

Parkview Health's Population Health Journey

Susan McAlister DNP, RN

Director Enterprise Care Management

Christine Howell BSN, RN

Community Based Registered Nurse

Objectives:

- By the completion of the webinar the listener will be able to identify the work in development in Parkview Health's high risk chronic disease and community based care:
 - How to identify high risk populations
 - Describe the correlation between chronic disease and community based care
 - Evaluate care strategies
 - Describe measureable outcomes



PARKVIEW HEALTH



**Parkview Regional
Medical Center**

8 Hospitals	
821 Beds	
Annual Revenues:	\$ 1 billion
Inpatient Discharges:	35,266
Outpatient Registrations:	362,352
Service Area Population:	890,000
Co-workers:	8,000
Medical Staff:	870



Parkview Noble



Parkview Hospital



Parkview Ortho Hospital



Parkview LaGrange



Parkview Whitley



Parkview Huntington



Parkview Behavioral Health

THE Rescue Mission™

CHANGING LIVES FOR GOOD™ AMY

GET HELP

I WANT TO HELP

OUR KEY MINISTRIES

“Real communities don't just live with each other, they love each other.”



Immediate Housing
Program for men
Community Meals
Program >



Short & Long term
residential programs for
women and children
experiencing a homeless
crisis >



Short & Long term
residential programs
for men experiencing a
homeless crisis >



Thrift store
Proceeds help to fund
The Rescue Mission
programs >



Return to **™ The Rescue Mission™**

Sustaining Life

Life House provides immediate relief from hunger and homelessness.

The Bible tells us whenever we feed the hungry, clothe the needy or help the poor, we've done it as unto the Lord. Life House lives out this biblical teaching every day. Here, transient men stay for the night or a few weeks, while the needy in our community find three free meals a day as well as clothing, hygiene products, referrals—or simply someone to listen.

BEDS

44+

IMMEDIATE HOUSING PROGRAM

Housing Program for men up to 30 days. Basic needs, case managers and ongoing spiritual support. Includes goal setting and referrals to other health and social service agencies. If The Rescue Mission determines a man needs more intensive services, he's invited to enroll in one of the programs of Restoration House if eligibility requirements are met.

COMMUNITY MEALS PROGRAM

- More than 216,000 meals served each year?.
- Breakfast, lunch and dinner open to Mission residents and the public 365 days a year.
- Special meals on Thanksgiving, Christmas and Easter. Free clothing and hygiene products as well as referrals to health and social service agencies.

[Outcomes/Stats >](#)

[Needs List >](#)

[Donate Online >](#)

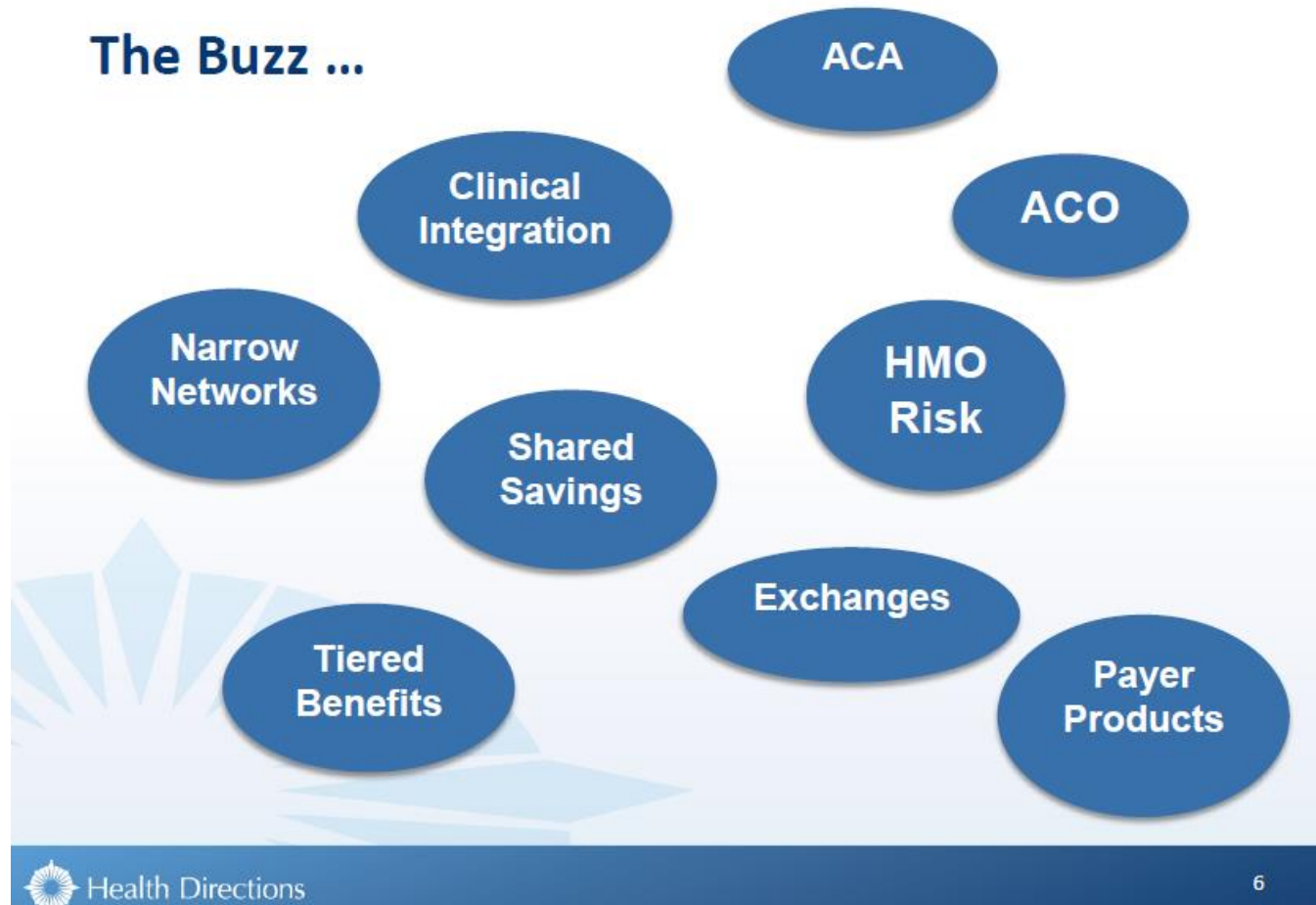
[Volunteer Opportunities >](#)

Rescue Mission Key Statistics 2014

- Provided over 212,034 meals -residents and community members in need
- Provided over 56,436 nights of lodging
- Served more than 326 men, women, and children in our life changing ministries.
- Saw 604 reports of spiritual experiences
- Provided services for 149 children
- Had 129 men and women gain employment
- Had 156 men and women experience some form of life change in our life changing ministries.

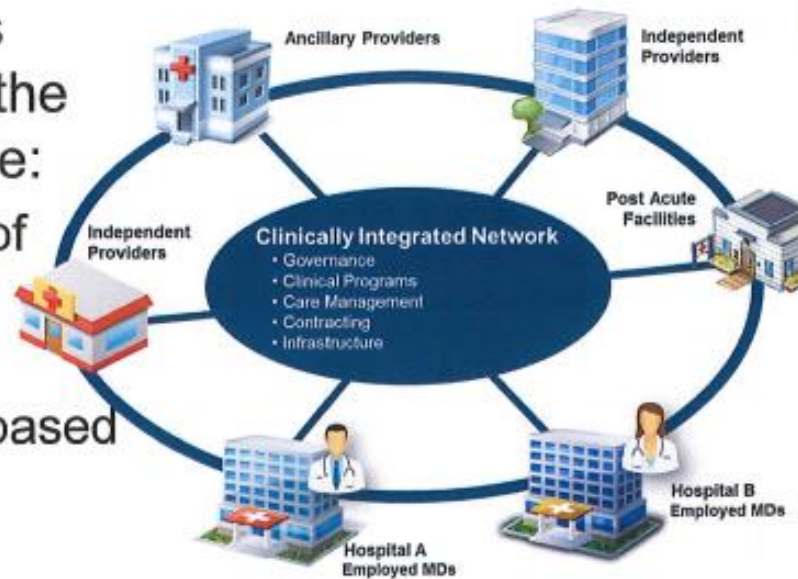
Population Health - Alphabet Soup

The Buzz ...



