Understanding the Basics of Clinically Integrated Networks (CINs)

by Nathan Gunn, M.D.

As healthcare providers move away from fee-for-service reimbursement and toward value-based payments, they should seek to understand how formation of, or participation in, a clinically integrated network (CIN) could help them optimize new reimbursement scenarios. Valence Health has put together a primer to help level the playing field and better explain the who, what, why and where of a CIN.

What is a clinically integrated network?

The healthcare cost-quality equation has always mattered. And today, amidst ever-changing regulatory, technology and business variables, the focus on this equation is intensifying exponentially. As a result, greater attention is focused on how healthcare reimbursement can move away from longstanding volume-based reimbursement models and toward “value-based care” ones.

In short, value-based care models seek to align payments with objective measures of clinical quality. While there is a range of different options for structuring value-based care arrangements, CINs are essential to any such model.

From a definitional standpoint, CINs bring independent healthcare providers under a common legal structure, allowing them to deliver services focused on quality, performance, efficiency and value to patients. CIN agreements involve the acceptance of common care guidelines, data sharing and performance tracking of providers and patients against agreed upon clinical care guidelines.

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Getting into the Game: Academic Medical Centers and Population Health Approaches to Care Delivery

by Thomas Enders, Joanne Conroy, M.D., and Alex Morin

A revolution underway in healthcare is fundamentally changing how every academic medical center (AMC) operates. Healthcare reform is challenging academic medicine to reinvent its approach to the triple mission of teaching, research and clinical care. Changing economics, market consolidation, fiscal pressures and payers’ new focus on higher quality and lower cost require a new operating model for academic medicine.

Managing beneficiary lives is a completely new paradigm for AMCs and most other healthcare organizations. AMCs in particular are struggling to redesign their organizations and develop new financial and organizational incentives for clinicians to play a more active role in patient management and coordination. An historic focus on tertiary/quaternary services and ongoing deficiencies in primary care networks contribute to this struggle.

Population health requires engaging patients and populations in a broad range of services and activities to prevent disease, improve the long-term success of medical interventions, increase the overall health of a defined beneficiary set and ultimately, enhance the health status of all the communities served.

Those AMCs that have implemented population health characterize their approach as incorporating five characteristics:

1. Patient-centered, ensuring patients are engaged in the entire process of care and decisions are well informed, along with recognizing the needs and preferences of diverse patients.
2. Community engaged, partnering with communities to identify and meet the needs of those they serve and measurably improve overall community health.
3. Primary care-based, having patient-centered medical homes as foundational elements for patient engagement and using shared clinical information and protocols to link specialists, hospitalists, long-term care and nursing homes and home- and community-based service providers. Specialty care medical homes are emerging as important vehicles for limiting care fragmentation in specific populations.

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Making a Case for Population Health

A Selected Case Study in Population Health Management...

Population Health Simulation Highlights Collaboration Challenges/Opportunities
by Karen Widerynski, MPH

Program Objectives:

- To engage leaders and healthcare providers in the decision-making process to improve community health.
- To facilitate a discussion of complex decisions associated with population health.
- To help participants understand the challenges facing healthcare providers as they resolve the question: “How do I improve the health of my community?”
- To evaluate financial and strategic impact of decisions made by hospitals, physician clinics and employers about the health of the community.

Program Description:
Group Glendale (Calif.) Adventist Medical Center (GAMC), a 515 bed-medical institution and part of Adventist Health, promoted a population health management simulation for member organizations from the Glendale Healthier Community Coalition. The coalition plans and implements projects that promote disease prevention, health education, clean and safe environments, adequate housing, affordable and quality education and community revitalization. Members include GAMC, Glendale Memorial Hospital, University of Southern California Verdugo Hills Hospital and other businesses in the Glendale community.

The simulation included representatives from the fire department, local area hospitals, the Los Angeles County Department of Public Health, community leaders, employers and other healthcare professionals. Cerner, GAMC’s electronic medical record partner, developed the simulation and engaged clients to help them understand a variety of issues related to targeting a population, such as the financial impact of funding immunizations or increasing physical activity for children.

Five teams comprised of individuals representing three professional disciplines—a physician clinic, a hospital and an employer—participated in the simulation; however teammates assumed roles with which they were not familiar, forcing stakeholders to see the issues and problems from a different point of view.

Each team, equipped with a computer, made decisions based on a given set of circumstances, such as disease prevalence, demographics or budget parameters. For example, employers would select what type of benefit plan best suits their company, including options such as value-based models, HMOs or fee-for-service designs. A clinic might have addressed hours of operation and capacity planning, while the hospital decided if resources should be dedicated to reduce infection rates or other quality improvement issues.

