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STANFORD SCHOOL OF MEDICINE
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Stanford Coordinated Care

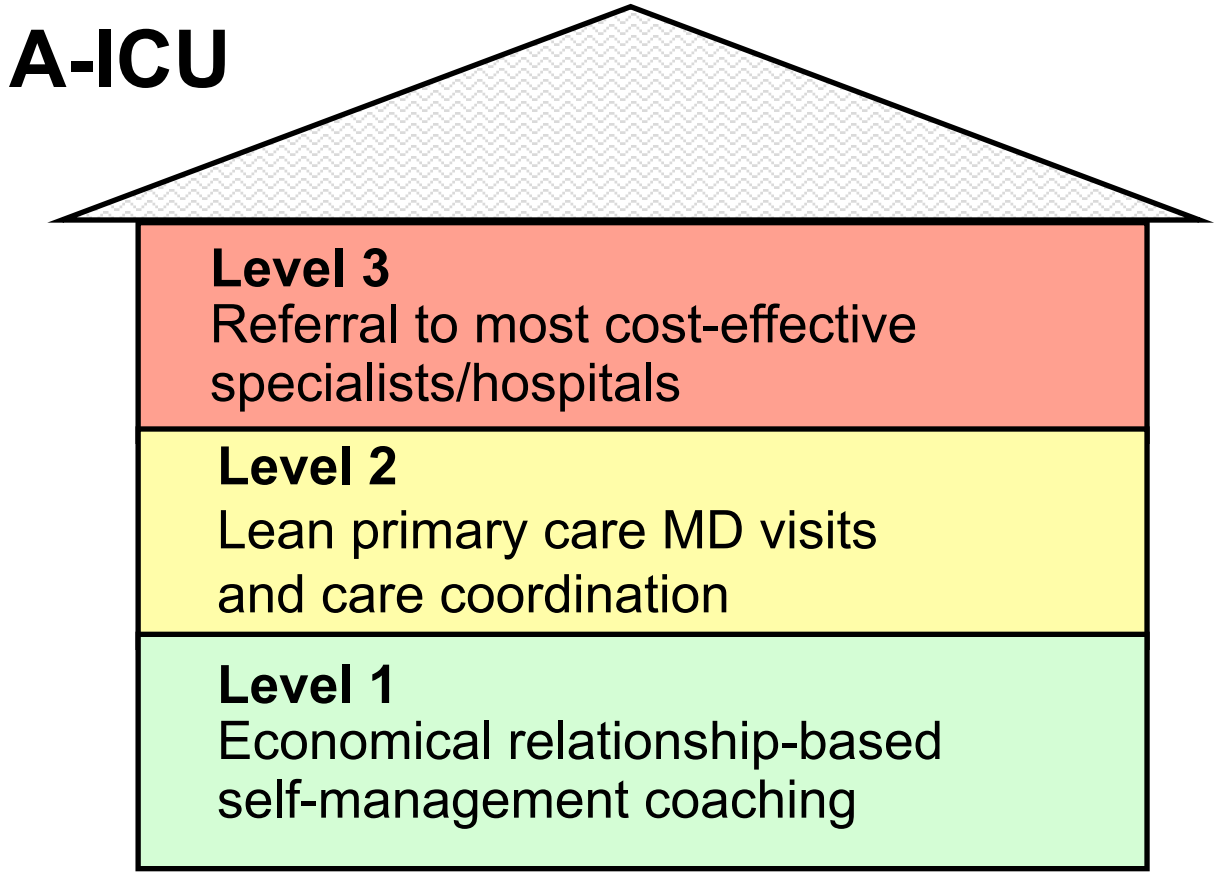
"Support the patients, manage their care"

Alan Glaseroff MD

P4P Summit 2014

Mini Summit VIII: Changing Payment and Changing Care for Medically Complex Patients

2005 Mission Impossible?
12 Months + 12 Brains + CHCF + RWJF



Milstein, Kothari; Health Affairs; Are Higher-Value Care Models Replicable?; Oct 2009
& Gawande; The New Yorker; The Hot Spotters; Jan 2011

