SUMMARY REPORT: 90-DAY CYCLE

HELPING ORGANIZATIONS BEGIN A JOURNEY ON POPULATION MANAGEMENT
April 30th 2013

Executive Summary:
The Patient Protection and Affordable Care Act (ACA) has started a transition in the US health care system from a focus on health care production to population management. This is leading health care systems to think about what their needs are to manage populations. During this cycle of work we interviewed a number of health care executives to try to understand their concerns around managing populations.

The results of this cycle of work led us to eight areas that we think are important for population management: primary care redesign, care management, data support, patient activation, governance, contracting and risk management, specialist involvement and community involvement. There needs to be a balance of activities in these areas around building structure, process and capabilities. We think that leadership does a better job with the identification and development of structure and that more emphasis needs to be placed on process and capability development.

I. Research and Development Team:

John Whittington

II. Intent:

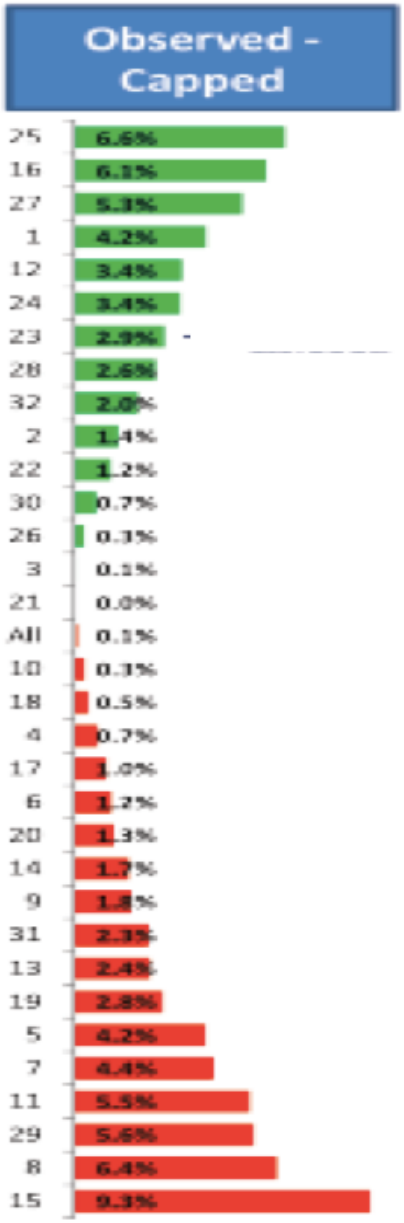
The intent of this project is to understand, develop, and prepare to deploy a set of supporting products for health systems that are in the early stage of population management or ACO development.

III. Background:

At this time there is clearly a push in the US for health care provider systems to learn how to manage populations. With the implementation of the Patient Protection and Affordable Care Act, we now have, for example, penalties for readmissions. These penalties alone cause hospitals to think about what happens to individuals after they leave the acute care setting. With accountable care organizations, health care providers have the opportunity for both financial reward and penalty for the management of populations. Accountable care organizations are being created to manage Medicare as well as Medicaid and commercial populations. Bundled payment for hospitalization, including in some cases post hospitalization, is being initiated. All of these new

payment models are pushing providers to work on understanding and managing populations. But population management is not a strength for most health care systems.

The Pioneer ACO organizations that CMS recruited are an example of organizations that are managing a population. In a meeting in December 2012 Pioneer organizations shared their experience in managing a population. Although it is in the early stages, the following chart reveals some of the challenges they are having. The chart below is a ranking of the 32 sites based on their financial experience to date. It shows their cost for managing a population versus the baseline projection of what the cost should be. What we can see from this data is that, on average, the 32 organizations are actually in a deficit mode, meaning that costs are higher than baseline. Now in fairness this is early data for these groups and it will take time for them to mange this work and some of their early investment will take time to reap benefit. However, these were considered some of the best organizations in the US, so if these organizations are struggling, we can expect that many more are also struggling.