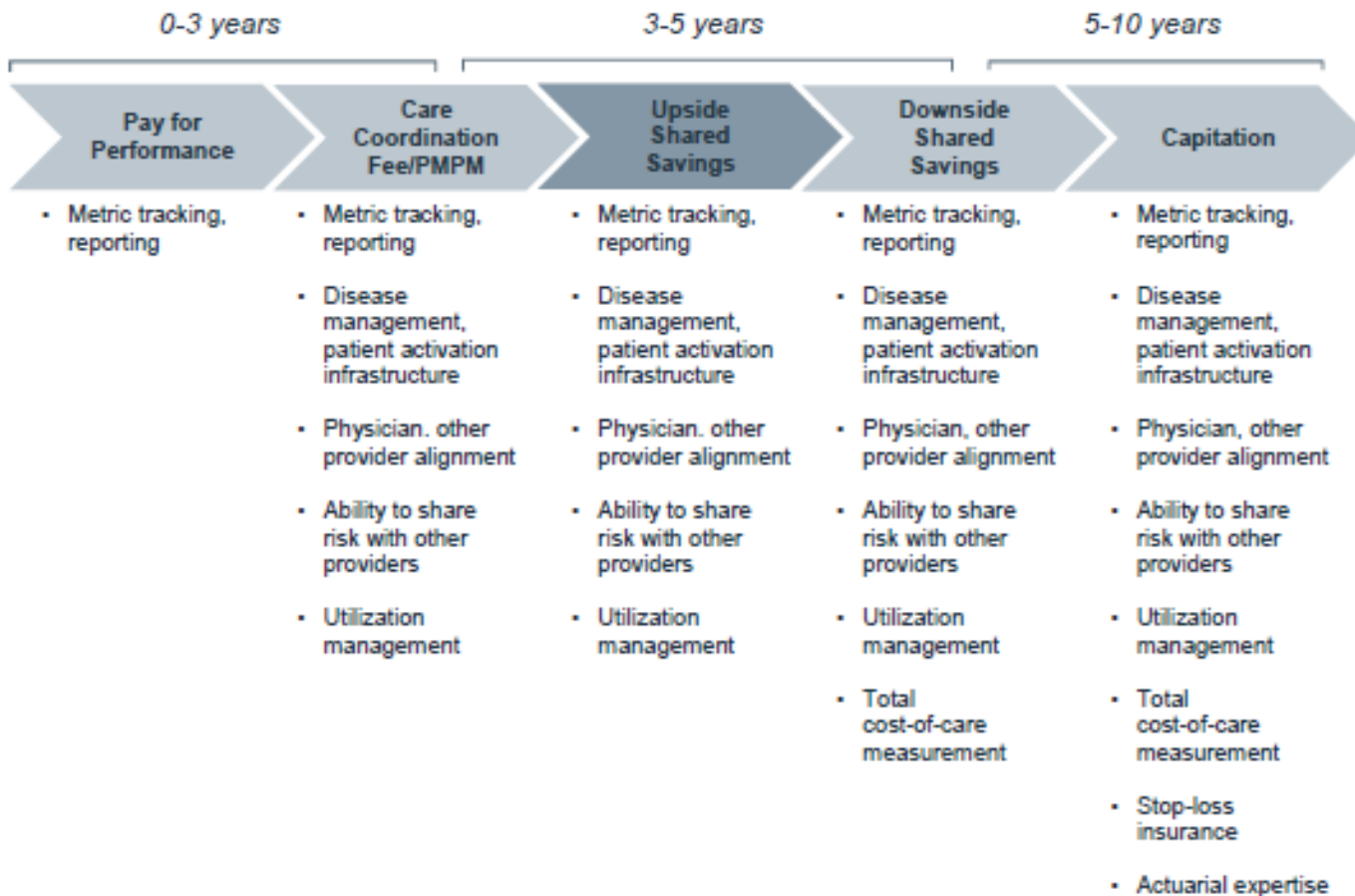
Overview Clinical Integration Networks

- Clinical integrations networks (“CIN”) are emerging across the country with goals that include:
 - ▶ Creating organized systems of clinically integrated care
 - ▶ Driving more members into organizations through value-based or narrow network contracts
 - ▶ Alignment strategy between hospitals and physicians
 - ▶ Managing patient leakage to influence quality and control costs
 - ▶ Creating contracts focused on reimbursement for quality (value-based care)



Progression of Risk Based Contracts

Progression of Risk-Based Contracts and Capabilities Required



Conflicting Healthcare Paradigms

- Continued pressure to bring down healthcare costs and reduce reimbursement (volume-based model)
- Shift to accountable care and value-based reimbursement tied to performance of services



2012 Mean Annual Expenditures per Individual by Percentage Group

Individual Spender Tier	Spending per Person	Percent of Total Spending
Top 1%	\$97,859	21.8%
Top 5%	\$43,038	49.5%
Top 10%	\$28,452	65.2%
Top 30 %	\$12,954	89.6%

Proactively Identifying the High Cost Population

Insights from the Health Care Transformation Task Force
July 2015

Age Distribution of Persistent High Spenders

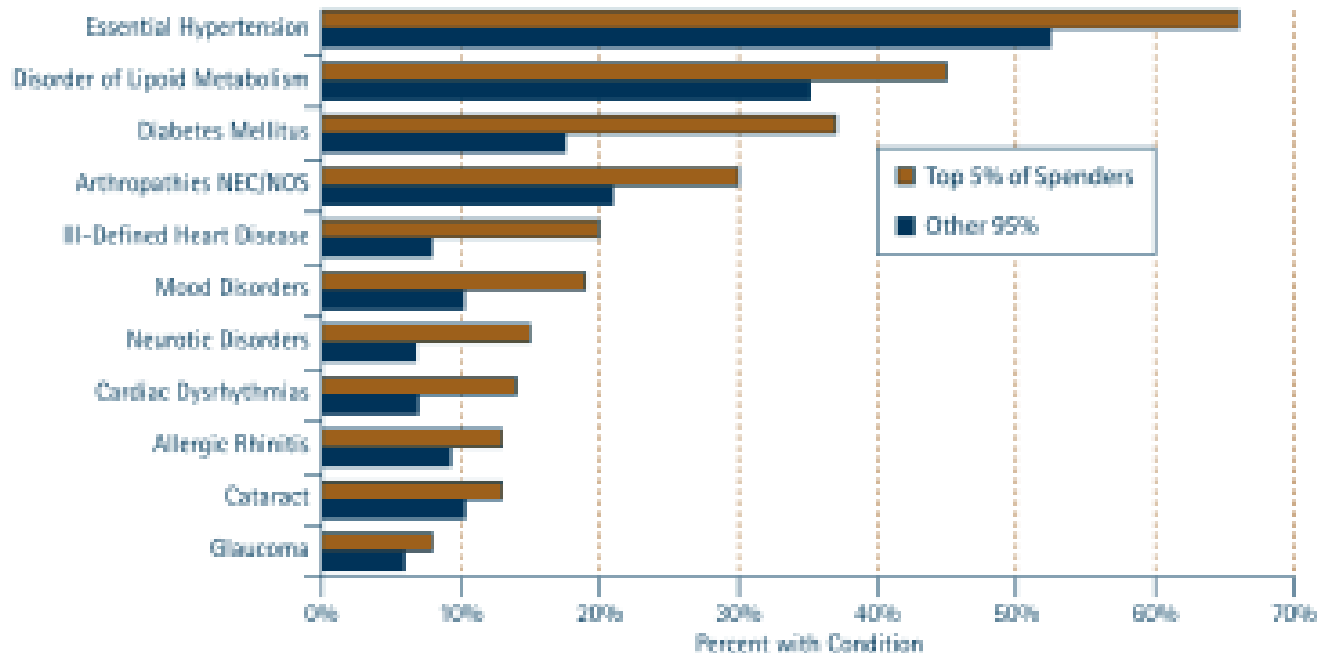
Age range (in years)	Percent or Persistent High Spender Population
65+	42.9%
45-64	40.1%
30-44	10.6 %
18-29	3.1%
0-17	3.4%

Proactively Identifying the High Cost Population
Insights from the Health Care Transformation Task Force
July 2015

Clinical profiles of Persistent High Spenders

Chart 1. Clinical profiles of Persistent High Spenders: Prevalence of Clinical Conditions

FIGURE 6. COMMON CONDITIONS AMONG ELDERLY HIGH SPENDERS, 2006



NIHOM Foundation analysis of data in The Lewin Group, "Individuals Living in the Community with Chronic Conditions and Functional Limitations: Closer Look," Jan. 2011. Featured conditions are among the most prevalent for both high and non-high spenders.

Medically Complex

- Psycho-social barriers
- Medicaid - 60% of patients in the top 10% spender tier remain in that tier the following year
- Medicare one third in top 10% spender tier and 40 % of patients in the top 5 % spender tier have persistently high costs over two years

Episodic High Spending

- 37% of patients in top 10% spender tier become “reverters” drop out of spender tier
- Not good candidates for long-term chronic care management

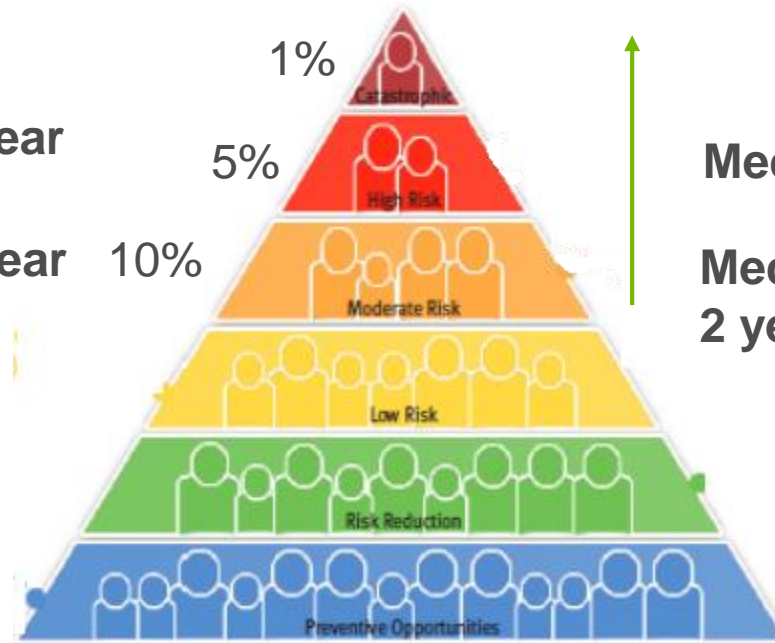
End of Life

- 28% of Medicare spending, \$170 billion, occurs in last six months of life.
- 11% of patient in top 5% spender tier die within 1 year
- 28% of patient in top 10% spender tier died within two years