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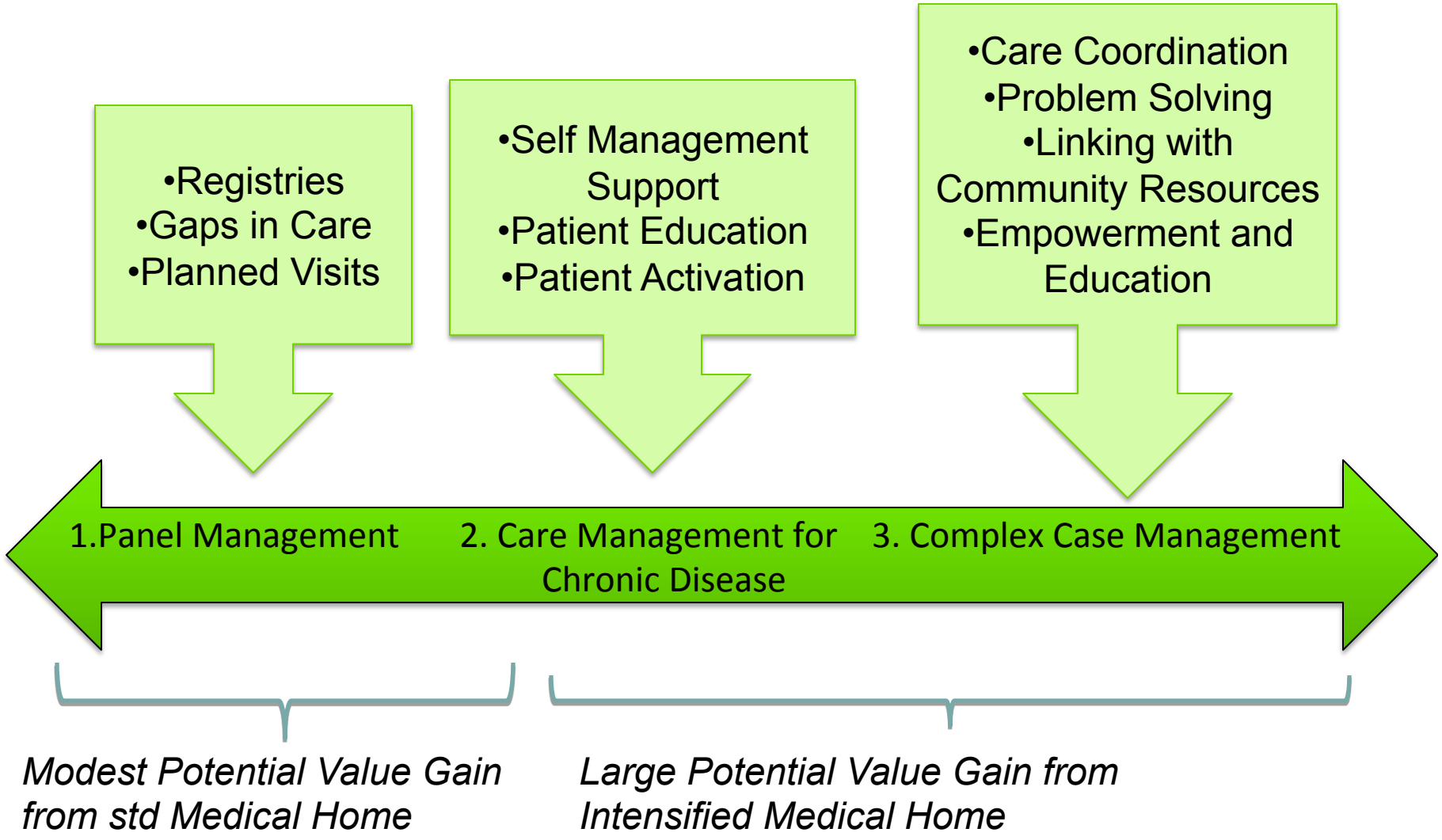
Where's the Leverage on Trend?



"Hot Spotting" in Employed Populations

- **Boeing & Atlantic City Resorts (A. Milstein, Kothari, Fernandopulle)**
  - AICU in 2 self-funded industries

    Capitation fee plus FFS for specialized MD-led teams within 3 MD groups and free-standing (Atlantic City)
  - 18%- 20% net reduction in per capita spending vs. propensity matched controls

- **Humboldt (A. Glaseroff)**
  - Partnered with PERS and PBGH (Anthem as ASO);
  - Disseminated rural county model within a distinguished IPA inserting RN care managers into 25 private practices
  - 16% savings estimated in first year

- **Stanford University (A. Glaseroff, A. Lindsay)**
  - Pilot for University & Hospital Employees + Dependents enrolled in self-insured plan.
  - Stanford Coordinated Care (SCC) – Primary Care Plus and Chronic Care Support
  - Capitated with shared savings arrangement

Better, Faster and Leaner: Boeing A-ICU Results After Year One

Change in Combined Total Per Capita Health Care Spending, Functional Health Status, Patient Experience, and Absenteeism	
	% Difference
% change from baseline in unit price-standardized total annual per capita spending by patients and Boeing, compared to a propensity-matched control group, net of supplemental fees to medical groups	–20%*
% change in SF12 physical functioning score for IOCP patients compared to baseline	+14.8%
% change in SF12 mental functioning score for IOCP patients compared to baseline	+16.1%
% change in patient-rated care "received as soon as needed" compared to baseline**	+17.6%
% change in average of patient-reported work days missed in last 6 months compared to baseline	–56.5%

* p = 0.11 after first 12 months for 276 chronically ill enrollees vs. 276 matched controls.
** From the Ambulatory Care Experience Survey – patients responding "always" or "almost always" to the question: "When you needed care for illness or injury, how often did the IOCP provide care as soon as you needed it?"

