - Dental
  - Homeless
  - Pharmacy

- 38,000 active patients
- 50% uninsured
- 40% Medicaid
- 56% < Poverty
- 98% <200% of Poverty
Clinica Family Health Services

- 49 Physical Health Provider Positions (67)
- 13 Behavioral Health Providers
- 4 Dental Providers
- Clinics in the Homeless Shelter and Safehouse
- 2 Full Pharmacies, 2 Pharmacy Outlets, School of Pharmacy
- Total Staff of 320
- Admit to 3 community hospitals
- Community EHR
Journey

- **1998**: Joined the IHI Chronic Care Collaborative
- **2000**: Delivery system redesign (The Big 3)
  - Access
  - Office efficiency through transition to teams
  - Alternative visits
- **Spread and Sustain** planned care approach to quality improvement
  - Asthma, depression, chronic pain
  - Prenatal and other preventative health care
  - Redesign architectural layout to support team care
Journey

- Behavioral Health Integration
- Other chronic illnesses-ADHD, Bipolar Patients…
- Medication Safety-anticoagulation program CU School of Pharmacy
- Implemented EHR 2005
- Dental expansion
- NCQA Level 3 PCMH 2010
- NCQA Diabetes Rec. 2011
Key Redesign Initiatives (The Big 6)

To improve patient centered-population based management.

#1 Continuity of care
#2 Access
#3 Improved office efficiency-team care
#4 Improved care delivery model
#5 Improved IS design
#6 Patient activation and self-management
#1 Continuity of Care

- Everyone assigned a PCP/Pod team
- Color branding for pods
- Measure continuity every three months
- Measure panel size and manage unassigned every month
- Evaluate patient’s understanding of PCP
- Key for patient activation
- Managed by the operations team
#1 Continuity of Care

Thornton Clinic Well Child Checks
2003-2009
#1 Continuity of Care: It Is Never Done

% Continuity at Pecos

- Team (Goal 90%)
- PCP (Goal 70%)
#2 Access: Time to Third

Time To Third Average

For Clinica Overall

Days

## Data

### Panel Size Report

<table>
<thead>
<tr>
<th>Provider</th>
<th>Pod</th>
<th>FTE</th>
<th>Current Number of Patients</th>
<th>Goal (w/factor)</th>
<th>2010-3 Panel (adjusted)</th>
<th>2010-4 Panel (adjusted)</th>
<th>Over (Under)</th>
</tr>
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<tbody>
<tr>
<td>Lafayette</td>
<td></td>
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<tr>
<td>Himan, Julie</td>
<td>Purple</td>
<td>0.91</td>
<td>1077</td>
<td>1092</td>
<td>1,132</td>
<td>1,137</td>
<td>45</td>
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<td>Keeman, Chris</td>
<td>Purple</td>
<td>0.50</td>
<td>683</td>
<td>600</td>
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<td>111</td>
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<td>Purple</td>
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<td>985</td>
<td>900</td>
<td>1,035</td>
<td>1,016</td>
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<tr>
<td>O'Brien, Daniel</td>
<td>Purple</td>
<td>0.80</td>
<td>785</td>
<td>960</td>
<td>760</td>
<td>812</td>
<td>(148)</td>
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<tr>
<td>Shepherd, John C</td>
<td>Purple-Gon</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Boysen, Eric</td>
<td>Red</td>
<td>0.55</td>
<td>468</td>
<td>660</td>
<td>414</td>
<td>428</td>
<td>(252)</td>
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<td>Funk, Karen</td>
<td>Red</td>
<td>0.60</td>
<td>808</td>
<td>720</td>
<td>831</td>
<td>829</td>
<td>109</td>
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<td>Johnson, Jennifer</td>
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<td>867</td>
<td>720</td>
<td>921</td>
<td>901</td>
<td>181</td>
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<td>Kamer, Mary</td>
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<td>885</td>
<td>780</td>
<td>901</td>
<td>884</td>
<td>104</td>
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<tr>
<td>Monyok, Eileen</td>
<td>Red</td>
<td>0.68</td>
<td>809</td>
<td>816</td>
<td>795</td>
<td>794</td>
<td>(22)</td>
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<tr>
<td>Unassigned</td>
<td>No PCP</td>
<td></td>
<td>23</td>
<td>30</td>
<td>25</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Total - Lafayette</td>
<td></td>
<td></td>
<td>7420</td>
<td>7248</td>
<td>7,530</td>
<td>7,572</td>
<td>270</td>
</tr>
</tbody>
</table>