Medicare/Medicaid Population

11% die in 1 year

28% die in 2 year



Medicare 5% - 2 years

Medicaid 60% Medicare 33%
2 years

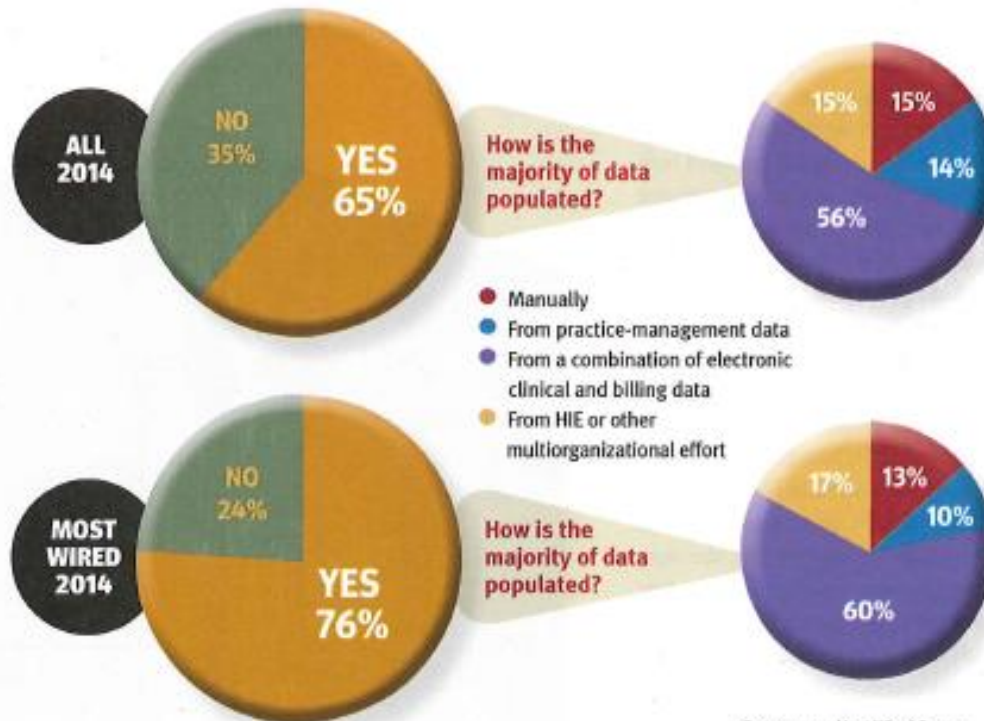
Clinical Disease Registry is Key to Connection

- Clinical Disease Registry (CDR) supports Clinical Integration goals of connecting care, tracking clinical outcomes and comparing against evidence-based protocols

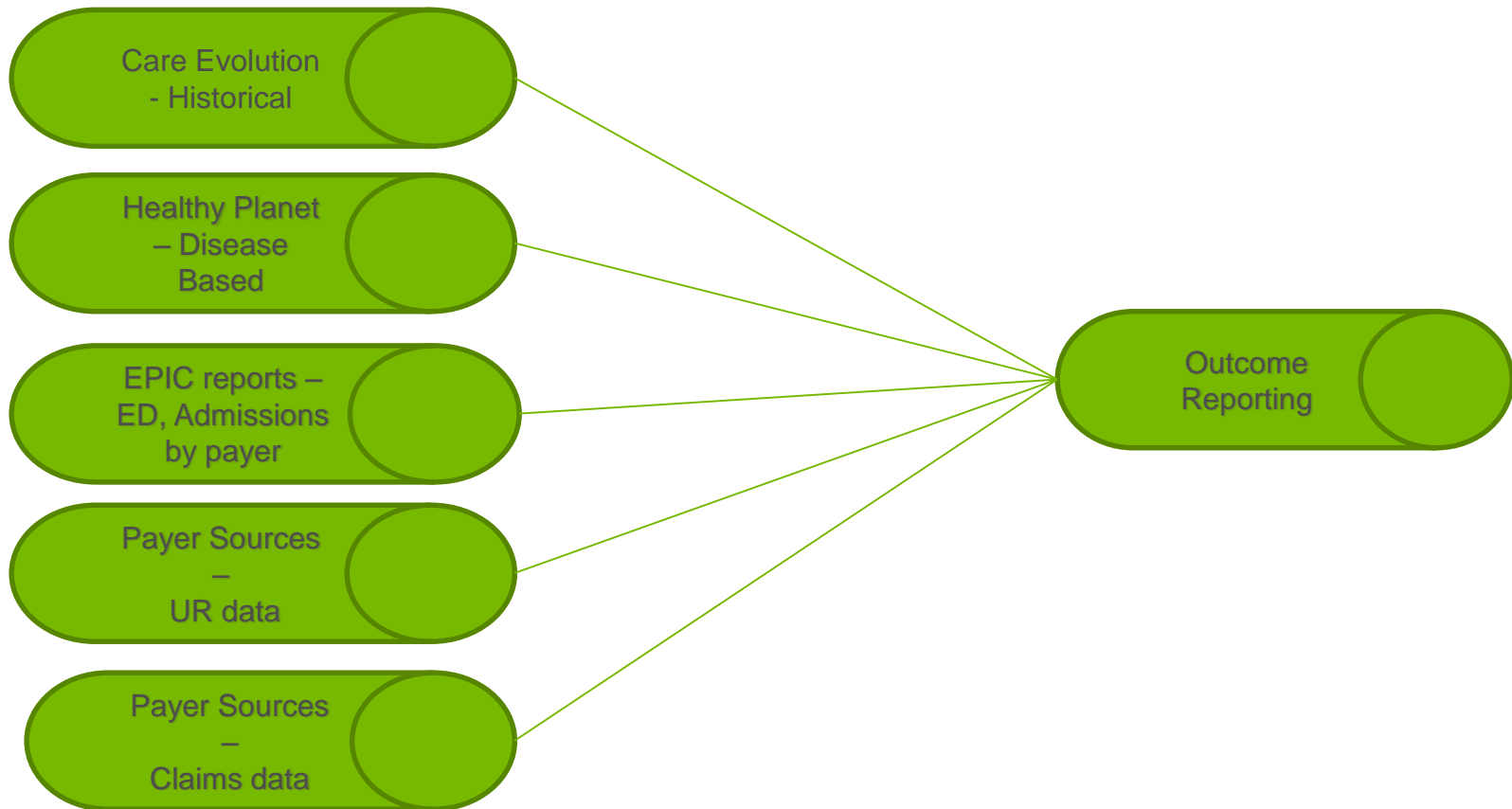


Disease Registries in 2014

Do you use a disease registry to manage gaps in care across a population?



Data Sources for Risk Stratification



Rescue Mission at Risk Population

- Short Term program – work related
 - 2 weeks – multiple months
 - Stay longer than 2 weeks meet with nursing
- Long Term program – do not work
 - Connections program
 - See nursing immediately
- Parkview ED case management referrals
- Personnel referrals
- Care Advisor referrals



Living Environments



Care Advisor/Care Navigator

Scope of Service

PPG/Population Health Care Advisor will:

- ❖ Identify appropriate patients for services with PPG office staff and physicians
- ❖ Contact patient to assess understanding of health status and develop plan of care
 - Establish goals and interventions to achieve positive outcomes
- ❖ Coach on disease management needs
- ❖ Monitor adherence to prescribed medication
- ❖ Assist patient with navigating the health care system
- ❖ Conduct home visits to assess environment and social support/needs
- ❖ Accompany patient on office visits with patient to encourage compliance with plan of care
- ❖ Manage Referrals: medication assistance, dieticians, pharmacists, social work and other community resources
- ❖ Provide network steerage
- ❖ Facilitate follow-up appointments with provider
- ❖ Provide resources to assist the patient to reach his/her optimal state of health
- ❖ Encourage patient to have accountability for health care
- ❖ Encourage completion of routine health maintenance and disease specific care guidelines

Quarterly provider feedback to referring physician will be scheduled

Emergency Department Visits and Observation Care Advisor Services

- Observation Status discharges:
 - EPIC review to determine “severity” of the observation stay
 - Potential need to follow up
 - FU phone call
- Emergency Department Visits
 - Potentially avoidable admissions:
 - Call to see if ED issue has been resolved
 - Determine if an intervention is needed
 - Patients may need PCP follow up visit
 - Schedule appointment via the PPG Contact Center
 - Patients with frequent ED utilization
 - Review EPIC for a current “FYI” care plan
 - Contact patient to determine ED cycle triggers
 - Transfer care to Ambulatory Care Advisor if intervention is needed
 - Appropriate use of ED
 - Inquisitive interview of ED usage
 - Offer *Walk In* clinic option
 - PCP intervention – schedule appointment via Patient Contact Center
 - No “active” PCP provider
 - Schedule new patient appointment via Patient Contact Center