Presented with these decisions, each team made choices that were processed through Cerner’s system to create a new set of decisions for discussion. Issues were not always complementary but often posed considerations that might benefit one participant while having a negative effect on another.

The process included three decision-making rounds, and simulated the impact of nine years of planning and working toward achieving an outcome that would result in a measurable improvement in community health. The team that collaborated most effectively and took other participants needs into account, resulting in improvements in community health, won the simulation.

Cerner initially developed the population health simulation as an internal assessment tool, but the lessons learned were compelling. The tool was used to engage senior leadership of client organizations and the communities they serve.

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Getting into the Game: AMCs and Population Health Approaches … continued from page 1

4. Health information technology-enabled, linking patients, caregivers and providers to health information to help prevent illness and manage care in a coordinated model, as well as to support targeted quality initiatives.

5. Academic, including residents, medical students and other health professional students, in efforts to support patient health and identify research opportunities that may provide new approaches for improving health.

AMCs demonstrating a commitment to these objectives contrast sharply with those organizations that focus almost exclusively on the highest acuity patients. That focus will remain a necessary but insufficient condition for success in the long term.

A particular challenge will be developing an ample network of primary care physicians and a community-focused system that can provide the comprehensive, longitudinal care chronic and elderly patients will require for decades. AMCs have always been a locus for complex and specialized care, but managing the health of individuals and populations across the entire continuum will be a new skill for many.

Developing an AMC-based Managed Care Model

Moving to a risk-based approach for beneficiary management requires focus on different market segments, including one’s own employees, as well as commercial, exchange, Medicaid and Medicare Advantage beneficiaries. Depending on an AMC’s current organization and structure, clinical profile and market situation, organizations could face numerous opportunities and options. Figure 1 describes some of the approaches leading AMCs are taking.

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 infrastructure. By the conclusion of the fifth year, the practice was closely managing every high-risk group, including dual eligibles, frail elderly, at-risk patients in transition and patients needing palliative care. These initiatives earned the Faculty Group Practice the distinction of being the top performer in the PGP demonstration.

Option 2: The Networked Model

Some organizations are creating regional approaches, partnering with several systems across regions to care for large populations of patients. The University of Iowa has formed the University of Iowa Health Alliance to serve as an umbrella for numerous initiatives. Sharing and employing best practices across the network, the Alliance has statewide reach. Members can realize savings by sharing potential costs related to population health management. Alliance participants also have partnered to offer an insurance product on the state health exchange.

Understanding That Information Technology (IT) Is Fundamental

To achieve the goals of a population health model of care delivery, clinicians need access to sophisticated information management tools. AMC leaders must have complete insight into their organizations’ portfolio of clinical, administrative and financial data, linked together and used to drive high-quality, patient-centered care.

Specific information management tools include:

- Registries and population health management tools that offer point-of-care and back-office clinical decision support, as well as workflow applications to maximize intervention impact and patient management. Particularly important is the ability to assess individual and group health risk accurately and dynamically—and prepare interventions and case management accordingly.

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- Geo-mapping that supports community dialogue by linking claims data, emergency department and other use rates, crime statistics and additional relevant social and healthcare information to identify “hot spots” and target interventions.
- Health information exchange technology that seamlessly integrates clinical and financial data from all sites of care.
- Patient engagement tools and services that assist patients in active home care and support shared decision making in medical treatment scenarios.
- Quality measurement and reporting that demonstrate outcomes to purchasers, as well as enhance clinical behavior around evidence-based guidelines and best practices.
- Electronic health records that enable consistent, portable patient information across the entire patient network.
- Advanced analytics that identify costly, at-risk patients so that proactive, specific interventions can be employed.

AMCs must create new organizational capabilities and training programs for clinicians and staff to leverage these tools fully. They also must develop the capacity to manage chronic diseases in low-cost settings in the community, empower patients to manage their diseases more effectively and equip them to prevent emergency room utilization and hospital admissions. While AMCs must improve patient safety initiatives, particularly in inpatient facilities, they also must engage more broadly in preventive medicine to an extent previously unseen in most AMC settings.

Implications for AMC Leadership

AMCs must adopt a new paradigm of care delivery that expands beyond the core specialty care services market and incorporates population health capabilities. Payers will be seeking high-quality, cost-effective options for beneficiaries and will place a premium on organizations that can deliver efficient, cost-effective, high-quality patient care for a defined population.

Leadership considerations include: (a) An expectation that the health system of the future will be agile in identifying and segmenting populations by indicators, such as health status, socio-economic status and prevalent chronic conditions, as well as in defining care environments that meet the needs of each segment; (b) The ability to define a population of beneficiaries and work to develop population health capabilities, either internally or in partnership with other organizations; (c) The pursuit of a population health strategy that complements a focus on specialty care service development and improvement; and (d) Sophisticated IT systems and skilled data analysts, as well as health services researchers and physicians, trained to understand data and translate it into better care at the population level.