Findings: Humboldt Metrics (n=259)

Cost Metrics

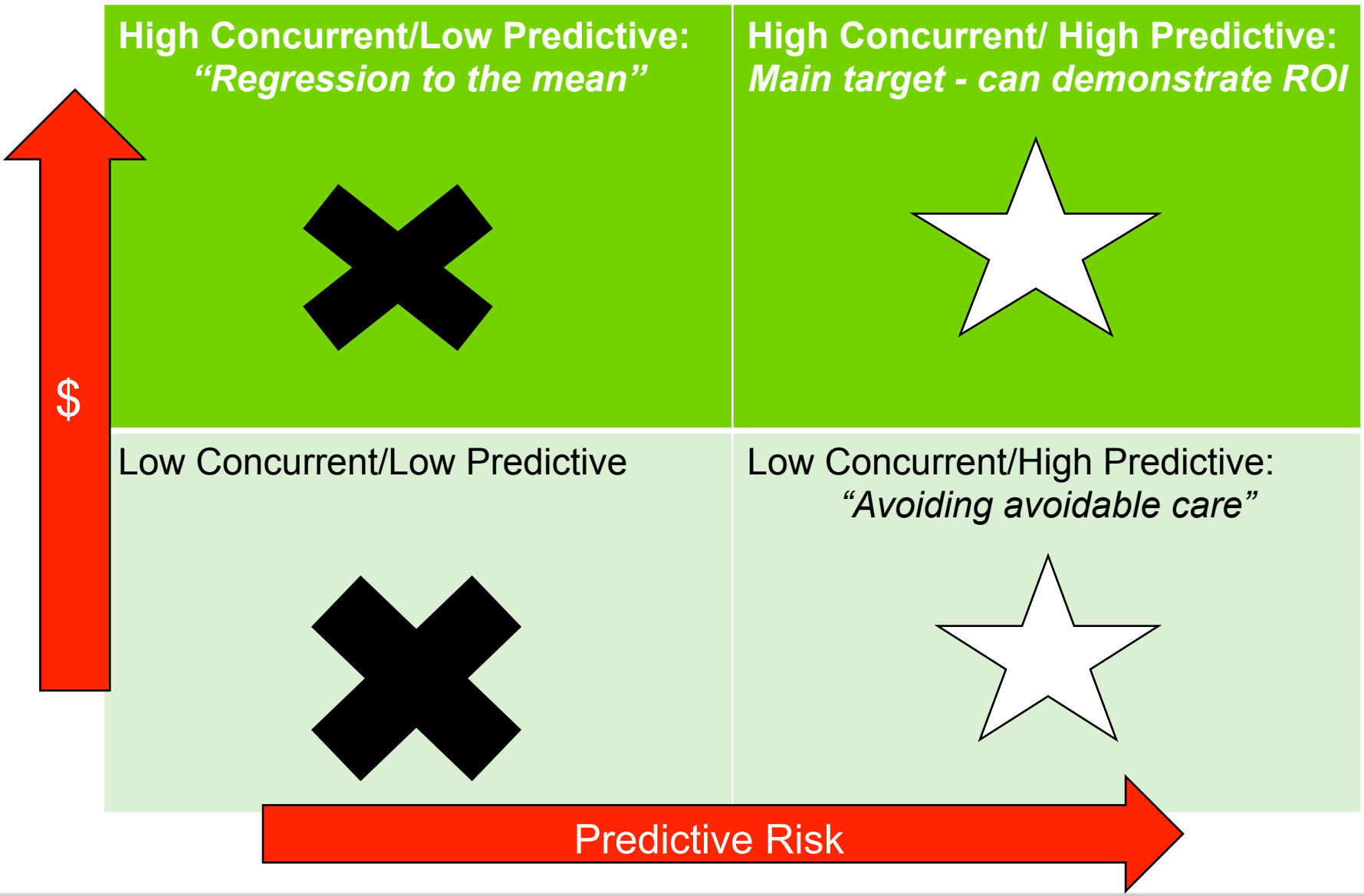
Total Allowed Amount	ER Surgeries & Visits Allowed Amount
% Change from Period 1 to Period 2	
-16%	-16%

Utilization Metrics

Inpatient Days	Inpatient Admissions	Outpatient Visits	Professional Visits	ER Visits
% Change from Period 1 to Period 2				
-63%	-51%	-17%	-11%	-25%

Awaiting comparing results to a matched control group

Risk: “4 square”



"Ambulatory Care Sensitive Conditions"

- **Defined by AHRQ (2001) as: "conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early prevention can prevent complications or more severe disease."**
  - Based on analysis of Healthcare Cost and Utilization Project (HCUP) data
    - Federal-State-Industry large data system partnership
    - Identifies 16 **"Prevention Quality Indicators" (PQI)**
  - Markers / Indicators of Quality of Primary Care
    - Need to be "important"
    - Reliably measureable
    - Show non random variation

Ambulatory Care Sensitive Conditions

AHRQ "Prevention Quality Indicators"

- Diabetes, short-term complications
- Diabetes, long-term complications
- Uncontrolled diabetes
- Lower extremity amputations among patients with diabetes
- Chronic obstructive pulmonary disease
- Adult asthma
- Pediatric asthma
- Hypertension
- Angina without procedure
- Congestive heart failure
- Bacterial pneumonia
- Urinary infections
- Low birth weight
- Pediatric gastroenteritis
- Dehydration
- Perforated appendicitis

Why Are ACSC Hospitalizations Important?

- "In 2006, **nearly 4.4 million hospital admissions, totaling $30.8 billion in hospital costs, could have been potentially preventable** with timely and effective ambulatory care or adequate patient self- management of the condition."
  - About one of every 10 dollars of total hospital expenditures
  - $8.4 B for CHF; $7.2 B for Bacterial Pneumonia

- This is probably an under estimate…

AHRQ Statistical Brief #72

- Poor experience of care – Sub Optimal Health – High Cost

- Shouldn't eliminating "preventable hospitalizations" be a core competence/ accountability of primary care ?