Key Components of Population Health Management

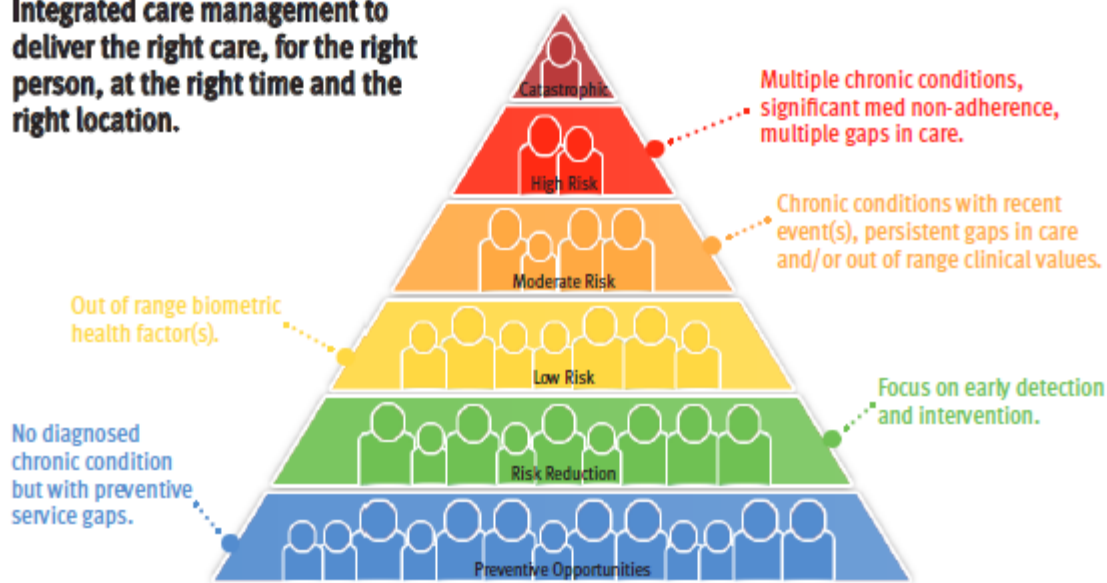
Key Elements of Population Health Management



Parkview Care Advisors

PARKVIEW CARE PARTNERS' APPROACH TO RISK CLASSIFICATION

Integrated care management to deliver the right care, for the right person, at the right time and the right location.



Parkview's care advisors work with patients in the "High Risk" category.

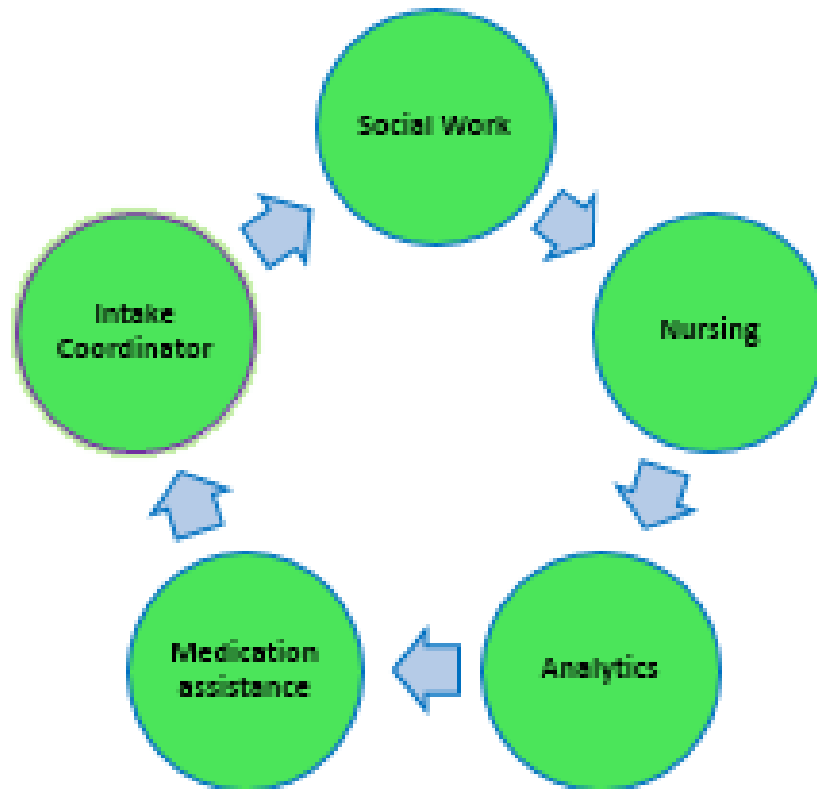
Catastrophic: 1%

High Risk: 5 - 10%
Complex diseases,
comorbidities

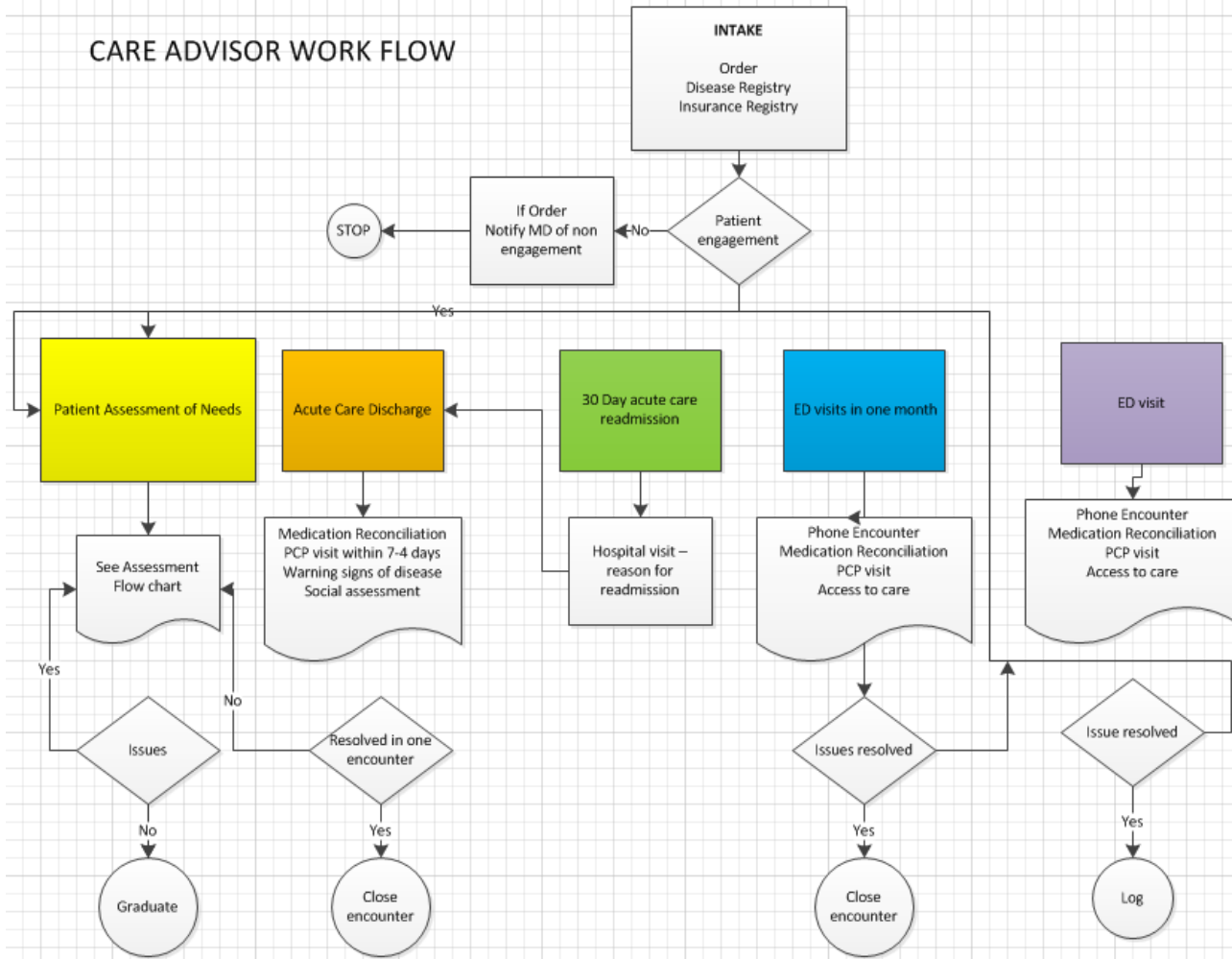
Rising Risk: 15 - 35%
Conditions not under
control

