A Strategic Framework for Assisting Rural Hospitals to Move to Population Health

April 8, 2015
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Fee-For-Service and Population Health

Assumptions

• Utilization
  • Inpatient and Outpatient
    • Increased volume is increased profit

• Revenue
  • Negotiate third party price increases
  • Cost based Medicare revenue

• Expenses
  • Salaries, wages and benefits
  • Productivity
  • Supplies
  • Based on episodic care
Population Health

Population health is defined as the health outcomes of a group of individuals, including the distribution of such outcomes within the group. These groups are often geographic populations or communities, but can also be other groups such as employees, age cohorts, disease categories or any other defined group.

**Health care determinants** generally include access, cost, quantity, and quality of health care services.

**Individual behavior determinants** include choices about lifestyle or habits such as diet, exercise and substance abuse. Social environment determinants include elements of the social environment such as education, income, occupation, class and social support.

**Physical environment determinants** include elements of the natural and built environment such as air and water quality, lead exposure, and the design of neighborhoods.

**Genetic determinants** include the genetic composition of individuals or populations.

David Kindig, MD, PhD
Population Health

Millions of Americans suffer from diseases that could have been prevented:

- Chronic diseases, such as type 2 diabetes and heart disease, are responsible for seven out of 10 deaths, 75 percent of the $2.5 trillion spent on U.S. medical care costs and billions of dollars in lost productivity each year.

- Infectious diseases, from the antibiotic-resistant Superbugs to Salmonella to the seasonal flu, disrupt lives and communities and result in more than $120 billion in direct costs and enormous indirect costs.

- More than half of Americans are living with one or more serious, chronic disease, ranging from type 2 diabetes to cancer. Those rates are expected to increase significantly over the next two decades, particularly due to the obesity epidemic.

A Healthier America 2014
We Have Moved into a New Environment!

- Subset of most recent challenges
  - Payment systems transitioning from volume based to value based
  - Increased emphasis as quality as payment and market differentiator
  - Reduced payments that are “Real this time”
- New environmental challenges are the TRIPLE AIM!!!
- Market Competition on economic driver of healthcare: PATIENT VALUE

Harvard Business Review

www.hbr.org
WE NEED TO THINK DIFFERENTLY
Population Health

- **We are responsible for population cohorts**
  - **Identify** by age your populations at high risk
    - Children
    - Adults
    - Elderly
  - **Assess** each population by picking a risk tool for each cohort
  - **Intervene** by drilling down in each population cohort and pick interventions

- **For every primary care visit there are 1.9 specialty care visits**
  - Reinvent the primary care panel size
  - 1200 patients?

- **Timing is critical**
Population Health

• WE MUST UNDERSTAND THE NEW LANGUAGE
  ➢ Pmpm-per member per month
  ➢ Disease-member months
  ➢ Exclusions/stop loss claims
  ➢ Baseline per disease-member per month costs
  ➢ Asthma, obesity, COPD, diabetes, CHF
  ➢ ACO, shared savings, sub-capitation, capitation
  ➢ Biometric screening
  ➢ HRA’s-health risk assessments
  ➢ Predictive modeling-forecast high utilizers
  ➢ Patient-centered medical homes-comprehensive primary care
Population Health

• WE MUST UNDERSTAND THE NEW LANGUAGE
  ➢ Insurance
    ▪ Medicaid
    ▪ Medicaid Expansion
    ▪ Medicare
    ▪ Medicare Dual Eligible
    ▪ Private-Direct
    ▪ Private-ESI
    ▪ Private-Exchange
    ▪ Uninsured
  ➢ Understand your market (refer to the next slide)
Population Health

Greater Portland

<table>
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<tbody>
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<td>00-17</td>
<td>45,293</td>
<td>43,531</td>
<td>-1,762</td>
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<td>18-44</td>
<td>77,941</td>
<td>76,574</td>
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<td>45-64</td>
<td>67,930</td>
<td>67,964</td>
<td>34</td>
<td>0%</td>
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<td>65+</td>
<td>34,394</td>
<td>40,600</td>
<td>6,206</td>
<td>18%</td>
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<td>225,558</td>
<td>228,669</td>
<td>3,111</td>
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2014 Household Income: $61,116