Medicare

How Many Admissions Are "(AHRQ) Ambulatory Sensitive?"

FIGURE 3: INCIDENCE OF ACSAS BY CONDITION

	ACSA PER 1,000	% OF CLASS
DIABETES SHORT-TERM COMPLICATION	0.3	0.5%
DIABETES UNCONTROLLED	0.3	0.5%
LOWER EXTREMITY AMPUTATION	0.7	1.3%
ANGINA	0.7	1.3%
HYPERTENSION	1.1	2.0%
ADULT ASTHMA	1.8	3.3%
DIABETES LONG-TERM COMPLICATION	2.4	4.3%
DEHYDRATION	4.0	7.1%
URINARY INFECTION	6.2	11.2%
COPD	6.6	11.9%
BACTERIAL PNEUMONIA	14.1	25.5%
CHF	17.6	31.8%
TOTAL ACSA	55.4	100.0%

Data sources: Milliman analysis of Medicare 5% sample data, 2006; AHRQ Prevention Quality Indicators, version 3.2.

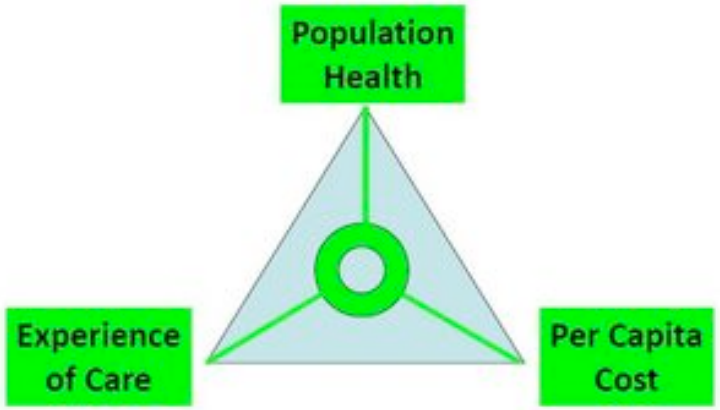
Does the Model Work?

- "Regression to the mean"
  - If you look at prior year cost alone, ***80% of high spenders will cost less in the following year without any intervention***
  - Some patients in high risk categories have ***uncommon conditions*** that are expensive and will continue to be (including cancer) but better symptom management and coordination of services can help
  - Patients with ***uncontrolled chronic conditions*** are likely to persist in the high risk/high cost category unless their conditions come under better control
- "Propensity Matched Control Group"
  - More revealing than year-over-year data but expensive to do

GOALS OF STANFORD COORDINATED CARE

Primary SCC Goals:

- Build the relationship to primary care *team*
- Enhance patients' self-management
- Transform the primary care/specialty care relationship to better serve the patient's goals: Access by tele-presence, email, phone
- Achieve "Triple Aim" results
  - Better health
  - Better care
  - Lower cost



Care Management Team Staffing Models

Intensivist	Distributed
Patients are referred into *specialized primary care* practice.	Patient remains with *current* (primary care) practice.
1 MD for every **400** patients	**n/a**
Dedicated Care Team: **3 team members for every MD (PCP)** • 2 Care Coordinators (Hired first; up to 250 patients enrolled) • 1 Care Coordinator - Specialized skills per patient panel needs. (e.g., NP, PA, RN, MA, MSW, LVN, Health coach) • IT & Project Management • Can form pods around 375-400 patients/specific PCPs, etc. **Care Team staff including MD/PCP are 'dedicated' and have no other duties assigned.**	**Dedicated Care Team:** **3 team members for 375 patients** • 2 RNs (Hired first; up to 250 patients enrolled) • 1 Care Coordinator - Specialized skills per patient panel needs. (e.g., NP, PA, MA, MSW, LVN, Health coach) • IT & Project Management • Can form pods around 375 patients **Care Team staff are 'dedicated' and have no other duties assigned.**

SCC Program Overview – "hybrid"

Primary Care Plus+ Description:

Target Population: Top 10% risk category

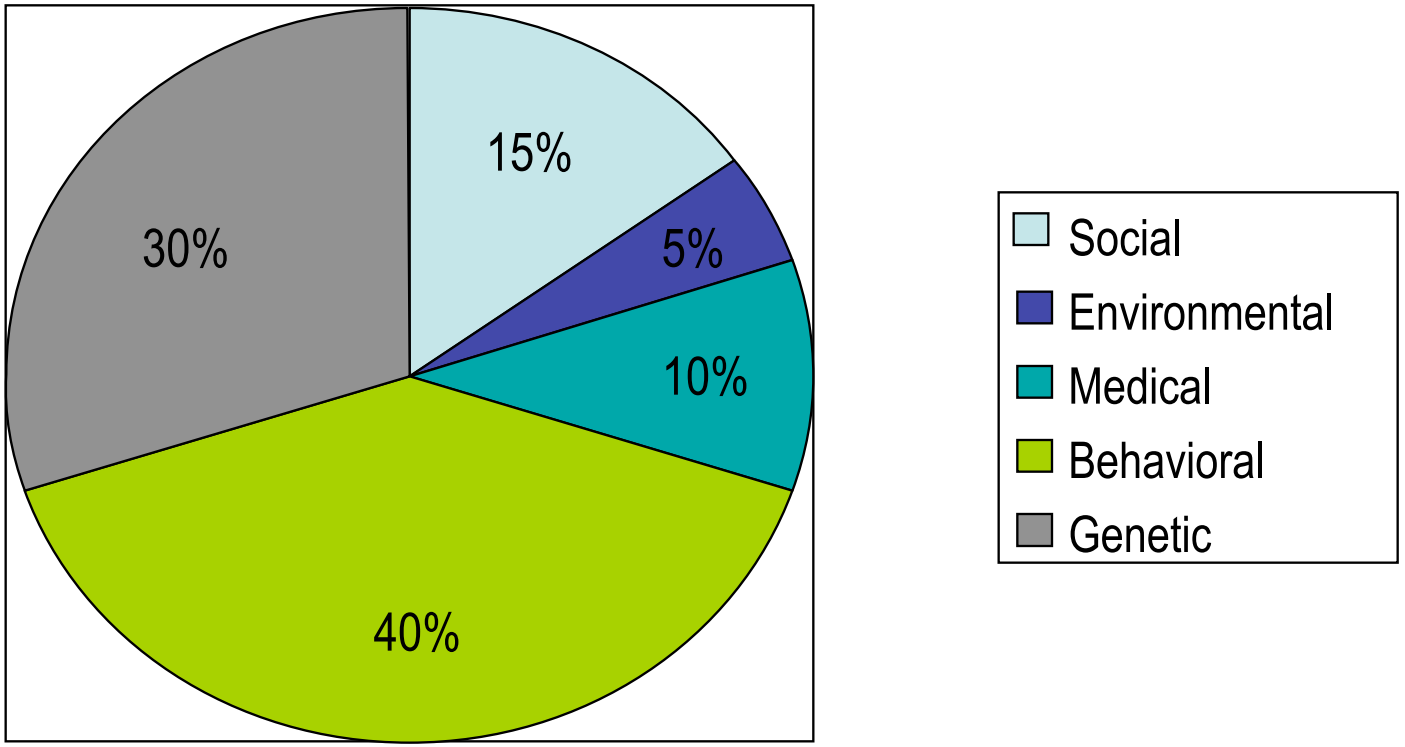
Primary Care Plus is a service provided by Stanford Coordinated Care, to those who wish to access the primary care services to the caring hands of an SCC physician. Those enrolled in Primary Care Plus are welcomed by a care team which includes a physician, nurse, care coordinator, physical therapist, pharmacist, and clinical social worker.

Chronic Care Support Description:

Target Population: Top 10-20% risk category

Chronic Care Support is a secondary service provided by Stanford Coordinated Care to those established within a medical home and would like to have the help and coordination from an SCC nurse who works closely with the PCP to offer enhanced support. A care coordinator is also designated to each individual to provide support of health care complexities regarding chronic conditions and visits to specialists.