This article comes from a 2014 report by experts from the Association for Academic Medical Centers and Manatt Health Solutions, “Advancing the Academic Health System for the Future.” https://www.aamc.org/initiatives/patientcare/aphc/357864/academichealthsystem.html.

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Understanding the Basics of Clinically Integrated Networks (CINs) ...continued from page 1

From a value standpoint, CINs offer clear advantages in care coordination, as they allow providers to have a comprehensive view of patients no matter where they are (or are not) in the care continuum.

CIN members, which could include all physicians or hospitals and physicians, develop and sustain clinical initiatives that enhance access to care, clinical quality cost control and the patient experience.

Lastly, participation in a CIN provides all participating physicians, whether employed or independent, the ability to contract collectively with health plans without violating antitrust laws.

How does a CIN operate?

In some cases, a CIN designs its own governance, operating requirements, service offerings and reimbursement rules. It will then “pitch” its wares to payers. In other instances, payers may have established programs, and CINs form to take advantage of them.

In either case, CIN governance typically involves leadership from hospitals, health systems, physician hospital organizations and/or independent practice associations. Executives from the hospital or system side typically have responsibility for physician relations, network development or clinical improvement.

Physician representatives, often governed by an independent, doctor-led board, design and implement the CIN’s clinical integration program. This program forms the basis for network negotiations for “pay-for-performance” arrangements with hospitals or health systems and payers to share in savings generated by improved quality and reduced costs.

For physicians, membership in a CIN is usually optional—at least at a practice level if not at an individual physician level. Physicians who join CINs usually sign a formal network participation agreement that requires them to collaborate with fellow physicians and any hospital or health system participants in adopting the CINs’ agreed upon clinical guidelines and care protocols.

While hospital or health system members are not required for a CIN, experience has shown that including these “anchor participants” within a CIN provides distinct advantages to a network of independent physicians. In instances where hospitals and systems share the same quality vision as physicians, these players can be powerful allies in collaborating across the entire care continuum, combining acute care and ambulatory guidelines.

Hospitals or health systems can also offer assistance in implementing patient initiatives that create true community benefit and are not tied to the volume or value of referrals. And in some markets, hospitals are essential allies in demonstrating that clinical integration is both legitimate and valuable.

No matter what specific CIN membership looks like, having the ability to share real-time information is essential to its success. By harnessing technology, CIN members exchange and aggregate key data sources to create robust clinical records for patients. Agreed upon guidelines can then be compared to these full records in ways that make non-compliance or gaps in patient care readily apparent and corrective actions quickly identifiable.

While a common electronic health record (EHR) across all participating physician practices can certainly accelerate and strengthen CINs, most (if not all) successful CINs do NOT depend on ambulatory EHR data for physician performance metrics. However, the more comprehensive the data sets used by a CIN, the more effective the CIN is likely to be.

The following data sources are the most commonly used in CINs:

- Inpatient EHRs and computerized physician/provider order entry information.
- Ambulatory EMR information.
- Ambulatory practice management information.
- Claims data (from the practice, clearinghouse and/or payers).
- Pharmaceutical benefits management information.
- Diagnostic results.
- Post-acute provider (e.g., homecare and skilled nursing facilities) clinical and claims information.

“...the more comprehensive the data sets used by a CIN are, the more effective the CIN is likely to be.”

Operationally speaking, each CIN uniquely defines the scope of services it will deliver. While service variety exists from market to market, most CINs typically address the following areas:

- Chronic disease management.
- Care coordination after an acute episode.

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Understanding the Basics of Clinically Integrated Networks (CINs) …continued from page 5

- Physician quality reporting initiatives.
- Communication among primary care physicians and specialists.
- Community case management.
- Quality-based credentialing.

When it comes to payments and reimbursement, most CINs form contracting committees. Led by physician members of the network, these committees determine the parameters of any contractual relationships with payers. CIN healthcare providers are then required to treat patients under these arrangements in the same manner as any other managed care relationship.

Additionally, CIN members only delegate contracting for those agreements entered into by the CIN. Any of their prior non-CIN managed care contracts remain intact. Most importantly, all CIN payment and incentive arrangements need to clearly link to the care guidelines/protocols and associated metrics agreed upon by the network.

What are the common advantages and pitfalls associated with CINs?

Whether one examines CINs from a provider's or patient's perspective, they offer several clear benefits for population health:

- **Greater opportunities for increasing care coordination and quality incentives.** Healthcare providers are under ever-increasing pressure to increase efficiencies and adopt new technologies. At the same time, they are also required to improve quality measures and demonstrate greater care team collaboration.