Ten Year Insurance Projection

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<tr>
<td>Medicaid</td>
<td>35,590</td>
<td>33,221</td>
<td>15.78%</td>
<td>14.31%</td>
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<tr>
<td>Medicaid Expansion Population</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Medicare</td>
<td>27,841</td>
<td>37,069</td>
<td>12.34%</td>
<td>15.97%</td>
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<tr>
<td>Medicare Dual Eligible</td>
<td>9,191</td>
<td>11,284</td>
<td>4.07%</td>
<td>4.86%</td>
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<tr>
<td>Private - Direct</td>
<td>9,785</td>
<td>9,333</td>
<td>4.34%</td>
<td>4.02%</td>
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<td>Private - ESI</td>
<td>121,457</td>
<td>118,592</td>
<td>53.85%</td>
<td>51.09%</td>
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<tr>
<td>Private - Exchange</td>
<td>4,449</td>
<td>12,997</td>
<td>1.97%</td>
<td>5.60%</td>
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<tr>
<td>Uninsured</td>
<td>17,246</td>
<td>9,618</td>
<td>7.65%</td>
<td>4.14%</td>
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<td>Grand Total</td>
<td>225,558</td>
<td>232,114</td>
<td>100.00%</td>
<td>100.00%</td>
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Source: Truven Health Analytics
In a given year, a small portion of the population is responsible for a very large percentage of total health spending. The next few slides explore the variation in health spending across the population through an analysis of the 2012 Medical Expenditure Panel Survey (MEPS) data. The analysis shows that the 1% of the population with the highest spending accounted for almost one quarter of health spending (23%) and that the top 5% of the population is responsible for almost half of all spending. It also examines spending variation across different demographic and health factors, including age, gender, race, insurance status and presence of certain health conditions.
Population Health

Contribution to total health spending per family, 2012

- Top 1% of health spenders: 26% of total health spending
- Top 5%: 39%
- Top 10%: 54%
- Top 15%: 65%
- Top 20%: 72%
- Top 50%: 94%
- Lower 50%: 6%

Source: Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services

Peterson-Kaiser Health System Tracker
Population Health

Distribution of health spending among those reporting fair or poor health, 2012

- Top 1% of spenders in this group: 16% of group spending
- Top 5%: 39%
- Top 10%: 54%
- Top 15%: 65%
- Top 20%: 73%
- Top 50%: 95%
- Lower 50%: 5%

Distribution of health spending among elderly population (age 65+), 2012

- Top 1% of spenders in this group: 13% of group spending
- Top 5%: 34%
- Top 10%: 50%
- Top 15%: 60%
- Top 20%: 68%
- Top 50%: 91%
- Lower 50%: 9%

Source: Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services

Peterson-Kaiser Health System Tracker
Population Health

Share of total health spending by age group, 2012

- Under 19: 11% of spending (by 25% of population)
- 19 to 34: 13% (by 22%)
- 35 to 44: 9% (by 13%)
- 45 to 54: 16% (by 14%)
- 55 to 64: 21% (by 12%)
- 65 and over: 31% (by 14%)

Source: Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services

Peterson-Kaiser Health System Tracker
Population Health

Average health spending by age and gender, 2012

- **Males**
- **Females**

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<tr>
<th>Age Range</th>
<th>Males</th>
<th>Females</th>
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<tbody>
<tr>
<td>Under 19*</td>
<td>$2,135</td>
<td>$1,579</td>
</tr>
<tr>
<td>19 to 34*</td>
<td>$7,779</td>
<td>$7,554</td>
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<tr>
<td>35 to 44*</td>
<td>$7,208</td>
<td>$7,608</td>
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<tr>
<td>45 to 54</td>
<td>$4,706</td>
<td>$5,186</td>
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<tr>
<td>55 to 64</td>
<td>$7,367</td>
<td>$7,185</td>
</tr>
<tr>
<td>65 and over</td>
<td>$9,323</td>
<td>$8,295</td>
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</table>

*Indicates that, for the age range, the difference in estimates for males and females is statistically significant (p< 0.05)

**Source:** Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services

**Peterson-Kaiser Health System Tracker**
Per capita health spending based on diagnosis status, in U.S. Dollars, 2012

- **Asthma**: $6,110
- **High Cholesterol**: $7,526
- **Diabetes**: $11,347
- **Arthritis**: $10,008
- **Emphysema**: $13,131
- **Cancer**: $12,000
- **High Blood Pressure**: $8,114
- **Stroke**: $13,827
- **Heart Disease**: $11,059

**Source:** Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services

*Peterson-Kaiser Health System Tracker*
Population Health

Medicare per capita spending for traditional Medicare beneficiaries over age 65, by age, 2011

Source: Kaiser Family Foundation analysis of a 5 percent sample of Medicare claims from the Chronic Conditions Data Warehouse, 2011.
Notes: Analysis excludes beneficiaries with Medicare Advantage.
*Analysis excludes people age 65 because some of these beneficiaries are enrolled for less than a full year; therefore, a full year of Medicare spending data is not available for all people at this year of age.

Peterson-Kaiser Health System Tracker
Population Health

Peaks in Medicare per capita spending by type of service for traditional Medicare beneficiaries over age 65, 2011

Source: Kaiser Family Foundation analysis of a 5 percent sample of Medicare claims from the Chronic Conditions Data Warehouse, 2011.

Notes: Analysis excludes beneficiaries with Medicare Advantage.

*Analysis excludes people age 65 because some of these beneficiaries are enrolled for less than a full year; therefore, a full year of Medicare spending data is not available for all people at this year of age.