**GOAL**= less than 4% of patients unassigned

\[
\frac{29}{7420} = 0.4\%
\]
Drill down to day by day, provider by provider.
#2 Access and Managing Demand

Visits Per Day

- **Jan**: 17.00, 2009, 17.50, 2010
- **Feb**: 17.00, 2009, 17.50, 2010
- **Mar**: 17.00, 2009, 17.50, 2010
- **Apr**: 17.00, 2009, 17.50, 2010
- **May**: 17.00, 2009, 17.50, 2010
- **Jun**: 17.00, 2009, 17.50, 2010
- **Jul**: 17.00, 2009, 17.50, 2010
- **Aug**: 17.00, 2009, 17.50, 2010
- **Sep**: 17.00, 2009, 17.50, 2010
- **Oct**: 17.00, 2009, 17.50, 2010
- **Nov**: 17.00, 2009, 17.50, 2010
- **Dec**: 17.00, 2009, 17.50, 2010
- **YTD**: 17.00, 2009, 17.50, 2010
#3 It Takes a Team
<table>
<thead>
<tr>
<th>Diabetes Registry Measures:</th>
<th>Average A1c</th>
<th>% of patients with two A1cs in the last 12 months</th>
<th>% of patients with last BP &lt; 130/80</th>
<th>% of patients with last LDL &lt; 100</th>
<th>% of patients are current smokers</th>
<th>% of patients have an annual foot exam</th>
<th>% of patients have an annual eye exam</th>
<th>% of patients have an annual self-management goal documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of patients have A1cs &lt; 7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operations**

- Print off Diabetes registry and workflow the first Tuesday of every month.

**Front Desk**

- Review registry for last visit, blood pressure, eye exam, foot exam, lipids, and A1c.
- **Visit**: If more than six months, make appointment. Otherwise, review Blood Pressure, Lipids and A1c for follow-up guidelines.
- **Blood Pressure**: If blood pressure <130/80 use other risk factors to determine follow up needs. If BP Systolic is >130 or BP Dyastolic is >80 follow up at least every month.
- **Eye Exam**: Add patients without eye exam in the last 12 months to wait list for eye clinic. Contact patient when slot opens with date of clinic.
- **Foot Exam**: If no foot exam in the last 12 months, schedule an appointment.
- **Lipids**: If LDL <100 use other risk factors to determine follow up needs. If LDL >100 but <130 follow up should be at least every three months. If LDL >130 follow up should be at least once a month.
- **A1c**: If Hgb A1c > 9, follow up every month. If Hgb A1c >7 but <9 follow up should be at least every 3 months. If HgbA1c <7 follow up should be every three to six months.

**Case Manager**

- Review registry for risk stratification, tobacco, and self-management goal. **Note**: For patients who do not have information populated in the flowsheet, CM will open NextGen and determine if patient is actually a diabetes patient. Alert clinical team to patients on huddle report.
- **Tobacco**: If current smoker, review for tobacco cessation counseling. Advise patient to quit at next contact.
- **Self-Management**: Monitor patients on registry for annual goal. Responsible for connecting with patient to set goal when in for a visit.
- **Group Visits**: Determine which patients/providers do groups. Coordinate DM group visits for pod by doing the following:
  - Determine provider availability
  - Denise’s schedule availability
  - Coordinate with NTM on support staff availability
  - BHP schedule availability
  - Call pts and schedule for DM GV as needed.

**Provider**

- Review the flowsheet every visit and enter any new data. Review registry for any patients for which there are concerns and patients who are MOGE. Provide information to CM.

**MA**

- Review the flowsheet every visit and enter any new data. Responsible for patients on registry who are in for visit today.