  While providers may still be recovering from EHR investments, CINs further enable them to adopt processes and technologies that can further enhance clinical and financial data sharing with colleagues or accountable care organizations (ACO). This also includes the sharing of population health management information that can reduce more costly resources, open doors to provider incentives and improve patient outcomes.

- **Stronger negotiating power with payers.** In a CIN, providers have more power to negotiate better contracts. Specifically, they can legally and legitimately negotiate with payers as a network and reap financial rewards for improving quality and reducing costs.

- **Easier operationalization than mergers and acquisitions.** With minimal disruption to patient-provider relationships, CINs can increase market share in ways that improve patient care and increase financial returns for providers and payers. CIN formation is also faster and less costly than health system merger and acquisition deals.

- **Increased quality transparency and improvement.** CIN-affiliated providers can transparently respond to demands to use “report cards” similar to systems for grading physicians. Just presenting the data usually lifts compliance rates without any negative communications.

- **First steps toward becoming an ACO.** By operating as a CIN, various independent providers, practices and hospitals can start functioning as an informed single entity. By having a common data infrastructure and agreed upon guidelines and incentives, providers that are part of a CIN are well positioned to approach payers for accountable care contracts.

From a risk standpoint, a CIN is most commonly derailed by the amount of change management work that is required to successfully design and run the network. Those barriers include:

- **Failure to gain alignment at the onset of a CIN's formation.** Physicians’ greatest fear is that if they join a CIN, they will be forced to fundamentally change the way they practice medicine. Therefore, it is essential to assure that all voices are heard and actively addressed during every stage of the design and implementation process.

- **Underinvestment in CIN dedicated resources.** All aspects of CIN design, implementation and operation take time away from members’ “day jobs.” It is therefore critical to realize that dedicated CIN resources need to be added. For example, most hospital and/or system IT organizations will not have sufficient tools, skills or capacity to integrate and manage CIN data assets.

  Once a CIN is operational, it is also critical to assure that customer service, program management and monitoring supports are fully funded. While such new resources usually represent a combination of outsourced and in-house solutions, CINs need to make smart choices about investing in new capabilities.

In helping CINs evolve over the last few decades, industry experts and CINs have reported a range of successes and failures. While some CINS only minimally integrate, others fully embrace its amalgamation.

Providers of all shapes and sizes need to work with proven consultants, technology providers, legal advisors and other partners to establish CINs. The promise of coordinated care is at the heart of the healthcare cost-quality equation and clearly CINs, when designed and operated effectively, provide the means for balancing that equation.

Nathan Gunn, M.D., is president of population health and risk services for Valence Health. Contact him at N_Gunn@valencehealth.com.
Look Before You Leap: Are You Ready for Change Management Requirements of Population Health?

by Luke Shulman

The recent explosion of interest in population health has led to a bonanza of “keys to success” and “essential frameworks” that supposedly lay out a clear map to how organizations can transition to becoming managers of patient populations rather than simply triaging individuals.

These roadmaps typically combine various process frameworks, such as patient-centered medical homes (PCMH), with a broad suite of health information technology (HIT) tools—patient portals, automated outreach platforms, risk stratifying predictive models, event marketing and social media platforms. However, before making the significant investment in these tools and frameworks, organizations need to frankly evaluate their readiness to adapt to the changing needs of a population.

The most important factor in successfully implementing population health programs is the commitment of an organization to embrace change and continuously seek to improve processes and care delivery. Organizations that lack the strategic direction and a foundation for transformation are likely to be challenged in the implementation of these changes and are unlikely to see the associated returns in the form of increased panel size, higher quality and reduced total medical expense.

The challenge of achieving successful implementation and gaining an ROI on elements of population health management cannot be understated. Primary care practices looking to achieve PCMH certification can expect to complete 216 separate deliverables of new care delivery and coordination processes. Recent effectiveness studies show that primary care practices that adopt PCMH end up increasing their staffing levels by 59%. Done properly, the changes can be profound in helping to improve the quality and operations in the primary care setting. Done improperly, organizations will simply have gone through a very extensive accreditationaudit.

Other elements of the population health toolset are also challenging to implement with success. Academic studies of automated outreach campaigns of mailings and phone calls show some early signs of success, but similar efforts for diabetes management showed no effect. The fact is that many of the population health management (PHM) systems succeed or fail based on how the adopting organization receives them and promotes their use.

To ensure that organizations end up on the right side of these investments, they must have three key attributes: (1) leadership to strategically prioritize goals; (2) a self-study capacity to define success and innovate in defined populations; and (3) a framework to standardize and ensure adoption of new tools and processes.

