Stanford Coordinated Care

Extreme Team Care

April 20, 2015
Determinants of Health and Their Contribution to Premature Death

Schroeder, NEJM 357; 12
<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling alone</td>
<td>Becoming an empowered patient</td>
</tr>
<tr>
<td>Forced to be at the center</td>
<td>Supported and confident</td>
</tr>
<tr>
<td>Feeling studied</td>
<td>Feeling listened to</td>
</tr>
<tr>
<td>Facts</td>
<td>Hands-on action</td>
</tr>
<tr>
<td>Passed between providers</td>
<td>Creating personal relationships</td>
</tr>
<tr>
<td>Stalling</td>
<td>Thriving</td>
</tr>
<tr>
<td>Resource intensive</td>
<td>Streamlined</td>
</tr>
</tbody>
</table>
Patient Variation - what the patient faces

Domains

Medical Neighborhood
- Access to Care
  - Experience with Provider(s)
  - Getting Needed Services
  - Coordination of Care
  - Medical Home / Services Risk

Social Support
- Home Environment
  - Job & Leisure
  - Social Support
  - Social Relationships
  - Social Support Risk

Medical Status & Health Trajectory
- Medications & Treatments
  - Chronicity
  - Symptom Severity & Condition Factors
  - Diagnostic/Therapeutic Challenges
  - Utilization Factors

Self Management & Mental Health
- Engagement / Coping
  - Adherence to Treatment
  - Mental Health History
  - Mental Health Symptoms
  - Self Management & Mental Health Risk

The Team = Patient, Providers, RN Care Manager, patient’s support network

Thanks for your attention to this.
**What the Patient Brings:**

**Activation Level**

- **Level 1:** Starting to take a role. Individuals do not feel confident enough to play an active role in their own health. They are predisposed to be passive recipients of care.

- **Level 2:** Building knowledge and confidence. Individuals lack confidence and an understanding of their health or recommended health regimen.

- **Level 3:** Taking action. Individuals have the key facts and are beginning to take action but may lack confidence and the skill to support their behaviors.

- **Level 4:** Maintaining behaviors. Individuals have adopted new behaviors but may not be able to maintain them in the face of stress or health crises.

10-15% of the population*

20-25% of the population*

35-40% of the population*

25-30% of the population*

* Medicaid and Medicare populations skew lower in activation
“Why wouldn’t a person with a chronic condition do everything in their power to live long and feel well?”
SCC Approach: “The Activation Model”

- From:
  “What bothers you the most?”

- To:
  “Where do you want to be in a year?”

First step  Next step  Getting there...
Depression

“Depression significantly increases the overall burden of illness in patients with chronic medical conditions... depression is associated with a 50-100% increase in health services use and cost.”

The Often Hidden Driver: Adverse Childhood Events

ACE Score = 1 point each for positive responses to 10 questions inquiring about exposure to:

- Physical abuse
- Emotional abuse
- Sexual abuse
- Physical neglect
- Emotional neglect
- Divorce/separation
- Domestic violence in the home
- Parent that used drugs or alcohol
- Parent that was incarcerated
- Parent that was mentally ill

From: www.acestudy.org
How does ACE play out later in life?

- **Increased smoking:**
  - The higher the ACE score, the greater the likelihood of current smoking

- **COPD:**
  - A person with an ACE score of 4 is 2.6 x more likely to have COPD than a person with an ACE score of 0

- **Depression:**
  - A person with an ACE score of 4 was 4.6 x more likely to be suffering from depression than a person with an ACE score of 0

- **Suicide:**
  - There was a 12.2 x increase in attempted suicide between ACE 4 vs. 0; at higher ACE scores, the prevalence of attempted suicide increases 30-51 fold!
  - Between 66-80% of all attempted suicides could be attributed to ACE.
SCC PAM 6 Month Results

Change in PAM level between 1st and 2nd measurements at 6 months

• 58% of patients improved at least 3 points (0-100 scale) – minimal significant change (associated with change in cost and health)
From “Cup Runneth Over”…

Provider

Medical Assistant/Care Coordinator

Nurse

Behavioral Health

Clinical Pharmacist

Physical Therapist
To “Share the Care”

- Provider
- Medical Assistant/Care Coordinator
- Nurse
- LCSW/Behavioral Health
- Physical Therapist
- Clinical Pharmacist
From MA to Care Coordinator

- “Artisanal” vs. assembly line
  - Coach, advocate, MA, scribe, outreach worker, pop health manager combined in single person: relationships are key

- Empanelment

- Training: onboarding and ongoing

- Case presentations at team meetings

- Staying with the patient – few handoffs
  - Scribing the visit: learning as the patient learns