The other issue that we need to face is the fact that we have developed a terrific product, our Triple Aim collaborative. It has much of the content that you would need to learn to do a good job of managing populations. In addition we have other work at IHI around leadership and readmission work that could be helpful for population management. One of the successful pioneer ACO's has been a long-term member of the Triple Aim community and they credit a good part of their success to working with IHI on the Triple Aim. However the Triple Aim community tends to attract organizations that are on the leading edge of this work. We need to continue to support leading edge products, but at the same time develop products that support organizations that are trying to make changes to manage populations but are not ready for the Triple Aim community.

IV. Description of Work to Date:
The deliverables for this work are:

1. Identification of the issues hospitals are facing when it comes to population management. This could be used to develop a driver diagram or some other model that would help us with a better understanding of their issues.
2. The development of or identification of a set of products that an organization can use to advance their work on population health. This would include offerings like white papers and WIHI, web and action series, a seminar, a collaborative, custom products and strategic partnership.
The basis for this work has been a series of interviews with health care executives around the US. I have left their names off of this report to respect the confidential comments that they made to us.

V. Results of the 90-Day Scan:
During the past two months we have interviewed a number of health care executives in the US who are thinking about or creating plans for population health management. We focused our conversation on discrete populations in which there might be some financial risk sharing. An example of this type of population could be an Accountable Care Organization, but this is certainly not the only risk sharing arrangement that they could consider.

Based on the interviews there are a few observations that we made:

1. Three events are moving us toward population health: the supreme court decision on the ACA, the election results, and 260 ACOs now covering 4 million plus another 13 million in Medicare Advantage.

2. Changing culture - frontline physicians don't seem to recognize some of the changes going on around them. In part this is understandable. They are still being paid for volume at the same time the organizations are asking for population support. This leads to mixed messages.

3. Payer alignment - most executives talked with me about the issue. They have one foot in fee for service and one in risk. (Although it looks to me like one toe is in risk.). However, once down this path they need to move quickly to more at risk. There is concern that CMS is not moving fast enough which is still creating uncertainty in the marketplace. I think there is personal internal conflict at the CEO level. Health care executives know they can do better and decrease hospitalization, but payment doesn't reward that. Or at least their present payment is not rewarding them. You need creative vision to move past the present system to start thinking as if you are running a risk system.

4. Healthcare leadership still sees the hospitals as revenue centers and that is understandable because they are. A few now talk about the idea of hospitals as cost centers.

5. Executives can manage financial incentives amazingly well. An approximate 100-bed hospital changed to 25 beds. The CEO now had to keep his hospital from getting too full. This is in comparison to seeing how full he could get it in the past. When given the right incentives executives can manage either scenario well.

6. Organizations are testing the waters on new payment models where it makes sense from a business perspective - ACO for some, bundled payments for others and other new models of payment.

7. With the recent flattening of hospital admissions and the likely decrease that good population management will create, it is more important than ever for health systems to take costs out of the system where they can.

An Overall Approach to Population Health

At IHI we have been working on managing populations with the Triple Aim collaborative since 2007 involving over 125 organizations from around the world. We have created population change packages around a basic framework: assess and segment the population, engage and activate the population, care for the population and address the macro system factors that will support the population. We think this is a good starting point to think about a framework for managing populations.

Using this framework plus ideas from the interviews, we constructed a table of important areas that will support population management for defined populations in which there is some form of risk sharing. Some of the conversations with executives focused on structural elements needed to manage populations. Most of the work that we have been doing at IHI is focused on process or capability building. We built a table based on eight areas of focus: primary care redesign, care management, data support, patient activation, governance, contracting and risk management, specialist involvement and community involvement. For each area we asked what were the structural needs, process needs and capability needs. We did not attempt to fill in ever area of the table . We want to use it as a template to build upon.

Table 1
Population Health management for a defined population in which the health system has some financial risk

Areas of focus	**Structure changes need to support defined population managemen**	**Process changes needed to support defined populatior management**	**Capability development to support this work**

Primary Care Redesi	1.Primary Care Group 2.Behavioral health supp 3.Legal entity- employed Integrated FTC model	Delivery model design and u to manage populations. Som the past work that IHI has dc on primary care fits in here.	1.Quality improveme skills 2. Principles of chan management
Care management High-Risk, High- Cc	1. Identification of high- risk, high-cost patients 2.Hiring care team (this needs to integrate with primary care redesign) 3. Predictive modeling to	1.Detailed understanding of factors for population segme 2. Developing team and interventions to manage this (see R and D work cycles 25 and 26 . available on request	
Data Support	1. EMR 2. Data Warehouse 3. Registries	1.Population segmentation 2. Risk prediction 3. Risk alerting 4. Real time tracking	
Patient Engagement and Activation	1.Patient Portal 2.Remote Patient Monitoring	1.Segment the population ba on motivation and activation 2. Develop strategy for each segment	Better communicatio between patient and network of care providers

