

Population Health

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Introduction

Population health -- a term frequently used, but is not well understood

- What does population health mean?
- How do we apply it?
- How does it relate to managed care and Pro Pharma?

What is Population Health?

- Defined in 2003 as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”
- The Triple Aim – The Institute for Healthcare Improvement’s (IHI) framework for optimizing health system performance in the U.S.
 - ❖ Improving the **patient experience** of care
 - ❖ Improving the **health of populations**
 - ❖ Reducing the **per capita cost** of health care

The Main Concept

- An approach that strives to improve the health of the overall population by providing quality care that is efficient in improving outcomes while managing resources.

How Do We Apply It?

- STEP 1: Define the population
 - ❖ Any group of people can be considered a population
 - Geographic location
 - Age, gender, ethnicity, socioeconomic status, etc.
 - Clinical diagnoses
 - Others (employees, health plans, etc.)
 - ❖ Obtain patient information to demographically profile the population to determine what is needed
- STEP 2: Address the health status of the defined population
- STEP 3: Monitor/measure clinical and cost outcomes to determine areas in need of improvement

Health Plan Example

➤ STEP 1: Define the population

Table 1. Selected Sociodemographic Characteristics of Members Aged 20 and Over in the Santa Clara Medical Center Service Population, Kaiser Permanente Northern California Member Health Survey, Spring 2011¹

Characteristics	Ages 20-44			Ages 45-64			Ages 65 and Over			Ages 20 and Over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Health Conditions During Past 12 Months												
Diabetes ²	1.6	4.5	3.0	4.7	19.8	12.2	15.1	19.9	17.2	5.1	12.5	8.7
Hypertension ²	4.7	8.7	6.7	33.4	36.0	34.7	66.4	65.0	65.8	26.1	27.4	26.7
High cholesterol (MD dx) ²	2.1	7.4	4.7	26.2	39.9	33.0	44.4	58.1	50.5	18.3	27.2	22.7
Heart problems, incl. angina, MI ²	1.5	1.0	1.3	4.9	5.3	5.1	8.1	20.9	13.8	3.9	5.6	4.7
Stroke	<0.1	<0.1	<0.1	<0.1	0.5	0.3	0.3	1.4	0.8	<0.1	0.4	0.2
TIA	<0.1	0.7	0.3	<0.1	1.1	0.5	<0.1	0.3	0.1	<0.1	0.8	0.4
Cancer (any type)	<0.1	<0.1	<0.1	5.2	4.4	4.8	5.6	9.8	7.5	2.9	3.1	3.0
Non-skin cancer	<0.1	<0.1	<0.1	4.3	3.8	4.0	3.5	4.2	3.8	2.2	2.0	2.1
Skin cancer	<0.1	<0.1	<0.1	<0.1	0.5	0.3	1.6	4.2	2.8	0.3	0.8	0.5
Asthma ²	13.2	8.0	10.6	16.2	5.3	10.8	8.2	7.6	7.9	13.4	6.9	10.2
COPD (Emphysema, Chronic bronchitis)	1.1	<0.1	0.5	3.2	1.2	2.2	5.0	3.4	4.3	2.5	0.9	1.8

Health Plan Example

➤ STEP 2: Address the health status of the defined population

Implement the Triple Aim

❖ Experience of care

- Chronic disease management

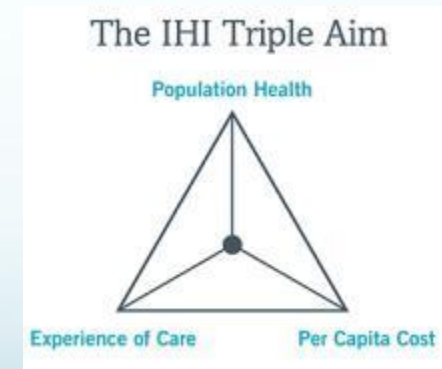
- Wellness programs, education (weight loss, smoking cessation)

❖ Health of populations

- Preventative health measures (vaccinations)

❖ Per capita cost

- Appropriate formulary design



Health Plan Example

- STEP 3: Monitor/measure clinical and cost outcomes to determine areas in need of improvement
 - ❖ Surveillance mechanisms
 - Track outcomes
 - Risk management
 - Monitor utilization to determine drivers of cost
 - Monitor compliance (refills, vaccination rates)
 - ❖ Use data to modify health plan to better serve the population

→ Managed Care

Population Health & Managed Care

➤ The concept of population health creates a major need for managed care to monitor and analyze data.