**Nurse**

- Reviews copy of registry given by CM to ensure all follow-up has been completed and is accurate.
Registry Work for the Team
### Diabetes Planned Care Ruler

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>DOB</th>
<th>Visit</th>
<th>BP Syst</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>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnie</td>
<td>i/1952</td>
<td>11/13/2008</td>
<td>122</td>
<td>80</td>
<td>Current</td>
<td>08/01/2007</td>
<td>11/13/08</td>
<td>05/15/2008</td>
<td>04/03/2008</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angelica</td>
<td>i/1975</td>
<td>03/26/2009</td>
<td>115</td>
<td>69</td>
<td>Never</td>
<td>12/11/08</td>
<td>03/26/2009</td>
<td>02/15/2008</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teresita</td>
<td>i/1974</td>
<td>03/26/2009</td>
<td>110</td>
<td>72</td>
<td>Never</td>
<td>10/10/2008</td>
<td>1/30/09</td>
<td>10/16/2008</td>
<td>01/30/2009</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **High Risk:** Last A1c >= 7
- **Medium Risk:** Last A1c > 5 Months
- **Low Risk:** Last A1c < 7 and < 5 Months

- Group Visit: No
- Group Visit: Yes
Improved Quality Takes a Team: 23% to 79% of smokers counseled to quit smoking

Current Pregnancy
Breastfeeding

Reason for visit:
- [ ] sinusitis
- [X] Tobacco Abuse

HPI: This chief complaint
- Tobacco Abuse
- Still smokin' dem Marlboros!

Review of Systems
- Constitutional
- Cardiovascular
- Genitourinary
- Neuro | Psychiatric
- HEENT
- Vascular
- Reproductive
- Dermatologic
- Respiratory
- Gastrointestinal
- Metabolic | Endocrine
- Musculoskeletal

Health Maintenance
Quick View

Vital Signs

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Temp</th>
<th>Bp Sys</th>
<th>Bp Dias</th>
<th>Pulse</th>
<th>Pattern</th>
<th>Resp</th>
<th>Ht</th>
<th>Lb</th>
<th>BMI</th>
<th>Calc</th>
<th>Sp O2</th>
<th>P Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/24/2009</td>
<td>2:35 PM</td>
<td>98.70</td>
<td>67</td>
<td>67</td>
<td>57</td>
<td></td>
<td>21</td>
<td>68.0</td>
<td>145.0</td>
<td>22.04</td>
<td>99</td>
<td>356</td>
<td></td>
</tr>
<tr>
<td>09/13/2009</td>
<td>7:38 AM</td>
<td></td>
<td>123</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last PAP 09/13/2009 LMP 02/19/2009

Physical Exam
- Constitutional
- Head | Face
- Neck | Thyroid
- Vascular
- Abdomen
- Back | Spine
- Musculoskeletal
Team Based Care

3 FTEs of Provider
3 FTEs of Medical Assistant
1 Nurse Team Manager
1 Case Manager
1 Behavioral Health Professional
2 Front Desk
1 Medical Records
½ Referral Case Manager
#4 Improving the Care Model
Improving Pregnancy Outcomes

2009 Data
Teen Parent Group
Parenting Girls Group Content Threads

- Nutrition
- School Performance
- Communication
- Peer Relationships
- Menarche
- Sexuality
- Role Attainment
- Family Planning
- Family Relationships

CORE CONTENT
#5
Information Technology
Meaningful Data for Meaningful Change

Pecos Red - Average HbA1C

- **Meaningful Data for Meaningful Change**
- **Pecos Red - Average HbA1C**

![Graph showing average HbA1C levels for Clinica, Pecos, Red Pod, and Red Provider over months from January to December.](image-url)
# Depression Registry

**Print Date:** 12/21/2010

**Population of Focus:** Depression Patient Type: BHP, CM Cycle Status: Active, None

**Clinica**

### Intervention Due

<table>
<thead>
<tr>
<th>Person Nbr</th>
<th>Last Name</th>
<th>First Name</th>
<th>DOB</th>
<th>Last Visit</th>
<th>MDD</th>
<th>SM Date</th>
<th>First Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>/50</td>
<td></td>
<td></td>
<td>8/23/10</td>
<td>8/23/10</td>
<td>6/14/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Alerts

<table>
<thead>
<tr>
<th>Alert</th>
<th>Status</th>
<th>Due Date</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>5M Goal</td>
<td>Past Due</td>
<td>12/21/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Month F/U</td>
<td>Due Now</td>
<td>12/14/10</td>
<td>11/30/1</td>
<td>1/11/11</td>
</tr>
</tbody>
</table>