Low Risk: 60 - 80%
Minor conditions
Easily managed

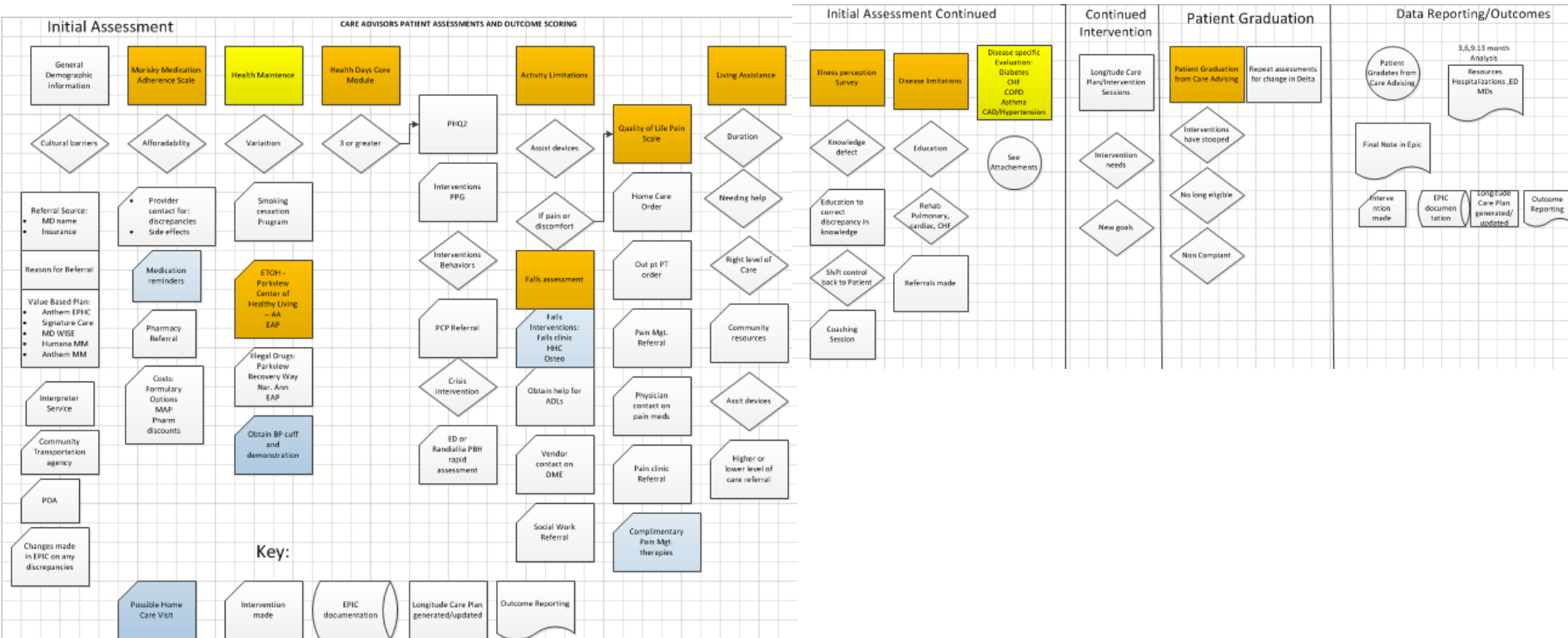
Care Advisor Team



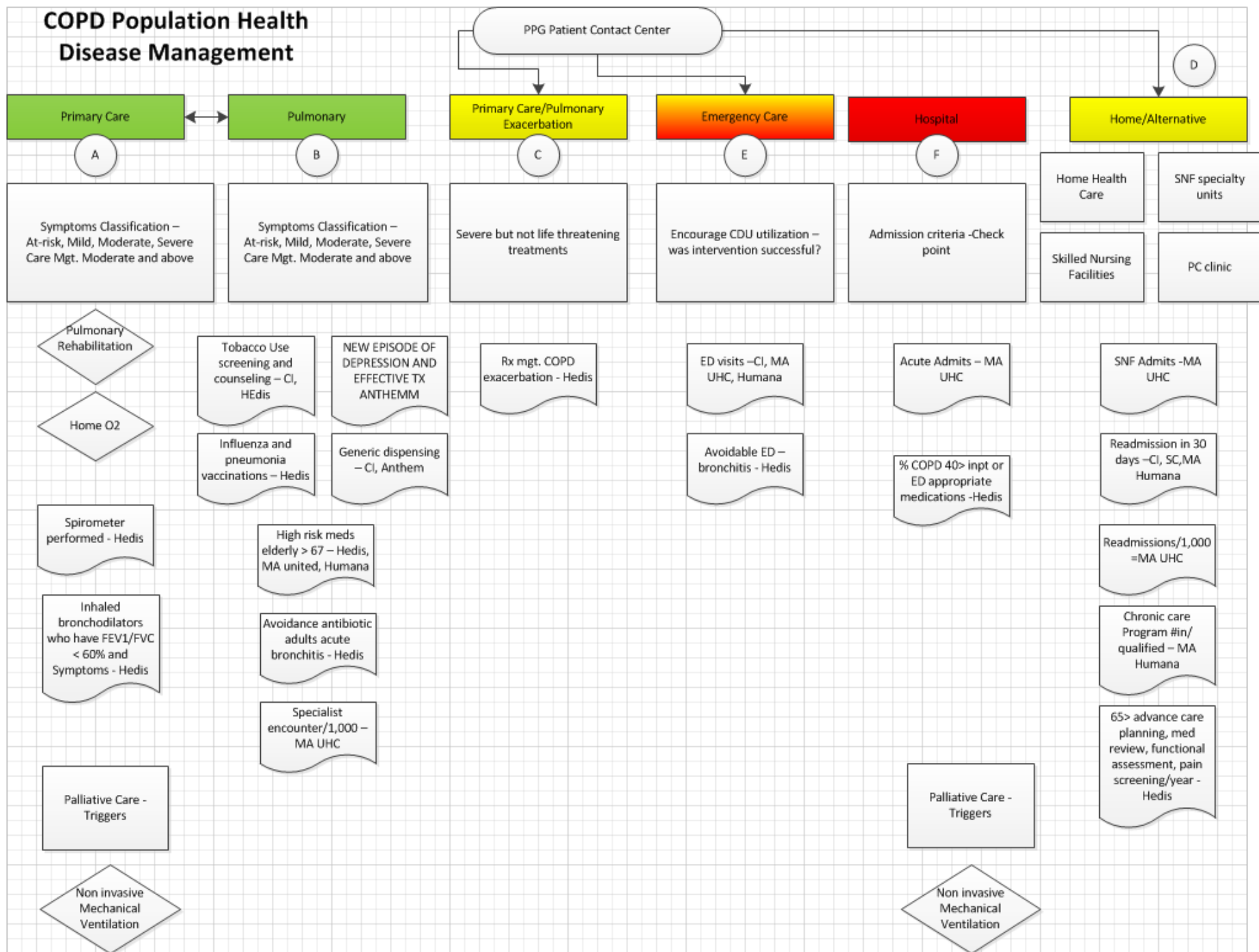
Care Advisor Workflow



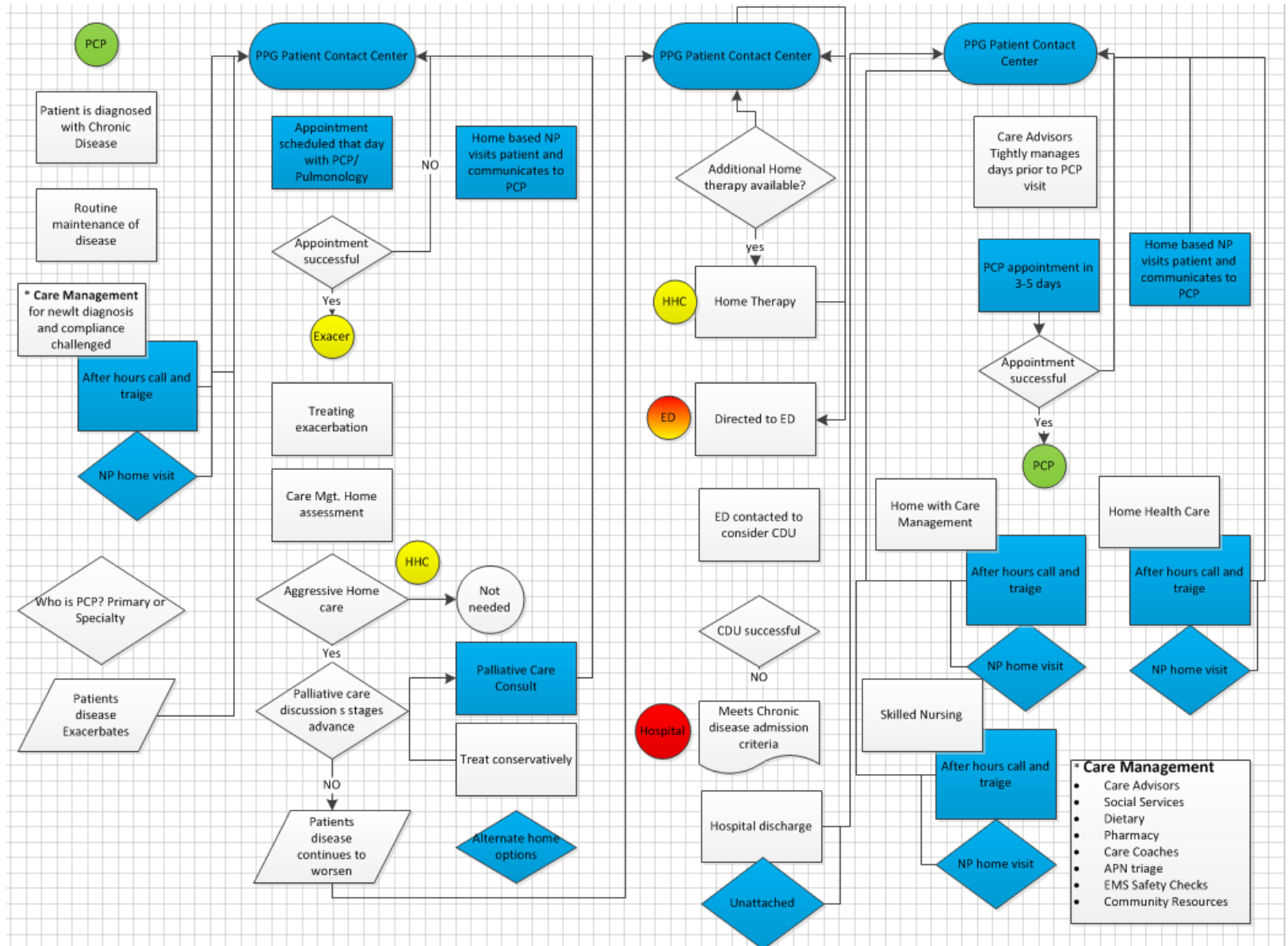
Care Management Assessment and Intervention Flow



CPD Population Health Disease Management



Patient Access and Navigation



Care Advisor Story of Care

Measure	Beginning of Engagement	As of 4-1-15
Weight	218	181
Total Cholesterol	203	159
Triglycerides	328	193
A1C	8.1	7.0
FBS	200s	130s
Humalog	15u	None
Lantus	45u	10u
Exercise	Irregular	6 days week – cardio and weights

Plan of care developed with patient to achieve the above goals.
Coaching continued with patient.