➤ Managed Care Principles

❖ **Maximum therapeutic benefit**

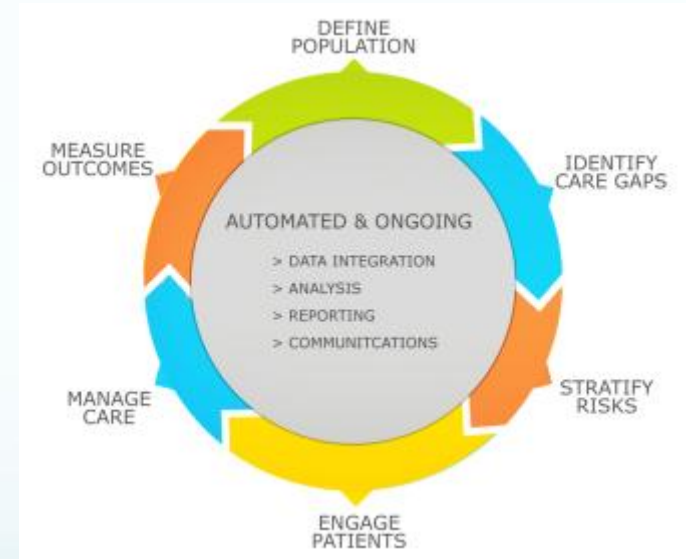
- Measure outcomes
- Improve quality of patient care

❖ **Minimum acceptable risk**

- Target individuals at high risk

❖ **Affordable cost**

- Predictive modeling to determine how to best allocate resources to minimize cost



How Does This Relate to Pro Pharma?

- Infrastructure
- Resources/tools for organizing and monitoring data
 - ❖ Ex: Drug utilization review (DUR)
- Analytics and expertise to determine areas of focus
 - ❖ Ex: Monitoring for compliance, continuity of care, polypharmacy, duplicate therapy, drug interactions, etc.
- Consulting
 - ❖ Ex: Providing clinical and financial advice

Summary

- For the concept of population health to be successful, managed care needs to be a part of the equation.
- As more health care entities strive towards population health goals, there will be an increased need for the capabilities that managed care companies can provide to monitor risk, lower cost, and effectively offer better care.

References

- Kindig DA, Stoddart G. (2003). What is population health? *American Journal of Public Health*. 2003;93:366-369.
- Kindig, David. What Are We Talking About When We Talk About Population Health? <http://healthaffairs.org/blog/2015/04/06/what-are-we-talking-about-when-we-talk-about-population-health/> (accessed 2015 Aug 26).
- The IHI Triple Aim. <http://www.ihl.org/engage/initiatives/tripleaim/pages/default.aspx> (accessed 2015 Aug 26).
- Populations, Population Health, and the Evolution of Population Management: Making Sense of the Terminology in US Health Care Today. The IHI Leadership Blog. http://www.ihl.org/communities/blogs/_layouts/ihl/community/blog/itemview.aspx?List=81ca4a47-4ccd-4e9e-89d9-14d88ec59e8d&ID=50 (accessed 2015 Aug 27).
- Kaiser Permanente. Sociodemographic and Health-Related Characteristics of Members Aged 20 and Over in the Santa Clara Medical Center Service Population, 2011.
- Population Health Management. <http://ihealthtran.com/population-health-management> (accessed 2015 Aug 27).

THANK YOU
Questions?