There is a broad range of “evidence-based” systems, processes and tools that aim to provide capabilities to population health managers. They are generally the product of research conditions, vendor case studies or groundbreaking implementation at the leading institutions. Most of the healthcare system, however, does not exist in one of those three environments. Organizations need to take a much more strategic approach to deciding which initiatives (that may or may not include technology) to invest in and which lack the feasibility or priority to deliver on their promise.

Health systems must plan for the transition from fee-for-service payment models to value-based programs that require systems to assume a level of risk for the health outcomes of their patients.

Setting Strategic Goals

Health systems must plan for the transition from fee-for-service payment models to value-based programs that require systems to assume a level of risk for the health outcomes of their patients. This isn’t breaking news. But not every value-based program is the same nor does every health system face the same challenges. Before jumping headlong into a population health transformation, health systems must consider why the organizational needs to make these changes and what outcomes need to be achieved. For a health system, joining an accountable care organization (ACO) contracted with a commercial payer is far different from directly offering an insurance product. A health system overwhelmed with demand is going to need different outcomes from one trying to establish itself in new markets.

Although these strategic decisions may not seem directly related to the processes of population health, they are critical in identifying the outcomes necessary to motivate and incentivize the population health transformation.

Broadening the Range of Measurement

Too many transformations are undertaken with undefined goals or those not measurable. The adoption, implementation and evaluation of PHM programs will not be measured on the 2011 Physician Quality Reporting System (PQRS) measures alone. High-performing organizations identify a range of leading process indicators that verify processes, adoption of tools and community responses. They go way beyond the prescription of certain medications at certain times that characterize many of the PQRS process measures.

Consider how to track the time spent on certain tasks, the workload of staff or the disengagement of patients. Likewise, expand the scope of the lagging outcome measures that may be adopted from national standards, some of which may be also be self-defined. The new outcome measures may be based directly on cost or are likely composites derived from strategic goals. Prepare your organization to constantly measure well beyond the traditional realms of compliance.

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Look Before You Leap: Are You Ready… continued from page 7

This process typically exposes gaps in data collection from clinical and claims data from commercial and government payers. Even organizations with sophisticated data warehouses don’t have access to detailed data from the electronic health record (EHR), aren’t able to process the provided files from CMS for use in the share-savings program or don’t have timely data from emergency room visits or hospital discharges.

These gaps in data need to be identified at the outset to ensure that implemented population health transformations are ones that will drive value. The ability to continuously measure is foundational. The stated goal of population health is to respond to the changing care needs of the served population. That won’t happen without measurement that identifies those needs.

Keeping Everyone on the Lead Lap: Standardize Adoption; Reduce Variability

Put simply, most organizations can pilot a new program successfully, but transitioning to a rollout across an organization at scale requires tools, standards and organizational culture that embrace change. Meaningful use helped expose organizations’ wide variability in implementation of even the most basic processes, such as recording smoking status or social history within the EHR. Real population health management demands that organizations approach patients with certain standards of excellence that are repeated across the organization. This goes beyond simply using the EHR and encompasses the ability for staff to adopt not only new technical systems, but also new care delivery models, new staff roles, new care protocols and other changes to standards.

Each part of the organization must be able to define its under-served population and embrace innovation, creating new programs that improve quality, operations and satisfaction. Put simply, most organizations can pilot a new program successfully, but transitioning to a rollout across an organization at scale requires tools, standards and organizational culture that embrace change.

Why This Matters

In January, the industry received its first glimpse of how the Medicare Shared Savings Program ACOs performed in their first years. The shared savings program is one of many driving the adoption of PHM in large health systems. The results were decidedly mixed with only 54 of 112 ACOs achieving savings\(^6\). Continued investment in population health management must be shown to demonstrate success in a concrete and measureable way. Otherwise, the cost of transformation can’t be recouped over the three- to five-year ACO contract.

Continuous improvement in service to population health management can be used to transform organizations and provide a myriad of benefits with an incremental and ongoing positive ROI. However, every health system needs to be able to articulate why they are transforming what their performance targets are and what ultimate success looks like.

Luckily, there are ongoing initiatives in health systems and offered by vendors that help address this challenge. Some health systems are elevating “innovation” as new core functions of their business are led by “chief innovation officers” and with dedicated centers to nurture innovation thinking and change management. New innovation platforms for continuous improvement are allowing users to define their improvement programs, setting performance targets, and allowing the agility to create measures beyond the CMS-defined quality measures.

One example of this is the Global Lab for Innovation from the University of California at Los Angeles’ (UCLA) Institute for Innovation in Health. The online community is built around an inventory of innovations, many implemented within UCLA. Each innovation is cataloged with documentation about barriers to implementation and achieved outcomes in savings, access, patient experience and quality. It is an example of how continuous improvement can be nurtured through shared platforms and documented knowledge\(^7\).