Governance	Board members chosen t manage populations	1. Allocation of resources 2. Design of payment model for primary care. 3. Transition management between fee for service and population payment 4. Oversight of care design 5. High level metrics/dashbo for improvement 6.Identify a population. 7.Articulate a clear statemen purpose, including what the organization or community/ region is trying to accomplis and why. 8.Develop a cogent set of hig level measures that operationally define what yo organization or community means by health of a popula experience of care, and per capita cost. 9.Identify a portfolio of proj and investments to support t pursuit of better health, bette care, and lower cost for the population	
Contracting and financial risk management		1.Contracting with hospital a specialist. 2.Business modeling- using sophisticated financial mode to understand what is happer in the transition from fee for service to risk related model	
Specialist involveme	Legal entity- employed, Integrated FTC model	Care delivery design for specialist	
Community involvement	Building community governance structure	Use community assessment tool to work with community	

Although all areas of focus are important, we think these 5 are the most important to start with: primary care redesign, care management, data support, patient activation and governance. We will touch on each one briefly to define the scope of focus for this work.

Primary care redesign is important for the management of the population. To be clear, when we say primary care redesign we are not just talking about doctors but the whole team that forms primary care for the community such as community health workers, case managers, pharmacists, behavioral health support along with the usual office team of doctors, nurse practitioners, nurses, physician assistants, medical assistants and front office staff. In addition to staff you need other structural components like an electronic medical record and registries to support this work. Now how this team interacts, their roles and responsibilities make up the process side of primary care. With the push toward the medical home there is growing capability in primary care to manage populations. There are, however, limitations to the present medical homes and we will need to build on this foundation to more effectively manage populations. Realistically, primary care is stretched thin in the US. More demands are being placed on them, the workforce is aging and new doctors are not willing to work as long as the previous generation. Although executives want primary care engaged in population management, they are still paying them primarily on volume and activity. A new payment model is needed to reward primary care for population health management.

Care management is identified as a separate issue from primary care in many organizations. However, it is tightly linked to primary care. Generally this is an area where the focus is on the high-risk, high-cost individuals, the 5 % that spend 50% of the health care dollar. We have worked on this population a lot in the last 6 months, so we refer the reader to the IHI research and development work on this subject. In addition a lot of separate but complimentary work has been done on care transitions that is also considered part of care management. And we would again refer the reader to IHI change packages on transitions of care. The key observation in studying care management is to design systems in a cost-effective way that can impact the population. Many of the present designs are too resource intensive and will struggle to be sustained from a resource standpoint.

Population Health Data support is critical for the management of populations. You can see examples where systems that have good analytic capability are now partnering with physicians to take on population management. An example is the partnership between Scott and White and Walgreens in a CMS ACO. Walgreens is bringing their analytic capability along with other skills to this partnership. Organizations will need to be able to merge claims data with their clinical data to build a data warehouse. They will need to be able to segment the population using this data in

order to identify high-risk, high-cost individuals. They will need the ability to monitor the performance of the health care system. They will need tools that provide them triggers to monitor the population for significant changes.

Engaging, activating and motivating individuals to coproduce health is important to the success of population management. There has been a steady push in the US to make health care more patient centric and there are definitely organizations that have made progress in this area, but much more needs to be done. For example, in the high-risk, high-cost population, putting together a comprehensive plan that involves the family and patient is very important, yet it rarely occurs. Certain tools have been tried, such as Judith Hibbard's patient activation measure to facilitate change in individuals. Another nice example of work is around chronic disease self management models such as the Chronic Disease Self-Management Program and The Expert Patient Program,

Governance of the health system to work on population health requires new skills and direction. It has to answer the big question: What business are we in? Are we in the business of producing units of health care or the business of producing health? If it is the production of health, what does the business model look like? How do we measure quality, safety and efficiency from a population standpoint? What role does the hospital play in this model? For a more detailed set of questions see the open question section.
The governance should address these questions: What is our population? What is our purpose? How will we measure success? What is the portfolio of work that we need to accomplish this?