CREATE NEW JOB CATEGORY AND PAYSCALE to reflect greater skills and responsibility
Clark Superman is 46 y with a PAM level of 4

Patient Goals:
1. Become weightless
2. Avoid krypton
3. Get married to Lois when I am healthy

Action Plans:
1. Fly three times a week for stress reduction
2. Try a lighter weight cape to help with shoulder pain

Follow up:
1. Stool test for colon cancer screen
2. See Deborah for shoulder pain

Diagnosis:
- Diabetes mellitus type II, uncontrolled
- Hypertension
  - Overview: On meds since 2006. Stable on lisinopril and metoprol
- Mortal Obesity
  - Overview: 5/2014 BMI 35.2. Referred to Healthy cooking class and diet plan. Will not eat after 8 pm.
- Hyperlipoplasia

Mark as Reviewed
Last Reviewed by Lindsey, Ann D. MD on 5/14/2014 at 12:24 PM
## Care Coordinator: COLEMAN, DELILA

| Patient Name | PCP       | Next Appt Date | HbA1c | LDL  | Nephropathy | LDL  | Flu | Pneumococcal | Chlamydia | Cervical Cancer | Breast Cancer | Colorectal Cancer | ACE/AR/Bladder | Med. Mgmt. | SCC | PAM | # Overdue |
|--------------|-----------|----------------|-------|------|-------------|------|-----|--------------|------------|----------------|---------------|----------------|----------------|-------------|-----|-----|-------|---------|
| VOLLRATH H, K| 01/09/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 04/17/2015 | 02/28/2015 | 03/07/2019 | N/A    | Overdue 2 |
| VOLLRATH H, K| 01/05/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 12/08/2016 | 09/30/2019 | 09/26/2015 | N/A    | 0       |
| GLASEROTH A   | 03/11/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 08/20/2015 | N/A        | 05/24/2015 | N/A    | 0       |
| GLASEROTH A   | 01/07/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 08/09/2015 | 03/20/2015 | Overdue     | N/A    | Overdue 3 |
| VOLLRATH H, K| 01/20/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 05/20/2015 | N/A        | 02/20/2015 | N/A    | 1       |
| GLASEROTH A   | 01/15/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 01/15/2015 | Overdue    | 03/19/2015 | N/A    | 2       |
| LINSFORD A    | 01/08/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 11/15/2015 | Overdue    | 06/03/2015 | N/A    | 0       |
| LINSFORD A    | 01/08/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 03/19/2015 | Overdue    | 06/03/2015 | N/A    | 1       |
| GLASEROTH A   | 01/01/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 09/01/2015 | Overdue    | 05/25/2015 | N/A    | 0       |
| VOLLRATH H, K| 01/07/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 09/01/2015 | Overdue    | 06/03/2015 | N/A    | 1       |
| GLASEROTH A   | 01/07/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 09/01/2015 | Overdue    | 06/03/2015 | N/A    | 0       |
| GLASEROTH A   | 01/07/20 15 | N/A            | N/A   | N/A  | N/A         | N/A  |     | Overdue      | N/A        | N/A            | N/A           | 09/01/2015 | Overdue    | 06/03/2015 | N/A    | 1       |
HEDIS: SCC results

Overall Composite: 84%
Diabetes Composite: 84%
Cardio Composite: 67%
Preventative Composite: 84%
Med Mgmt Composite: 97%

Distance from Goal

Measure | Percentage to Goal | Current Rate | Goal | Patients | Patients to Goal | Percentile Ranking (Estimated)
--- | --- | --- | --- | --- | --- | ---
Overall | 83.3% | 84.3% | 50.5% | 202 | n/a | n/a
Diabetes | 91.9% | 83.9% | 74.8% | 103 | 0 | 0
Cardio | 13.9% | 60.7% | 93.7% | 103 | 0 | 0
Preventative | 63.6% | 82.3% | 63.7% | 202 | 0 | 0
Med Mgmt | 67.1% | 96.0% | 93.7% | 202 | 0 | 0
Diabetes | HbA1c Screening | 12.4% | 94.7% | 93.7% | 202 | 0 | 0
Cardio | LDL Screening | -1.6% | 54.5% | 55.6% | 63 | 2 | 2
Preventative | Flare Immunization | 25.9% | 60.7% | 93.7% | 63 | 0 | 0
Medication Management | ACE/ARB/Diuretic/Digoxin | 2.9% | 96.0% | 94.0% | 63 | 0 | 0

Print - Colorectal Cancer Screening
Monthly “Speed Dating”

Each care coordinator conferences with relevant clinician on CC panel they share

- Each CC works with each clinician – allows for cross-coverage
- Focus on “red” areas – immediate risk for poor outcome
- CC panel ~100
- No one “falls through the cracks”
- Care gaps also addressed
Analytics Risk Dashboard