Peterson-Kaiser Health System Tracker
Population Health Framework

An effective population health framework addresses as many as possible of the following nine key criteria elements:

1. An organizational planning and priority-setting process
2. A health risk assessment process
3. An agreed-upon, prioritized subset of population health improvement activities
4. Takes responsibility for leading population health improvement activities
5. Selection of a set of measures or indicators and performance targets
6. Use of the prioritized indicators
7. Joint reporting on progress toward achieving the intended results
8. A plan for sustainability
9. Indications of scalability

National Quality Forum 2014
Step 1: Health Risk Assessment: Provide a Baseline

- Understand the **severity** or **likelihood** of an **adverse health outcome** due to an **exposure** to environmental, biological, or social conditions.

- **First**, we want to be able to grade the risk in terms of either **severity** or **likelihood**. Severity can be measured in terms of premature mortality, years of healthy life lost, or even the amount of dollars that will be spent on individuals at higher risk.

- **Second**, even though we acknowledge that exposure to risk may not always result in adverse outcomes, there is ample evidence to support assessing specific issues that are related to **specific adverse outcomes**.

- **Third**, some **exposure** to unhealthy risk is obviously unavoidable; also there can be complex interactions between environmental, biological, and social conditions.
Framework to Manage Population Health

Step 2: Disease Avoidance or Delay

- Disease avoidance and delay can be accomplished in a large population by moving high-risk individuals to low-risk.
- If you manage the risks, you manage the costs.
- The model of reducing costs by reducing risks holds true for all age groups, even among the most expensive elderly segment of the population (Wellsource 2015).
Step 3: In order to achieve disease avoidance or delay the onset, individuals must be engaged and empowered!

- Preliminary research suggests that patient-centered care may reduce use of health care services while improving health status and patient satisfaction.
Framework to Manage Population Health

Step 4: Plan an Intervention and Evaluation Strategy

• Report to stakeholders

• Intervene
  • Address key health issues that were identified. Regardless of who actually tackles the interventions, some key questions would include:
    • How will you reach the defined target population?
    • What resources and funding will be required?
    • Who needs to partner with you?

• Evaluate
  • An evaluation component should be included whenever an implementation is planned.
National Geographic writer Dan Buettner has traveled the globe to uncover the best strategies for longevity and happiness.

He identified Blue Zones — places that have the greatest life expectancy and where more people reach age 100 than anywhere else.

Working with a team of experts, Buettner distilled their secrets into nine common denominators he calls Power 9®.

Dan debunks the most common myths and offers a science-backed blue print for the average American to live another 12 quality years.
In 2009, Albert Lea, Minnesota, a statistically average American city, completed a one year community health experiment that raised life expectancy by three years, trimmed a collective 12,000 pounds off waistlines and dropped healthcare costs of city workers by some 40%.

USA Today, Good Morning America, AARP, ABC Nightline, CNN and U.S. News and World Report all covered the story.

Harvard’s Dr. Walter Willett, writing in Newsweek magazine called the results “stunning”. Dan Buettner, founder and director of the AARP/Blue Zones Vitality Project created a “perfect storm” of health that transformed a city.

He tells the fascinating story of how one typically obese American city of 18,000 reversed the trend and also got happier.
A Strategic Framework - Moving to Population Health

• We need a strategic framework for assisting organizations to transition from a payment system dominated by the FFS payment model to one dominated by population based payment models
  • Requires creation of an integrating vehicle so that providers can contract for covered lives, create value through active care management and monetize the creation of that value
• Our strategies/strategic plan must begin to integrate population health initiatives

Part II

April 10, 2015 Utilizing Data Analytics to Manage Population Health services
Next Session: Who are Our High Risk Patients?

High Risk Cohorts

- ACE Score > 6
- ASQ-3 below cutoff in > 1 area
- Addiction Risk assessment > 8
- hgBA1C > 9
- RAF Score > 3
- Positive Surprise Question

Hospitalization and/or Frequent ED Use

Source: MPHC
Population Health Framework

INITIATIVE I
- Operating Efficiencies, Quality, and Patient Engagement

INITIATIVE II
- Primary Care Network Alignment Planning
- Service Network Rationalization Strategy

INITIATIVE III
- Service Network Rationalization Implementation Planning
- Service Network Rationalization Implementation

INITIATIVE IV
- Claims analysis
- PCMH
- Evidence based protocols
- Payer and network contracting
- Hot spotting
- Value attribution
- Plan design
- Risk management
- Value based credentialing support
- Provider based health plan

F-F-S

PHASE I

PHASE II

PHASE III

PBPS

DELIVERY SYSTEM

POPULATION HEALTH MANAGEMENT (INTEGRATED DELIVERY AND PAYMENT SYSTEM)

PAYMENT SYSTEM

Initiative I
- Self-Funded Employee Health Plan

Initiative II
- Transitional payment models Planning

Initiative III
- Full risk capitated plans Strategy

Initiative IV
- Full risk capitated plans Implementation Planning

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