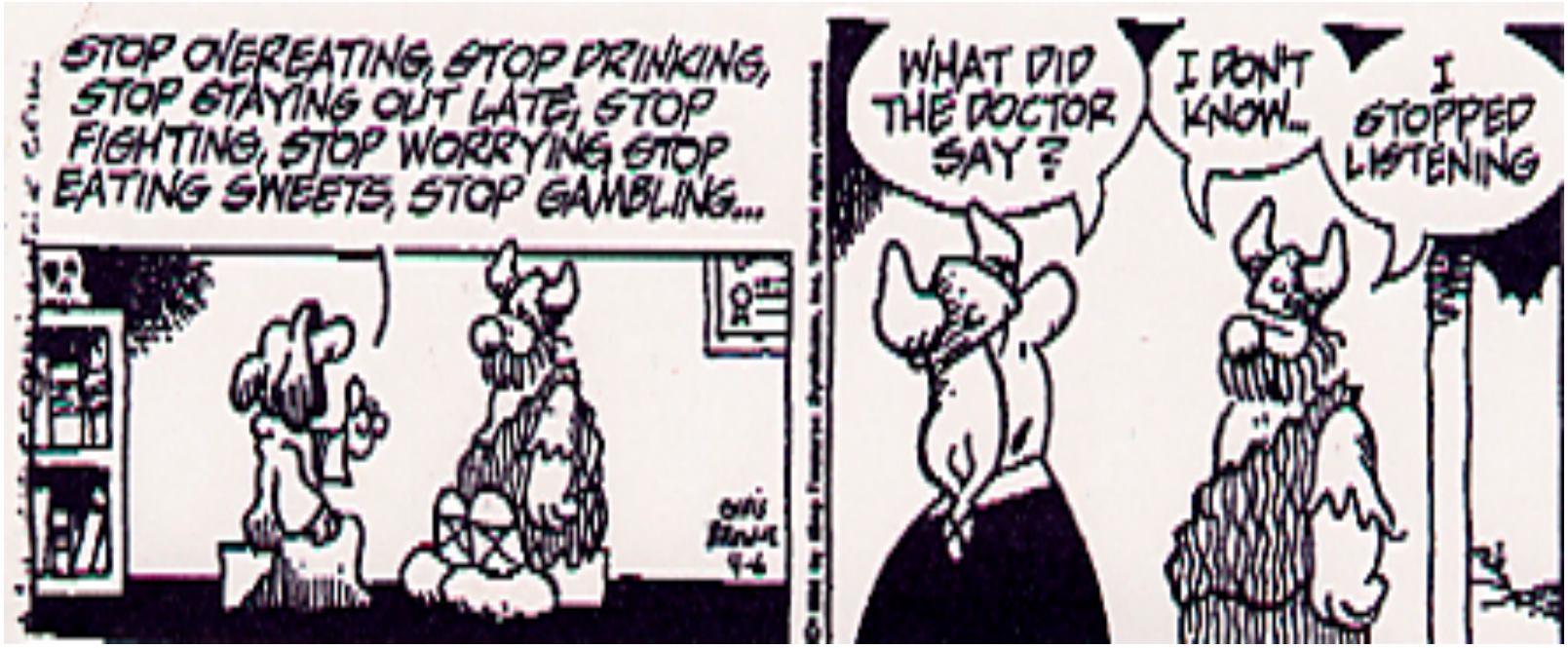
Determinants of Premature Mortality



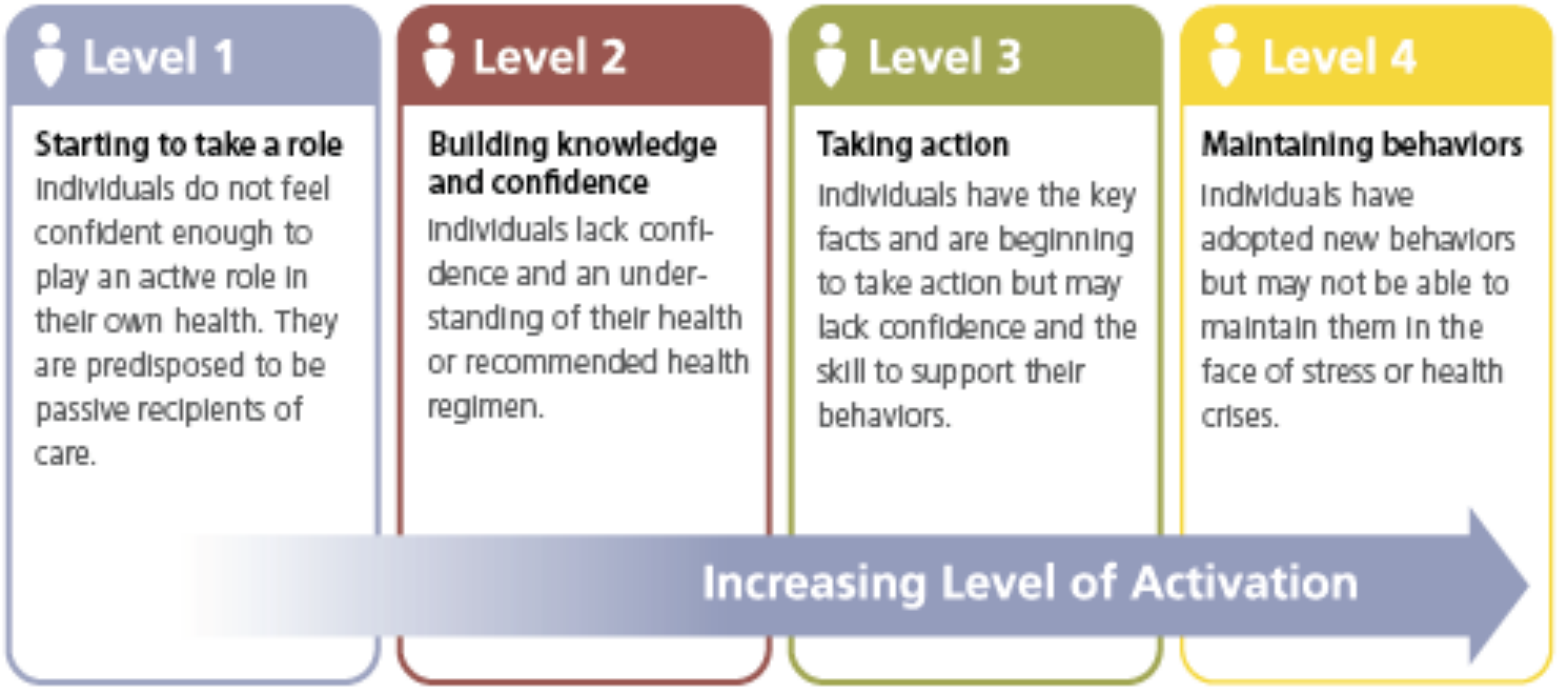
Schroeder, NEJM 357; 12

Care Model

"Why wouldn't a person with a chronic condition do everything in their power to live long and feel well?"