### PHQ Scores

<table>
<thead>
<tr>
<th>Date</th>
<th>Score</th>
<th>Q9</th>
<th>Q10</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/12/10</td>
<td>9</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>8/23/10</td>
<td>10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6/14/10</td>
<td>16</td>
<td>0</td>
<td>1</td>
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</table>

### Current Treatment Cycle

<table>
<thead>
<tr>
<th>Current Cycle Start</th>
<th>2 Week Visit</th>
<th>6-12 Week Visit</th>
<th>6 Month Visit</th>
<th>1 Year Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/14/10</td>
<td>6/23/10</td>
<td>8/23/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Current treatment stage is Continuation**

### Treatment

**Type:** family and relationship counseling  
**Location:** CC BHP  
**BHP:** Peck, Jennifer  
**Date:** 11/15/10

### Class

- Antidepressant
- Antipsychotic
- Antianxiety
- More Meds

### Alerts

<table>
<thead>
<tr>
<th>Alert</th>
<th>Status</th>
<th>Due Date</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>12/13/10</td>
<td>12/13/10</td>
<td>11/24/10</td>
</tr>
</tbody>
</table>

### PHQ Scores

<table>
<thead>
<tr>
<th>Date</th>
<th>Score</th>
<th>Q9</th>
<th>Q10</th>
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<tbody>
<tr>
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<td>1</td>
</tr>
<tr>
<td>11/24/10</td>
<td>22</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### Current treatment stage is Acute

**Type:**  
**Location:** Lomonaco, KC  
**BHP:**  
**Date:** 12/13/10

### Class

- Antidepressant  
  - Generic Name: CITALOPRAM
  - Dose: 10 MG
- Antipsychotic
- Antianxiety
#6 Patient Activation
How to Emphasize the Patient’s Role

- Simple messages from the primary care provider:

  “Diabetes is a serious condition. There are things you can do to live better with diabetes and things our health team can do to assist you. We are going to work together on this.”

- Consistent approach
My INR Graph
(INR Goal Range: ______)

My Vital Signs

<table>
<thead>
<tr>
<th></th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse</td>
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<td>Blood Pressure</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Confidence Scale: From 1-10, please rate how confident you are that you can manage your blood thinner therapy?
5 As

ASK  Type of Tobacco Used: cigarette

ADVISE  □ Patient advised of importance of quitting

"Quitting smoking is the best thing you can do for your health"

□ Discuss the health risks of second hand smoke.

ASSESS

Readiness to Quit: ________

If Patient is ready to quit in next 30 days:

Collaboratively set quit date: / / 

ASSIST

□ Referral to the Colorado Quitline at 1-800-QuitNow (1-800-784-8669)

□ Referral for behavioral change counseling

Prescribed Nicotine Replacement Therapy  Decision Support

□ Active  □ Prescribe  □ Excluded  □ Stopped

Brand Name: ________  Dose: ________  Sig: ________

Prescribed Additional Cessation Medications

□ Active  □ Prescribe  □ Excluded  □ Stopped

Brand Name: ________  Dose: ________  Sig: ________

□ Cessation Tips Discussed

□ Hand Out Self Help Materials

ARRANGE

One Week F/U after quit Date  □ Scheduled  □ Completed

One Month F/U after quit Date  □ Scheduled  □ Completed

□ Schedule other smoking cessation follow up

OK  Cancel
Clinica Lessons Learned

- Put the patients first by starting with continuity
- Optimize the team-hand off evidence based algorithms
- Find ways to add the patients voice
  - Patients choose content threads
  - On teams
  - Scan comments
  - Media
- Start small but start!
Clinica Lessons Learned

- Use the QI tools that work to make improvement a system characteristic
  - Chronic care model,
  - The IHI Model for improvement
  - Sequential learning with PDSAs
  - Short and small test cycles followed by spread

- Measure data over time
  - You don’t need a double blinded RCT or a dashboard program to get better
Future Focus

- Continue improving the Big 6
- Become experts at patient activation
- Increase behavioral health integration and dental services
- Single “alert” driven registry
- Care across the continuum-ACOs and payment reform
- Add a Patient Portal and address the digital divide
- Push for more meaningful use of the EHR