Care Advisor Story of Care

- 70 year old female
- Heart disease
- Lives with 88 year old mother
- Last few months 7 hospital admissions and CDU stays
- Skilled nursing stays
- Depression and frustration – living with mother
- Interventions in Care Advisor:
 - Depression assessment and coping mechanisms
 - Took patient to assess “Room and board assistance program”
 - Assisted Living placement
 - Behavioral Health evaluation

Healthy Planet Care Plan

SnapShot

Lab Reports | Thumbnails | Filters | Text Search | Preview | Refresh | Select All | Deselect All | Reveal Selected | Side-by-Side | Master Report | Lab Flowsheet | Flowsheet

Snapshot | Encounters | Labs | Imaging | Procedures | Other Orders | Meds | Episodes | Letters | Notes | Referrals | Media | Misc Reports

← Longitudinal Plan of Care | Snapshot | Recurring Report | Specialty Summary

Report: Longitudinal Plan of Care

Patient Care Coordination Note

Jane Younge, RN 1/10/2012 3:58 PM

83 yo male with multiple medical issues including congestive heart failure, hypertension and well controlled diabetes. Intermittent problems with medication adherence. Followed by case management.

Recent Encounters with My Specialty

Visit Date	Provider	Primary Dx
10/08/2013	Younge, Jane, RN	CHF (congestive heart failure)
01/11/2012	Younge, Jane, RN	
01/04/2012	Younge, Jane, RN	Gastroesophageal reflux disease
11/24/2011	Younge, Jane, RN	
10/24/2011	Younge, Jane, RN	
09/16/2011	Cubanile Pat, MD	Congestive heart failure
08/16/2011	Younge, Jane, RN	Lower back pain
05/19/2011	Younge, Jane, RN	
05/21/2011	Younge, Jane, RN	
05/21/2011	Cubanile Pat, MD	Congestive heart failure

Recent Admissions and ED Visits

Date	Complaint
8/10/08	Cough, Fever, Fatigue, Shortness of Breath

Diagnosis Description: Pneumonia, organism unspecified

Problem List

Date Reviewed: 7/17/2011

Essential hypertension

Overview

Diagnosed age 54. Initially treated with sodium restriction, diet, exercise. Diuretics started ~1988, taken sporadically since that time. Patient admits to poor compliance with med regimen. No history to suggest end organ damage or coronary artery disease. Cardiovascular risk factors include 20 pk yr hx of smoking and hypercholesterolemia.

Congestive heart failure

Sleeplessness

Diabetes mellitus

Lower back pain

Hypothyroidism

Pure hypercholesterolemia

GERD (gastroesophageal reflux disease)

Overview

GERD symptoms well controlled with intermittent use of H2 blockers.

Current Medications

Medication

albuterol ipratropium (COMBIVENT) 18-103 MCG/ACT inhaler
Inhale 2 puffs into the lungs 4 (four) times daily as needed for Wheezing.

lisinopril (PRINIVIL ZE STRIL) 10 MG tablet
Take 1 tablet (10 mg tablet) by mouth daily.

Goals

Blood Pressure

Blood Pressure < 130/80

8/16/11: 120/80
7/17/11: 150/90
4/2/11: 120/80
11/8/10: 149/95
11/10/09: 135/85
9/19/09: 138/88
7/21/09: 136/88

Exercise

Exercise 3x per week (30 min per time)

Result Component

HEMOGLOBIN A1C < 7.0

4/2/11: 4.0

If Something Goes Wrong

Contingency

Manage CHF Symptoms

Note created 10/3/2013 12:54 PM by Nurse Care Manager, RN



Manage Your CHF Symptoms

If you have any of the following symptoms, call your doctor because a change in your medications may be needed:

- Increased shortness of breath
- Increased swelling in ankles, legs or feet

Longitudinal Plan of Care report

You Might Want To...

 Read your messages. You have 29 new messages. View instructions for your appointment on Wednesday, August 5, 2015 with PRMC Radiation Oncology.

View your test results.



Send a message to your doctor's office.



Refill your medications.



Review your health summary.

MyChart News for You

Here is a link to our Proxy Access Updates [MyChart Proxy Access Card](#).

Here is a link to our searchable [Provider Directory](#).

Do you have a question about a recent bill or your insurance? Just [Ask Customer Service!](#)

Using the MyChart Message Center, you've been able to get medical advice from your clinic, but now you can also contact customer service. This new feature available through MyChart allows you to contact the clinic regarding non-medical concerns.

7 Tips for healthy living

- Move More
- Cut Fat
- Reduce Stress
- Wear Your Seat Belt
- Floss Your Teeth
- Keep a Positive Mental Outlook
- Drink Plenty of Water

7 Super foods for your health

- Salmon
- Yogurt
- Nuts
- Dark green leafy vegetables
- Beans
- Oats
- Blueberries

Parkview Health My Chart

My Chart Patient Portal

The patient portal advances efficiency and engagement.

The patient portal is key to comprehensive virtual care. It enables providers to share information with patients before and after visits, and it creates a clear and easy access point for patients to contact providers.

In Spite of Patient Demand...

73%

Percentage of patients who would use portals to improve their access to care

50%

Percentage of patients who would consider switching to a physician who offered a patient portal

...Portal Adoption Still Lagging

5.5%

Percentage of patients who email with physicians

<25%

Percentage of patients registered for portal among majority of providers who have one

What Zone Are You In?

GREEN ZONE	<p>ALL CLEAR</p> <ul style="list-style-type: none"> • No cough, wheeze, chest tightness, or shortness of breath during the day or night • No decrease in your ability to maintain normal activity 	<p>GREEN ZONE MEANS...</p> <ul style="list-style-type: none"> • Your symptoms are under control • Continue taking your medications as ordered • Follow low salt diet • Keep your Home Care Nurse appointments • Keep all physician appointments
YELLOW ZONE	<p>CAUTION</p> <ul style="list-style-type: none"> • Sputum (phlegm) that increases in amount or color or becomes thicker than usual • Increased cough or wheezing even after you take your medication and it has time to work • Increased swelling of ankles or feet • Increased shortness of breath with activity • Weight loss or gain of 3 lbs. • Fever of 100.5° oral or 99.5° under your arm • Increased number of pillows needed to sleep or need to sleep in chair • Anything else unusual that bothers you 	<p>YELLOW ZONE MEANS...</p> <ul style="list-style-type: none"> • Your symptoms indicate that you may need an adjustment in your medications and/or treatments • Call your Home Health Nurse <p>Parkview Home Health & Hospice 24 hour phone number is: _____</p> <p>(Please notify your Home Care Nurse if you contact or go see your physician)</p>
RED ZONE	<p>EMERGENCY</p> <ul style="list-style-type: none"> • Unrelieved shortness of breath • Unrelieved chest pain • Wheezing or chest tightness • Increased or irregular heart beat • Change in color of your skin, nail beds, or lips to gray or blue • Mental changes • Chest pain or pain that worsens when you breathe or cough 	<p>RED ZONE MEANS...</p> <ul style="list-style-type: none"> • You need to be evaluated by a physician right away CALL 9-1-1 IMMEDIATELY! <p>Primary Physician: _____</p> <p>Phone Number: _____</p> <p>(Please notify your Home Care Nurse if you go to the emergency room or are hospitalized)</p>



Community Resources

Person focused care

- Innovative approaches to prevention
 - Social
 - Environmental
 - Psychological
 - Cultural
- Faith based organizations
- Aging networks
- Home care based care

MEDICAL CARE

Question: What do you do if you need to go to a doctor or hospital for pain or other medical problems?

Answer: Tell the doctor or nurse who examines that you are in recovery!

Why? Most doctors and nurses these days will understand that a person in recovery must not take certain medications such as narcotic pain killers, certain cough syrups (with alcohol and codeine), muscle relaxants or tranquilizers. So make sure that you tell any medical professional who is treating you that you are in recovery. Explain to them that you cannot take any mood/mind altering substances as it will endanger your recovery and may result in a positive drug test. If you forget and your doctor gives you a prescription for a drug you are not allowed to take, you must contact that doctor, tell them you are in recovery and get a new prescription.

COMMON MEDICATIONS

Common medications that you **should not take** while in recovery include:

All Cough Medicine with Codeine, Alcohol or Dextromethorphan.

All Narcotic Analgesics (pain killers) Common brands include: **Darvon** or **Darvocet** (also known as Propoxyphene), **Percocet** or **Percodan** (also known as Oxycodone), **Tylenol 3** (with Codeine), **Vicodin** (also known as Hydrocodone)

All Benzodiazepines (anti-anxiety drugs) Common brands include: **Ativan** (also known as Lorazepam), **Librium** (also known as Chlordiazepoxide), **Valium** (also known as Diazepam), **Xanax** (also known as Alprazolam)

All Amphetamines such as **Adderall**, **Ritalin**, **Vyvanse**, **Concerta**

Muscle relaxers such as **Flexeril**, **Soma**, **Zanaflex**

Antihistamines (**Atarax**, **Vistaril**) and **Allergy/Cold Medication** containing any of the following compounds: Pseudoephedrine, Phenylpropanolamine, Dextromethorphan, Doxylamine

Examples: Actifed, Benadryl, Benvlin, Comtrex, Contact, Coricidin D, DayQuil, Dimetapp, Neo-Synephrine, NyWuil, Robitussin Sinus, Sine-Off, Sinutab, Sudafed, Tylenol Cold, Vicks 44M, Zytrec-D

READ YOUR LABELS AND ASK QUESTIONS

IMPORTANT POINTS TO REMEMBER

- **PERSONAL RESPONSIBILITY:**

You, and you alone, are responsible for what goes in your body. Don't come with an explanation that illegal or prohibited drug use is anyone's fault but yours. **NO EXCUSES!**

- **OTHER PEOPLE'S MEDICINE:**

Never, ever take any medication that has been prescribed for someone else (your mother, brother, boy/girlfriend etc.). Using medication prescribed to another person is a violation of federal law.