Summary of overall risk for patient population

View by selected Patients, demographics, and/or clinician

Population Health Dashboard

Panel Health Indicator

Time | Q1 | Q2 | Q3 | Q4
-----|----|----|----|----
2000 | 1, Jan | 7, Jul | 3, Mar | 9, Sep
2001 | 1, Feb | 8, Aug | 10, Oct | 1, Dec
2002 | 1, May | 11, Nov | 6, Jun | 12, Dec

Chronic Condition

Asthma
CAD
CHF
COPD
Diabetes
Hypertension

Clinician

ADPZ, K.KENEVEET
BIZI, KORININ2, G
BYRDBJ, QUGROQF
FODV
IVXMQP, PWOYCSPK
JYTVYMBJHI, BUDZ
LONG, KRRMMASU

Panel Summary

Visit Detail

Progress

Clinic Performance By Measure

Patient Name | PCP | Age | Race | Gender | Location | Total Score | Score Distribution | Score Percentage | Score Percentage | Score Percentage | Score Percentage | Score Percentage | Score Percentage | Score Percentage | Score Percentage | Score Percentage

View Patient Record
Patient Health Portrait

HEALTH PORTRAIT - MQRRSVIODE,APTQHFZ L

Patient: MQRRSVIODE,APTQHFZ L  Provider: FZWVYIQ, HHJ U.

BirthDT: 3/19/1967  Address Line 1 -

Address Line 2 -

Gender: M  Language: English

Chronic Conditions
A1C  A/Cl Ratio  BMI  BP (Systolic)  LDL  On AntiPlatelet  Smoker?

Scores
Domain Score  8  PAM Score  2  PHQ9 Score  -  SF12 Score  -  Pain Score  -

Care Gaps
A/Cl Ratio Interval  -  A1C Interval  -  Last SCC Encounter  12  HS CRP Interval  -  LDL Interval  -  Eye Exam  -  Foot Exam  -

Vitals and Labs

A1C

BP (Systolic)

LDL

BMI

Time
2000  2002
2001  2006
2008  2007
2009  2011
2010  2012
1  2013

Q1  Q2  Q3  Q4
1-Jan  7-Jul  2-Feb  8-Aug  3-Mar  9-Sep  4-Apr  10-Oct  5-May  11-Nov  6-Jun  12-Dec

Print Page
Print FAQ
## Medication Refill Protocol

<table>
<thead>
<tr>
<th>Medication (generic name)</th>
<th>Medication (Brand name)</th>
<th>Condition</th>
<th>Refill</th>
<th>Appt</th>
<th>Labs</th>
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</thead>
<tbody>
<tr>
<td>acarbose</td>
<td>Precose</td>
<td>Diabetes</td>
<td>6 months</td>
<td>&lt; 6 months</td>
<td>A1c &lt; 6 mo; Lipid panel &amp; CMP &lt; 12 mo, Urine Microalbumin &lt; 12 mo</td>
</tr>
<tr>
<td>acyclovir ointment or oral</td>
<td>Zovirax</td>
<td></td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td></td>
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<tr>
<td>albuterol</td>
<td>Proventil</td>
<td>Asthma</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td></td>
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<tr>
<td>albuterol</td>
<td>Ventolin</td>
<td>Asthma</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td></td>
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<tr>
<td>alendronate</td>
<td>Fosamax</td>
<td>Bone Density</td>
<td>12 months</td>
<td>&lt; 12 months</td>
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<tr>
<td>alopurinil</td>
<td>Allopurin</td>
<td>Gout</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td>BMP, Uric Acid</td>
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<tr>
<td>alprazolam</td>
<td>Xanax</td>
<td>Anxiety</td>
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<td>amiodarone</td>
<td>Cordarone</td>
<td>Atrial Fibrillation</td>
<td>6 months</td>
<td>&lt; 9 months</td>
<td>AST, AST, TSH &lt; 12 mo</td>
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<tr>
<td>amlodipine</td>
<td>Norvasc</td>
<td>Hypertension</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>amlodipine and benazeplil</td>
<td>Lotrel</td>
<td>Hypertension</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>atenolol</td>
<td>Tenormin</td>
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<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>atorvastatin</td>
<td>Lipitor</td>
<td>Cholesterol</td>
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<td>&lt; 12 months</td>
<td>Fasting Lipid Profile, AST, ALT &lt; 12 mo</td>
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<td>benazeplil</td>
<td>Lotensin</td>
<td>Hypertension</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>benazeplil with hydrochlorothiazide</td>
<td>Lotensin HCT</td>
<td>Hypertension</td>
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<td>BMP &lt; 12 mo</td>
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<td>budesonide</td>
<td>Pulmicort</td>
<td>Respiratory Agent</td>
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<td>budesonide</td>
<td>Rhinocort Aqua</td>
<td>Allergies</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td></td>
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<tr>
<td>bupropion</td>
<td>Wellbutrin SR</td>
<td>Depression</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td></td>
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<td>bupropion</td>
<td>Zyban</td>
<td>Depression</td>
<td>6 months</td>
<td>&lt; 6 months</td>
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<td>candesartan</td>
<td>Atacand</td>
<td>Hypertension</td>
<td>12 months</td>
<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>candesartan and hydrochlorothiazide</td>
<td>Atacand HCT</td>
<td>Hypertension</td>
<td>13 months</td>
<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>captopril</td>
<td>Capoten</td>
<td>Hypertension</td>
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<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<td>carvedilol</td>
<td>Coreg, Coreg CR</td>
<td>Hypertension</td>
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<td>&lt; 12 months</td>
<td>BMP &lt; 12 mo</td>
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<tr>
<td>chlorpromazine</td>
<td>Cionazapam</td>
<td>Anxiety</td>
<td></td>
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# Triple Aim Results