What the Patient Brings: Activation Level



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

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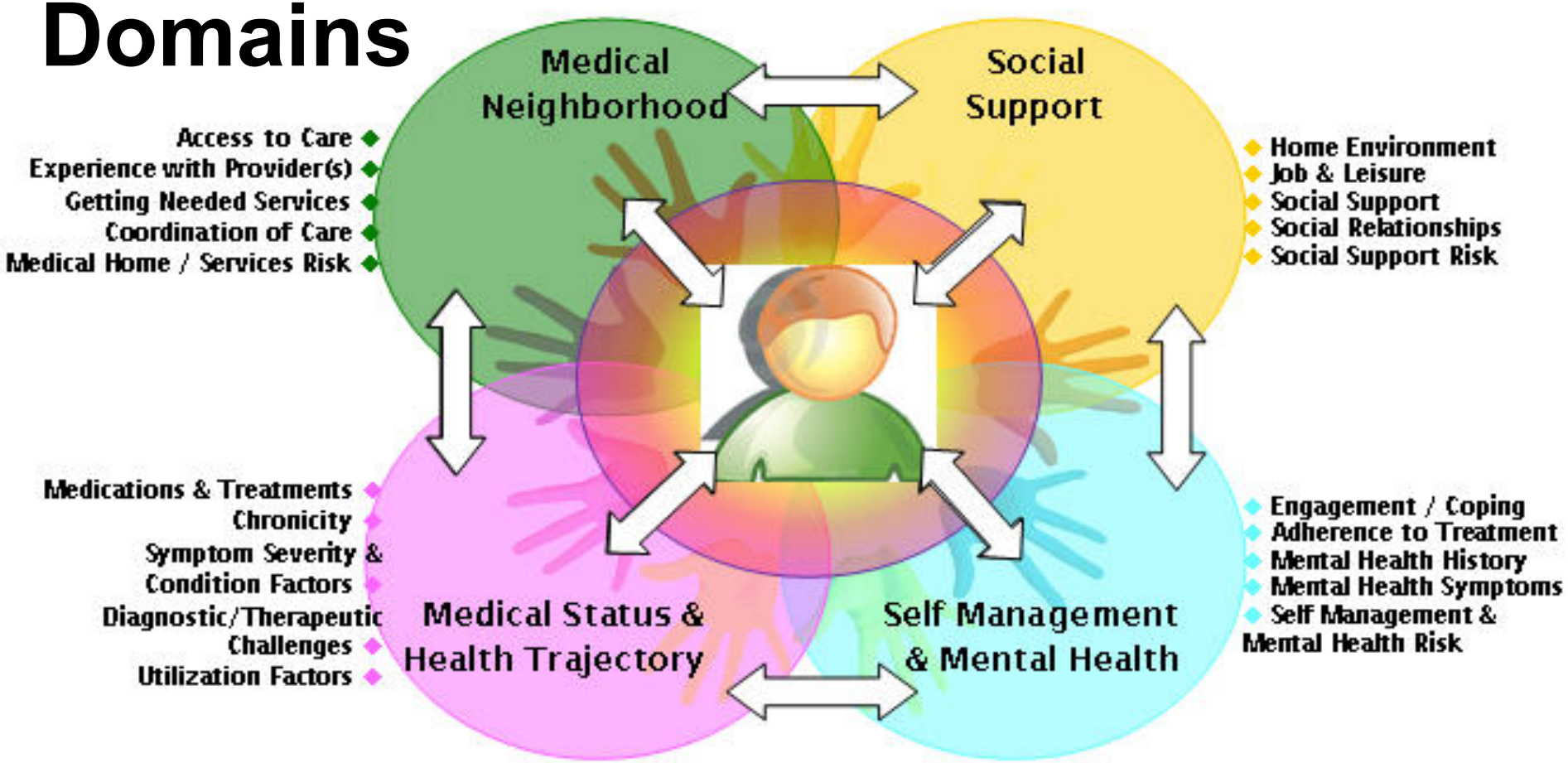
Patient Variation – what the patient faces

Domains



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

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.***"

Simon, Gregory E. "Treating Depression in Patients With Chronic Disease". Western Journal of Medicine 2001:175:292-293

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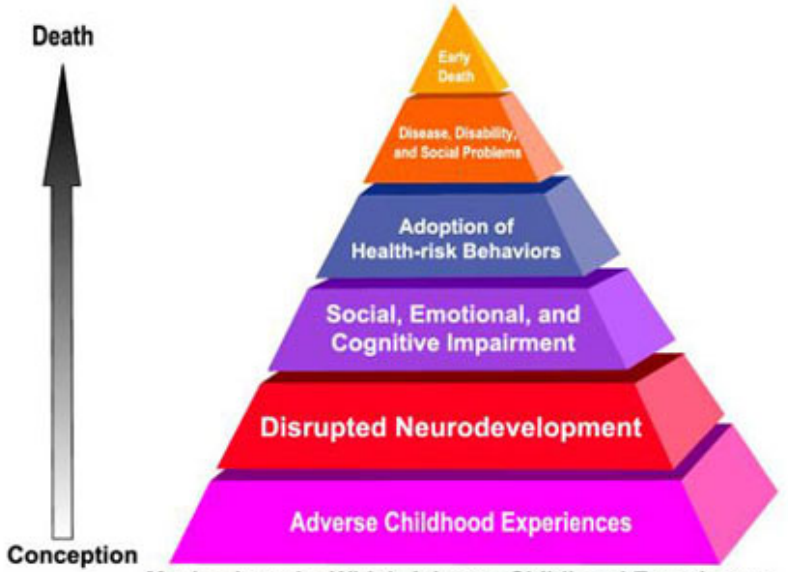
The Often *Hidden* Driver: Adverse Childhood Events

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



Mechanisms by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

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 Approach

- From:

  “What bothers you the most?