A foundation of change management and innovation is at the center of the population health challenge. The real key to success on population health is an organization that embraces change and willingness to continuously improve.


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To subscribe: visit www.PopulationHealthNews.com or call 209-577-4888
Each month, Population Health News asks a panel of industry experts to discuss a topic suggested by a subscriber. To suggest a topic, write to MLEdlin@comcast.net. Here’s this month’s question:

Q. What Is the Most Effective Way to Engage Consumers Through Population Health?”

“The short answer is that it depends on which population an organization seeks to manage based on health status and socio-demographic characteristics that impact tools and methods used to change behavior, and on the short and long-term measurable goals sought as a result of the population health program’s interventions.

“There is no such thing as a ‘one size fits all’ population health management program even for a seemingly homogenous population (i.e., pre-diabetics). Differences in income and insurance characteristics require variance in the approach just as much as the clinical risk factors and comorbidities require a distinct diagnostic-therapeutic regimen. 

“Generally, incentives to prompt an initial change of behavior are useful unless the medical problem (diagnosis) is severe and an individual is self-motivated to avoid an undesirable outcome. But a consistent change of behavior is the result of it becoming a habit, like brushing your teeth. For a population health management program to transition from an incentive-based program to a habit that’s expected, it must use a combination of tools that engage an individual in guided self-care—plan design (insurance benefits, access), social media (linking the individual to a meaningful peer group), self-monitoring devices and health coaching from a ‘trusted provider,’ who monitors the behavior change via a registry, including function and biometrics.

“Population health management is a set of processes that can be adapted to an individual’s health status, circumstances and responsiveness to behavior change. They’re sophisticated and customizable, but necessary to bending the cost curve while improving health.”

Paul Keckley
Managing Director
Navigant
Chicago, Ill.

“There are three primary ways to engage consumers:

1. **Access to health records.** As coordination of care across organizations and geography becomes the norm, the ability of the patient record to be transported (virtually, electronically or otherwise) becomes increasingly important. This will allow for the primary care team to be both the transmitter, as well as the receiver of new data that impacts the patient’s health. Similarly, for the patient or family to have access after an encounter is crucial because most of us remember less than 30% of what is talked about during a medical encounter. To have the ability to go back and review, ask additional questions if necessary and really understand the event is crucial in improving outcomes.

2. **Access to decision support.** Patients are generally ‘healthcare naïve.’ The data and health information they have are limited (and frequently biased). I believe that supplying patients with accurate data in a format that they can digest will increase the appropriateness of care. Such an example is the effort to eliminate antibiotic usage in otitis media by educating families about the consequences of unnecessary antibiotic usage. Future endeavors will focus on things like the overuse of imaging in back pain, and questions of when joint replacement is really necessary.

3. **Starting health education early.** Growing up I had the advantage of having robust age-appropriate health classes beginning in grade school and extending well into college. Those classes explained the basics of how our bodies work, how to do basic care and first aid and generally how to stay healthy. I would advocate early childhood and then ongoing health education for ‘consumers-to-be’ so that they are better prepared to understand their own bodies, health and health information.”

Gary Wainer, M.D.
Medical Director
Cadence Medical Partners
Wheaton, Ill.
“The population health studies to date offer a number of methods to engage consumers in their own health care decisions. And while we believe there is no one single way that works for all accountable care organizations (ACOs) and health plans, there are several tools available to stratify patients based upon their needs.

“Patient Activation Management from Insignia in California is embedded in several of our clients’ patient activation strategies. It actually assigns a score to the patient based upon comorbidities. This allows the score to produce a model pathway for patients who can be connected to caregivers by phone versus those who need a case manager’s smiling face at an in-person visit to assess and report back to the physician or physician assistant.

“The success of this tool is found both at the front end and the back end. At the front end, the clinical indicators are input and are ensured to be complete so that patients are scored based upon the most recent data available. As we all know, this changes over time so a patient assessment must profile critical factors that can lead to preventable and avoidable costs, such as hospitalization, post-surgical infection or evaluation of general plateaus of healing.

“At the back end, the case manager assigned for a home visit or phone call follow-up has all available information. We have seen traditional case managers, as well as social workers, do well in this role. In Minnesota there is a new law permitting paramedics to act as case managers, and this strengthens both availability as well as backup when a critical need for assistance arises.”

William DeMarco
President
DeMarco & Associates
Rockford, Ill.

“The best way to engage consumers in population health is to make it invisible to them. We know that population health management gives healthcare organizations the tools to engage specific patient populations in order to improve their health. It’s not just about leveraging the data after the fact to simplify reporting. It’s about making a difference in the life of each individual patient they touch.