<table>
<thead>
<tr>
<th>Inpatient Admissions</th>
<th>ER Visits</th>
<th>Patient Experience</th>
<th>HEDIS</th>
</tr>
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<tbody>
<tr>
<td>-25%</td>
<td>-39%</td>
<td>99&lt;sup&gt;th&lt;/sup&gt; percentile</td>
<td>&gt;90&lt;sup&gt;th&lt;/sup&gt; percentile (10/15 measures)</td>
</tr>
</tbody>
</table>

271 patients with at least 6 months enrollment
Primary Care Plus

Services:
• No co-pays for patients to see any of our providers
• 24/7 access to Primary Care Physician
• Coordination with your other physicians and specialists so everyone is on the same page
• Care transition planning at hospitalization with home visit if needed
• Contact with SCC staff once a week on average

Program Value:
• All of these services cost Stanford health plans $3432/year, less than 10% the average annual total cost of care for SCC patients
SCC is growing! 3/24/15

Cumulative Enrollment: 433

Current Enrollment: 376

Disenrolled*: 57

Disenrolled from SCC, but were enrolled in the program for longer than 6 months

Program Enrolled

<table>
<thead>
<tr>
<th>Program</th>
<th>Enrolled</th>
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<tbody>
<tr>
<td>Primary Care Plus</td>
<td>336</td>
</tr>
<tr>
<td>Care Support</td>
<td>40</td>
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Other Programs

<table>
<thead>
<tr>
<th>Program</th>
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<tr>
<td>BCBH Online</td>
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<tr>
<td>BCBH In-Person</td>
<td>9</td>
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<tr>
<td>Seminar Series</td>
<td>60</td>
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<td>D-School</td>
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Better Choices Project

<table>
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<tr>
<th>Mode</th>
<th>Enrolled</th>
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</thead>
<tbody>
<tr>
<td>Online</td>
<td>32</td>
</tr>
<tr>
<td>In-Person</td>
<td>20</td>
</tr>
<tr>
<td>Mail Kit</td>
<td>38</td>
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## SCC Case Study

**A quote from a patient:**

> “Stanford Coordinated Care focused on the little things that were leading to my needing to be hospitalized.”

### Before enrolling in SCC  
**01/24/2012 – 06/24/2012**

- 4 Urgent inpatient admission  
  (syncope, sepsis, peritonitis, osteomyelitis)  
  1 PCP and 5 Specialists

- **$627,076 billed charges**  
  **$104,513/month**

### After enrolling in SCC  
**06/25/2012 – 12/25/12**

- No (0) inpatient stays or surgeries  
  1 PCP and 2 Specialists

- **$7837 billed charges**  
  **$1306/month**

### Care Management Interventions

**Conditions:**
- Corns and Callosities  
- Osteomyelitis  
- Systemic Lupus Erythematosus  
- Lupus anti-coagulant disorder  
- Vitritis of right eye  
- Chronic Kidney Disease (stage IV - severe) on hemodialysis  
- Immunosuppressed status  
- Hx Peritonitis  
- Pericarditis in SLE  
- Gout  
- Anemia

- PCP pared foot callouses (source of osteomyelitis)  
- Conference call with providers to adjust immune suppression drugs to reduce sepsis risk  
- Family conference with PCP about importance of not cancelling specialist visits or risk falling off transplant list  
- Development of an Action Plan with patient  
- Regular patient contact from the Care Coordinator

**A quote from the PCP:**

> “By getting the specialists together on a conference call we were able to reduce the patient’s risk of sepsis.”

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