- **WHEN YOU ARE NOT SURE:**

When in doubt, **DON'T TAKE IT!** Ask your doctor, treatment provider or case manager. If you have any questions at all about any medication you are taking; **ASK!**

- **READ THE LABEL:**

Read the label when you buy cough syrup, cold medicine, mouthwash or other over-the-counter liquids. **MAKE SURE THEY DO NOT CONTAIN ALCOHOL!** Listerine contains alcohol. Dayquil contains alcohol. There are over-the-counter products available that do not contain alcohol.

- **POPPY SEEDS:**

Never, ever eat poppy seeds or "everything bagels" because they can give a false positive for morphine. Don't every try to explain away a positive drug test by saying you ate poppy seeds. **IT WILL NOT WORK!**

- **MAKING RECOVERY MORE DIFFICULT:**

Taking prohibited drugs can only make your recovery harder.

- **IN CASE OF EMERGENCY:**

Carry this notice in your wallet or purse so you can show it to any medical personnel in case of an emergency or when you go to the doctor.

Signature acknowledges that you have received a copy of this document and a copy will be placed in your file.

Signature of Participant

Date

Signature of witness

Print Name Participant

Print Name/Title Witness

Rescue Mission Needs

- Community Partners
 - Behavioral Health
 - Medications
 - Dental
 - Housing
 - Clinics
 - Insurance Coverage
 - Transportation
 - Phone contact for appointments

Rescue Missions follow up clinic care

- Open door visits
 - Blood pressure checks
 - Oxygen saturations
 - Blood sugars
 - Defib. Vest
 - Dressing changes
 - MD appointments
 - Medication – pill boxes

Rescue Mission Case Study



Challenges

- Inpatient/community communication
- Physician communication
- Physician Access
- Behavioral Health
- Indiana insurance communication

Hip 2.0 MD Wise – Plan Choices

Hoosier Healthwise

A health plan for children under the age of 19.



Healthy Indiana Plan (HIP)

A health plan for uninsured adults ages 19-64.



Hoosier Care Connect

Hoosier Care Connect is a new coordinated care program for Indiana Health Coverage Programs (IHCP) members age 65 and over, or with blindness or a disability who are residing in the community and are not eligible for Medicare.



Indiana Care Select

A health plan for people who have special health needs or benefit from specialized attention.



MDwise Marketplace

A health plan for individuals and families in need of affordable health insurance.



HIP 2.0 now includes HIP Link, a new **premium-assistance program** that helps eligible, working Hoosiers afford their employer-sponsored health insurance plans. Employees who qualify for HIP Link must have a household income at or below approximately 138 percent of the federal poverty level (\$16,436 per year for an individual and \$33,865 for a family of four) and meet HIP eligibility requirements.



CLINICAL OUTCOMES

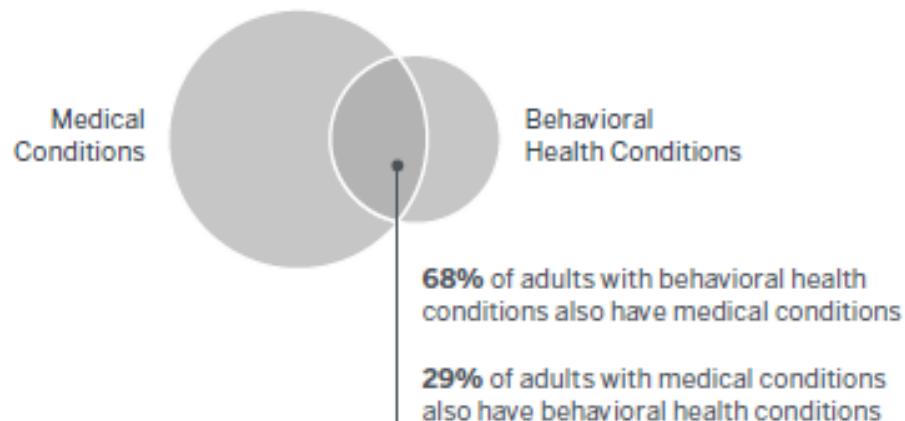


Rescue Mission Volumes

Indicator	June 2015	Year to date
# <u>appts.</u> to medical home	17	148
# connections to resources	54	435
# new residents	43 new/171 unique	217 new/609 unique
# people seen within 2 weeks of programing	17 appointments	69
# who lack providers	7	108
# requiring medication assistance	10	61
# actual touches	237 touches (69 men)	1583

Behavioral Health

Medical and Behavioral Illness Comorbidity



Primary care behavioral health screenings are your first opportunity to address behavioral health needs. If you invest in a way to identify problems early on, you can improve care planning and avoid unnecessary ED utilization or hospitalization down the road.

Rescue Mission Clinical Outcomes

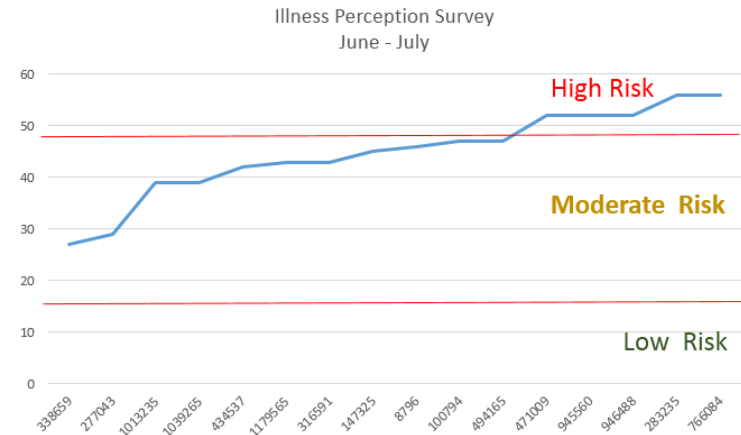
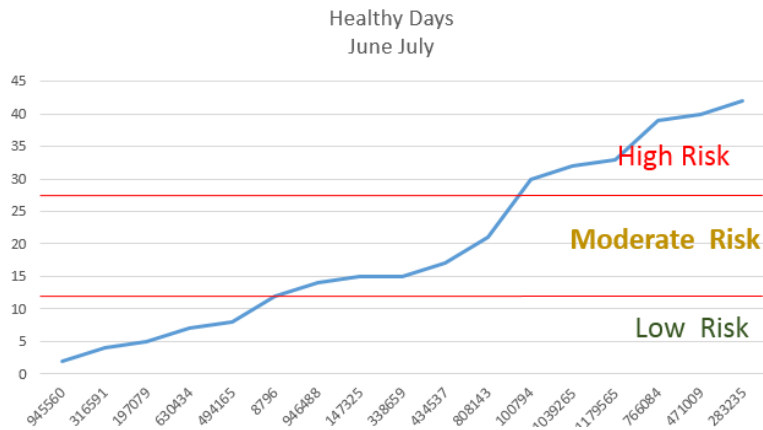
Outcome	June 2015	Year to date
Decrease in ER visits	15 visits (1 man x 3, 2 men x 2) 4 admitted	130
# ER visits related to medication noncompliance	0	11
CIT calls	1	28
Program vs. Life House	6 programming (1 man x 3)/9 no programming	16 programming/94 no programming
Cholesterol within normal range	0	14

Rescue Missions

Outcomes needs

- Rescue Mission case managers better communication and identification of needs
- Men with medical issues identified to see nursing next day
- Hand off from other facilities to the Mission (Mental health, hospital, DOC etc)
- Increased health education access

Patient Perception of Illness

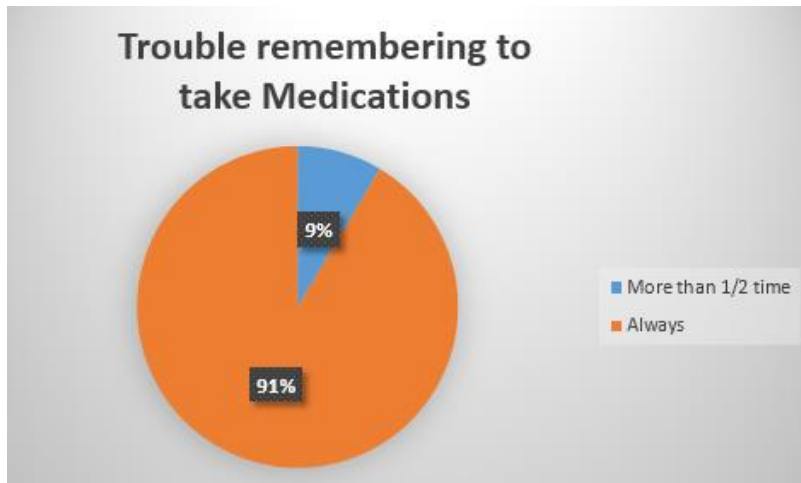


Care Advising outcomes

June /July 2015 N = 266



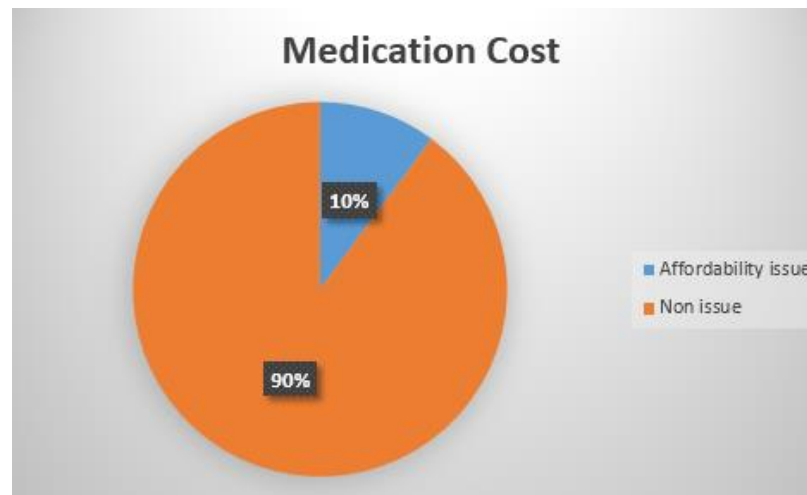
Medication Related issues



Interventions:

Physician contact = 10

Medication reminders = 5



Medication Assistance interventions:

Physician communication

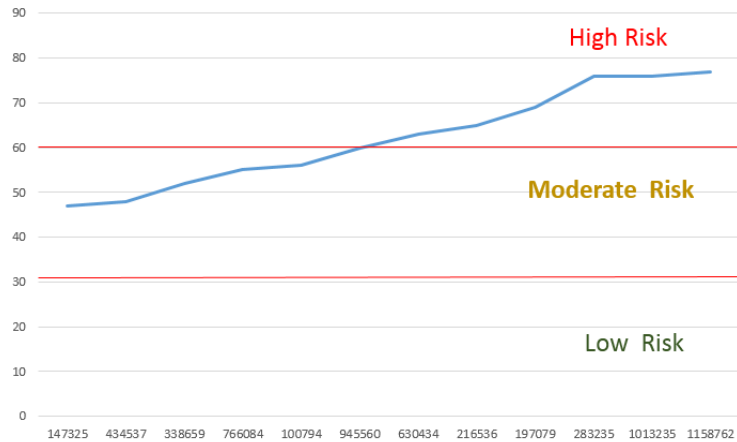
Alternative selections

Medication Assistance

6-8 hours

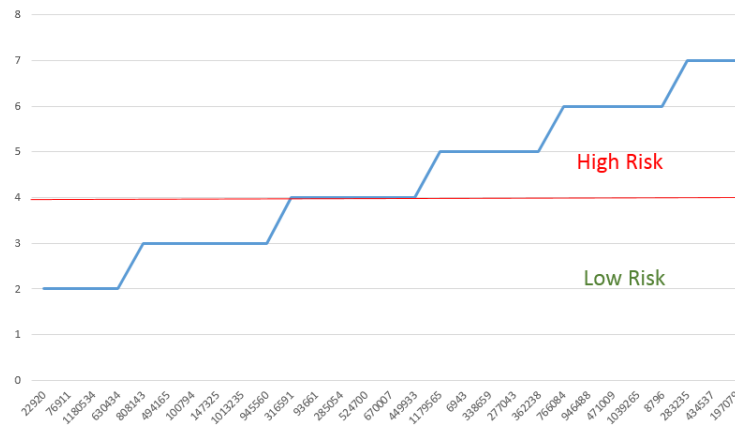
Sample of Risk/Intervention

Diabetes Risk N = 12
June - July



Interventions:
 A1C related = 7
 General Mgt = 2
 Eye care = 1
 Foot Care = 3
 100% Intervention

Fall Risk Assessment N= 29
June - July

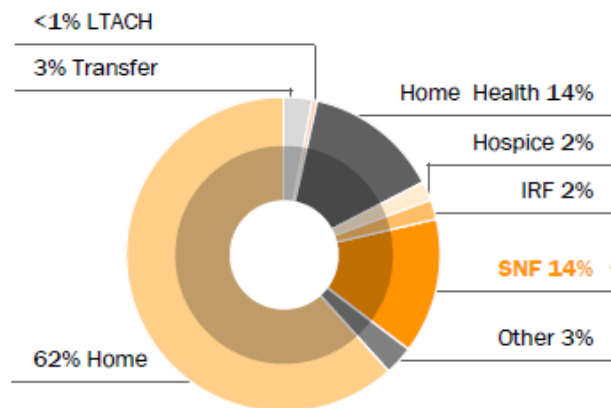


Interventions:
 Education = 19
 PT/OT/fall clinic referral = 2
 72% intervention

Post Acute Care

Nationally, 14% of patients in the acute care setting are discharged to a SNF, although that number grows to 23% when excluding patients younger than 65 years of age and to 28% when accounting for patients with lengths of stay above six days. Readmission penalties and moves toward bundled payment for full episodes of care will require hospitals to more actively oversee services their patients receive after transfer to a SNF. A number of the most common diagnoses (eg, congestive heart failure, joint replacements) related to SNF admissions are among targets for penalties and risk-sharing projects.

Hospital Discharge Disposition by PAC Site
US Market, 2014



Top 10 Reasons for SNF Admissions,
by Discharge DRG

- Major joint replacement or reattachment of lower extremity, without MCC
- Septicemia or severe sepsis without mechanical ventilation 96+ hours, with MCC
- Kidney and urinary tract infections, without MCC
- Hip and femur procedures except major joint, with CC
- Heart failure and shock, with MCC
- Heart failure and shock, with CC
- Simple pneumonia and pleurisy, with CC
- Intracranial hemorrhage or cerebral infarction, with CC
- Renal failure, with CC
- Septicemia or severe sepsis without mechanical ventilation 96+ hours, without MCC

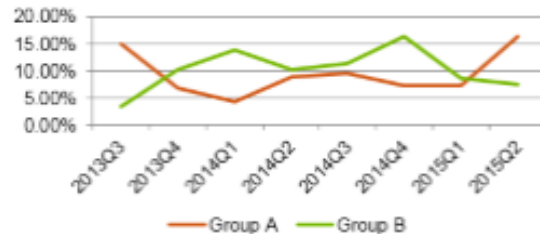
Note: Percentages may not total 100% due to rounding.

CC = complications and comorbidities; LTACH = long-term acute care hospital; MCC = major complications and comorbidities.

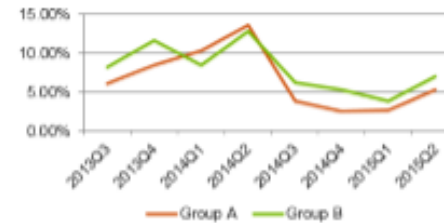
Sources: NIS Database, 2014; Sg2 Performance Database, 2014; Sg2 Analysis, 2014.

Long Term Care Preferences

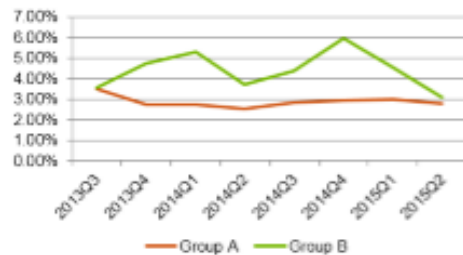
Avg Readmit Rate



Avg Falls with Injury Rate



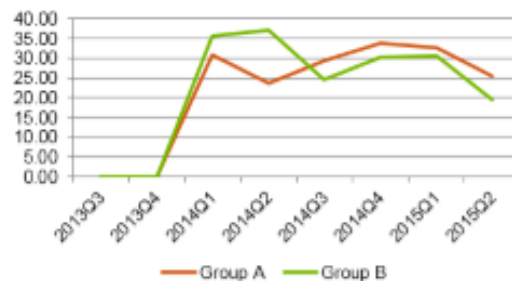
Avg In-House Wound Rate



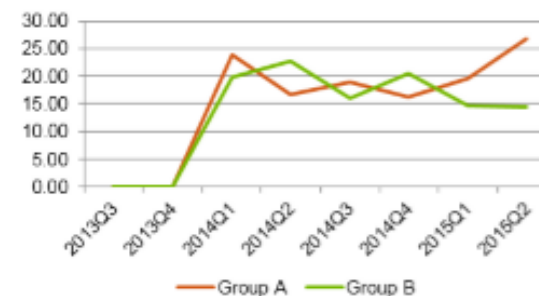
Avg Nosocomial Infection Rate



Avg Medicare ALOS (Days)



Avg MA Plans ALOS (Days)



Post Acute Considerations

- Living Arrangements:
 - Private duty nursing
 - Custodial care
 - Adult day care
 - Assisted Living
 - Memory Care
 - Long term care
- Skilled Care:
 - Home Health Care
 - Skilled Nursing Facility
 - Procedures
 - Rehabilitation
 - Hospice
- Alternative Options:
 - Tele-monitoring
 - Palliative Care

Population Health Requires Extensive Investment

External Funding Helps Ease the Burden



An Undeniable Financial Burden

\$12M

AHA's¹ estimate of ACO start-up costs for a 5-hospital system

\$14.1M

AHA's estimate of ongoing annual ACO costs for a 5-hospital system

Common Areas of Investment



Care management staffing



Disease Registry



Electronic Medical Record



Post-Acute Care network



Patient-Centered Medical Home



Management resources



Legal and consulting support



Predictive analytics



Health Information Exchange



PCP recruitment



Specialist network



Patient engagement tools

Review

- How to identify high risk populations
- Describe the correlation between chronic disease and community based care
- Evaluate care strategies
- Describe measureable outcomes