Contracting and risk management will not be addressed in this paper.

Specialist involvement is important for any type of risk contracting. In loosely aligned medical communities as opposed to larger integrated health systems, some have gravitated to a clinical integration model and either sought Federal Trade Commission (FTC) approval or attempted to develop a model that they thought would pass the FTC. One issues that medical communities face is developing organizational capability without incurring antitrust issues. The clinical integration model allows loosely organized medical communities to focus on clinical quality improvement and secondarily gives them a means for taking on risk contracting.

Community involvement is important and has been discussed in early R and D work that was done on population health for communities. (Population Health papers 1-3 IHI R and D team. available on request)

One last thought that is not specifically part of the eight areas that we have discussed but is very important is for health systems to continue to remove cost from the hospital. As noted, early

inpatient visits have flattened and lower cost within the hospital will be helpful for organizations to afford to manage patients. IHI has a separate body of work for helping systems remove cost from their hospitals.

VII. Conclusions and Recommendations:

This work focused on trying to understand more about where the medical community is in regards to population health. We used a very narrow definition of population health at this time which focused on defined populations in which health care might be at financial risk, such as an ACO. We know that health is made up of many more determinants than health care and we have written about a much broader health focus in previous R and D work on population health. However we are pleased with the progress that health care is making on moving away from a production system that primarily focused on units of health care production to one that is now thinking more broadly about production of health. With that in mind we focus on eight areas that are important for health systems to consider as they manage populations: primary care redesign, care management, data support, patient activation, governance, contracting and risk management, specialist involvement and community involvement. We think these areas need a balanced approach between structure, process and capability development. Right now there is a lot of work being put into structure and we think a lot more focus needs to go into process and capability development. Helping with process and system thinking is IHI's strength. The following are some specific recommendations that come from this R and D cycle and are also based on prior population R and D cycles:

1. We have a system that we have been using within the Triple Aim for population management. We need to build upon what we have learned in the Triple Aim community, this R and D cycle and other R and D cycles to enhance our population health management ability. We can use these eight areas of focus from this paper to identify strengths and weaknesses in our present work.

2. We need to decide which of the following eight areas needs more IHI development work: primary care redesign, care management, data support, patient activation, governance, contracting and risk management, specialist involvement and community involvement.

3. In support of a population management system, we need to develop an executive management system to support leadership who want to manage their business/population around the Triple Aim for a population. At this point few if any organizations in the US or the world are using such a system. Andrea and others at IHI are working on leadership and so their work should help us in this area.

4. We need to decide how and where we might implement this material at IHI.

VI. Open Questions:

1. How does a hospital fit in the new population management centric world? In view of national trends on inpatient activity, how fast do you plan to remove cost out of the hospital?

2. What is your business model for population health? How can the leadership deal with mal-aligned incentives? "Fill the beds, fill the beds, versus reduce readmissions, get patients care in the home." As you start to work in some of the population management areas, it creates tension in the fee for service side. What are those tensions and how will you mitigate them? How do you anticipate the challenges in the future (short, medium, long-term)? How will you work to align a mixed payer alignment?

3. What skills and people do you need to manage the transition? Do you have enough capacity and capability to manage a population-based portfolio? How will you equip your leaders to manage and support this transition?

4. How do you engage physicians and how will they work in different kinds of relationships than we had before? How will you engage primary care doctors in this work in general? What is the new payment model for primary care around population health? What is your plan for decreasing clinical variation?

5. How will you redefine quality, safety, and productivity from a population management perspective?

6. How will you know which metrics to focus on to know how you are doing? Do you have the right measures to manage populations around the three aims?

7. How will you adapt your present organizational structures to support spread and scale-up of strategic work on populations?

8. Data will be key for managing populations. Do you have an overall strategy for this?

9. How are you going to engage patients in the future? Their activation will be key to holding down costs.

10. Since health care plays only a minor role in the health of a community, how will you build a successful community coalition?

VIII: Appendices:

Developed by the Institute for Healthcare Improvement Innovation Team