“With the right population health management tools, care teams can easily identify a subset of patients and proactively reach out to them to remind them about their visits, educate them on the importance of prevention and encourage them to receive needed tests. When we communicate with patients in the way they prefer to be reached—phone, letter, email or text message—then population health becomes personal. It’s about them. From an organizational perspective, this is population health management. From a consumer’s perspective, this says, ‘I matter.’”

Janice Nicholson
President and CEO
i2i Systems, Inc.
Santa Rosa, California

Making a Case: Population Health Simulation… continued from page 2

Program Results:
The population health simulation highlights the complexities of achieving the “triple aim”—improving patient satisfaction, improving the health of populations and reducing the cost of care. Glendale Healthier Communities Coalition is confident that the exercise will draw attention to the needs of the community and ways to meet those needs, such as reducing healthcare costs and encouraging healthier lifestyles in the entire population through increased physical activity, better nutrition, avoidance of behavioral risks and wider use of preventive care.

Lessons Learned:
• Stakeholders need to work collectively or nothing will be accomplished.
• Data are needed to help guide the decision making process and must be shared to create opportunities for improvement.
• Decisions are complex and interdependent.
• Results may not be immediate.

Karen Widerynski is a consultant for Connect-Care.Net. She can be reached at Karen@connect-care.net.
**Industry News**

**ONC's 10-year Plan: Big Data, Analytics, Population Health**

The Office of the National Coordinator’s (ONC) 10-year interoperability plan offers a vision of the healthcare ecosystem founded upon data analytics, population health management and health information exchange. The long-term roadmap hopes to continue the transformation of the paper-based healthcare system into a truly connected network of coordinated organizations working together to achieve safe, high quality, data-driven care, according to a recent announcement by National Coordinator Karen DeSalvo.

“Over the past decade, there has been dramatic progress in adoption and use of health IT across the nation,” DeSalvo wrote in a blog post announcing the roadmap. But, she adds, “There is much work to do to see that every person and their care providers can get appropriate health information in an electronic format when and how they need it to make care convenient and well-coordinated and allow for improvements in overall health.”

By building upon a firm foundation of electronic health record adoption and the budding analytics infrastructure that allows providers to manipulate and analyze patient data, the ONC hopes to guide the industry towards a stronger core of data standards and technical optimization by building upon established rules of governance and engagement.

**Older Adults With Multiple Conditions Benefit From CaRe-Align Initiative**

By Karen N. Peart

The John A. Hartford Foundation and the Patient-Centered Outcomes Research Institute joined forces to invest nearly $750,000 in CaRe-Align. This health care model seeks to realign care around older patients’ self-identified health goals. The model also aims to improve health outcomes and lower care costs for this population, which is the major user of healthcare services in the country.

Medicare patients see an average of seven different physicians, including two primary care providers and five specialists, multiple times over the course of a year. This care is difficult to coordinate and generally has not focused on needs or concerns that matter most to patients. According to the Institute of Medicine, as much as 30% to 40% of all healthcare may be unnecessary or even harmful.

Yale MacArthur Fellow Mary E. Tinetti, M.D., and Caroline Blaum, M.D., of New York University are experts in the care of older adults with multiple chronic conditions. Under their leadership, the initiative has convened a group of more than 200 primary and specialty care physicians, family caregivers and other healthcare stakeholders to gain their insights and perspectives on the new care model.

“We want to involve patients in their own care and facilitate communication and coordination between and among primary care and specialty care clinicians,” says Dr. Tinetti, chief of the Section of Geriatrics at Yale School of Medicine.

**Children’s Health Alliance Selects Wellcentive to Support Clinical Quality Improvement Programs for Pediatric Patients**

ATLANTA (PRNewswire)—The Children's Health Alliance, a not-for-profit association of clinically integrated, independent primary care pediatricians, has selected Wellcentive’s suite of population health management solutions and services to support its clinical quality improvement and high-function medical home programs caring for pediatric patients with complex medical conditions.

The implementation of the Wellcentive solution, which will be extended to The Alliance’s more than 100 pediatricians across five counties in the Portland and Salem, Ore., and Vancouver, Wash., metropolitan areas, will provide an unprecedented view into a broader range of data affecting the health of their patients. Wellcentive will aggregate clinical data from specialists and other outside providers and services, as well as information from claims through payers, helping pediatricians to proactively engage with their patients and coordinate continuity of care more effectively.

"After focusing many quality improvement efforts on care management of children across our communities, our pediatricians have difficulty seeing the complete picture of their young patients," says Deborah Rumsey, executive director of The Children's Health Alliance and The Children's Health Foundation. "Because of how care is administered in silos within our fragmented U.S. healthcare system, providers often have minimal visibility into other areas of a child's care and knew that gaining a 360-degree view was critical to better outcomes."