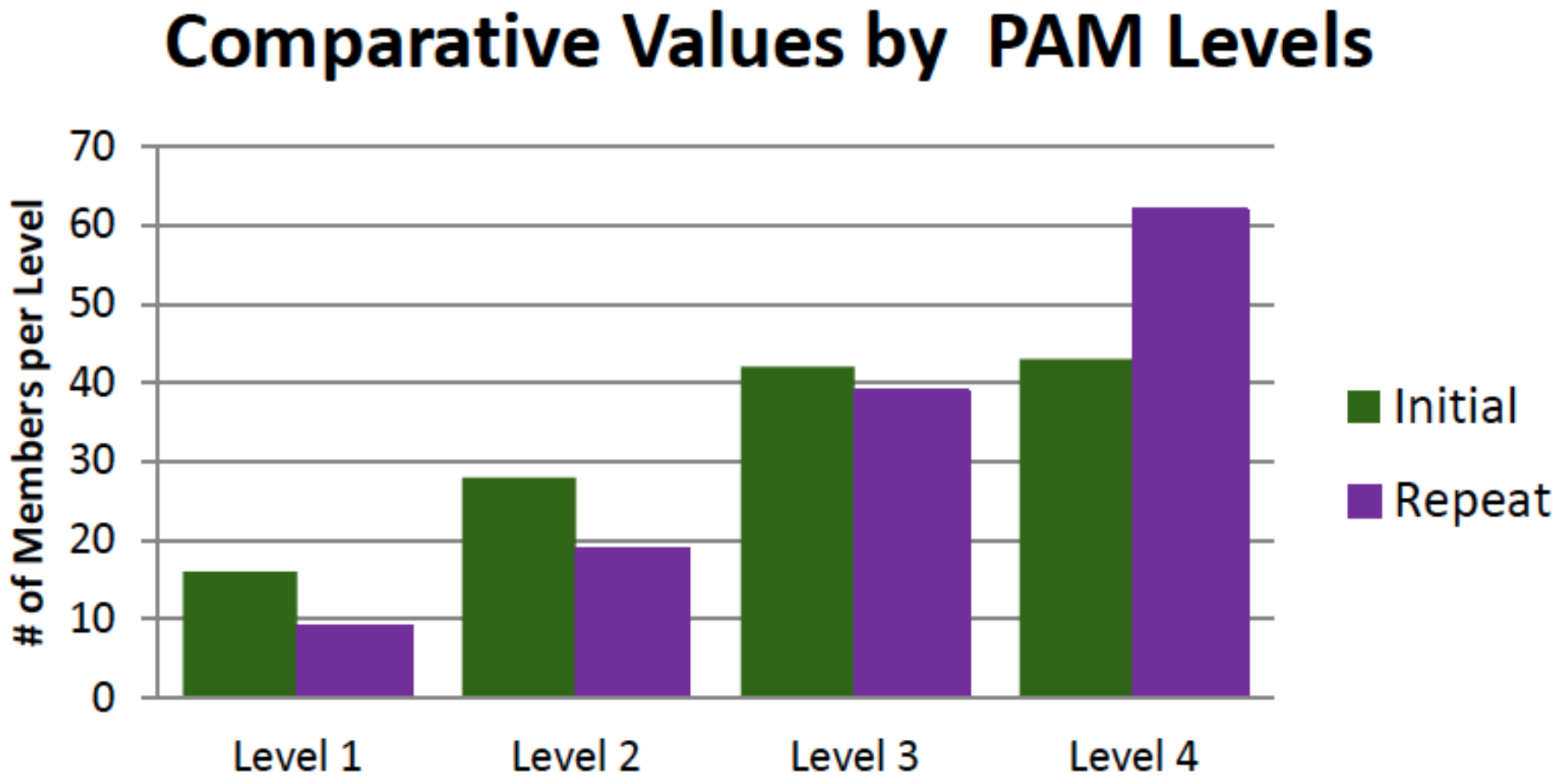
- To:

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

3 Step Method

- Engage the patient
  - Their goals, not ours
- Determine importance
  - Why isn't it lower?
  - What would it take to make it higher?
- Action planning
  - What are you going to do tomorrow?
  - How confident are you that you can succeed with your plan?
  - What would increase your confidence?

Humboldt Priority Care PAM Results



How was this achieved?

Illustrative Intervention from Humboldt's AICU

"The nurses are there to help you problem solve, give you things to try… The ER just gives you a pain pill and tells you to call your doctor on Monday."	**Before** enrolling in Priority Care 02/2010 – 06/02/2011 6 ER visits 1 Urgent inpatient admission 1 Planned outpatient surgery 1 PCP and 5 Specialists Depression Screening PHQ9: 20 $41,639.00 in billed charges $2947.00/month	**After** enrolling in Priority Care 06/02/2011 – 10/04/11 No (0) ER visits No (0) inpatient stays or surgeries 1 PCP and 2 Specialists Depression Screening PHQ9: 12 $2560.00 in billed charges $640.00/month
	Care Management Interventions	
Conditions: History of cancer Chronic pain Back Abdominal Rectal Urinary problems Anxiety Depression Hypothyroid Weight loss Anemia Frequent falls OSA	♣Assessment of Four Domains ○Medical Neighborhood ○Social Support ○Self Management & Mental Health ○Medical Status & Health Trajectory ♣Home Visit ♣Shared visit with PCP ♣Coordination of care with providers ♣Mental health provider referral ♣Development of a client centered Action Plan ♣Regular patient contact from the RN Care Manager	A quote from the PCP: *"My patient feels that his nurse case manager has been very helpful"*

Thank You!

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