**Study Finds Coordinated Approach Improves Quality of Primary Care**

NEW YORK—Primary care doctors practicing in a model of coordinated, team-based care that leverages health information technology are more likely to give patients recommended preventive screening and appropriate tests than physicians working in other settings, according to research published today in the *Annals of Internal Medicine*. The study comparing quality of care by physicians using a delivery model known as the patient-centered medical home (PCMH) to care from physicians in non-PCMH practices provides evidence that the previously unproven but popular model effectively provides care for patients.

"The study showed that primary care physicians participating in PCMHs improved their quality of care over time at a significantly higher rate than their non-PCMH peers," says lead author Lisa Kem, M.D., an associate professor of healthcare policy and research at Weill Cornell Medical College. "The PCMH model combines electronic health records (EHRs) with organizational changes, including changes in the roles and responsibilities of clinicians and staff. It was the combination of EHRs plus organizational changes that was associated with the greatest quality improvement; EHRs alone were not enough."
Fred Goldstein serves as founder and president of Accountable Health LLC, in Jacksonville, Fla., which helps healthcare organizations implement health management programs and provides tools and techniques to engage patients and improve adherence, outcomes and control costs.

He combines his multidisciplinary experience—hospital administrator, general manager of an HMO, founder of a disease management company and president of a population health management company—to address healthcare issues, from operations and mHealth to product and network development.

Fred Goldstein

- Interim Executive Director, Board Chair, Population Health Alliance.
- General Manager, Healthcare USA.
- B.A. degree in zoology, University of California at Berkeley.
- M.S. degree in healthcare administration, Trinity University, San Antonio, Tex.

Population Health News: What was the thought process in moving from a B.A. degree in zoology to an M.S. degree in healthcare administration?

Fred Goldstein: My father was a professor of medicine, but I was never interested in being a doctor. From a young age, the dream was to do shark research, à la Jacques Cousteau. In college during a summer internship at Mote Marine Labs in Florida, I discovered that funding for shark research had dried up so I finished up my degree in zoology and began looking at an MBA. Discussions with my father and others led me to combining science knowledge from the zoology degree with the business background in healthcare to make a difference.

Population Health News: You served as general manager of a Florida-based Medicaid health plan, as well as administrator for several hospitals, and are board chair of Population Health Alliance. How did those experiences lead to the start of Accountable Health LLC?

Fred Goldstein: This background provided different points of view of health and the healthcare system. I could see where each sector had a role—what they were good at—as well as areas that didn’t function well: fragmentation, incentives supporting the status quo, driving right and wrong behaviors and system inefficiencies. Working with Medicaid and my disease management company gave me insights into patient behavior and the socioeconomic factors that influence health, each leading me to think about ways to structure and improve the system.

Population Health News: What do you mean by “accountable health?”

Fred Goldstein: It’s very simple: All sectors of the system need to be accountable, including the patient or consumer, and the focus needs to be broadened to “health” and not just “care.” Both accountability and a focus on healthcare are required if we hope to have a long-term fix to our current and future issues and achieve the Triple Aim.

Population Health News: What roles do disease management and wellness play in population health?

Fred Goldstein: Disease management and wellness, both evidence-guided approaches, are some of the interventions within a broader population health framework. Wellness’s focus on identification of health risks and keeping people healthy reduces the incidence of preventable diseases and will have longer-term impacts. Disease management focuses on individuals with chronic diseases and can show returns in a shorter period. When discussing population health, we also need to think about case management and end-of-life care. It’s really about providing appropriate services and support to everyone regardless of their current health status.

Population Health News: Why is technology important to population health?

Fred Goldstein: Population health is built upon data. Without data, population health management is not possible. Technology provides: 1) the ability to scale services and interventions cost effectively; 2) different and more effective touch points; 3) more and real-time data for identification, assessment, intervention and outcomes measures; and 4) advanced analytic tools including Big Data and Machine Learning that provide for the aggregation and analysis of clinical, behavioral and social data to better understand the consumer, provider and service delivery.

Consumers are rapidly adopting new technologies that dramatically impact how we interact with services similar to banking and retail. We’ll see consumer-driven changes in healthcare, such as mobile access to providers, telemedicine and personal health data.

Population Health News: You mentioned that you foresee “accountable care organizations” becoming “accountable health organizations (AHOs).” What will this evolution look like?

Fred Goldstein: Focusing on “care” will only get you so far. Social and environmental factors play a large role in health. AHOs will be broader, structured models of providers, community organizations, payers, employers, government, consumers and others working collaboratively to improve the health of their community. AHO’s will identify needs and implement strategies not only in the clinical areas, but also in the community. They will develop solutions for issues that are driving poor health but not affected by our healthcare system, such as access to nutritious foods, exercise and safety. It will take an AHO to maximize health at a population level.