Vizient Member Networks

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Organizational strategies for care redesign



Subject matter experts and Vizient members share strategies for care redesign



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Today's healthcare environment demands constant change and evolution, and the case for redesigning care has never been stronger. Patient volumes remain below prepandemic levels while the length of stay remains high, patient throughput across the continuum continues to face bottlenecks, burnout and turnover continue to plague the workforce, and operating margins remain under significant pressure (Vizient[®] Nursing Workforce Intelligence Report, May 2023).

Healthcare executives and c-level leaders in Vizient Member Networks work together to address challenges and improve performance with data-driven thought leadership from Vizient, leading practice sharing and member roundtables.

As hospitals and health systems navigate the future of care redesign, there's value in remaining grounded in the foundational concepts of variance and cost reduction, unnecessary care reduction, clinical restructuring and system optimization, as outlined by Sg2®, a Vizient company, more than a decade ago. This compendium highlights strategies, leading practices and innovative approaches to redesigning care shared by these healthcare executives and leaders, along with Vizient experts, organized in a way that builds upon those foundational concepts but inspired by the need for constant change and evolution. Much like building blocks, these concepts build on one another, with robust foundational work that supports care redesign:



Improve operational efficiencies

Operational efficiencies address patient throughput, optimization of the physical footprint of an organization, technology and improvement of day-to-day operations. At the intersection of any of these complex issues, you will find the workforce which looks much different today than it was a few years ago.



Identify and address variation

Leveraging data can help to identify variations in both care and resource utilization. New ways of looking at and pairing data can be adapted to prioritize areas where care redesign might be most beneficial for patients and resource utilization.



Clinical restructuring

Deploying unlicensed and licensed staff in non-traditional ways along with exploring virtual care models are important components of redesigning care.



System optimization

Organizations that have achieved system optimization have positioned themselves to evolve, adapt and pivot as market dynamics continue to change. Discussions include a culture of innovation and learning, as well as infrastructure to foster ideas from the frontlines, as key factors to remaining agile in a dynamic environment. Improve operational efficiencies

The balancing act of remaining agile when it comes to staffing and patient throughput while reducing variation in care and resource utilization has experienced greater turbulence in recent years. Improving operational efficiencies is a foundational building block on the journey toward care redesign.

These strategies, leading practices and innovative approaches address patient throughput, optimization of the physical footprint of an organization, technology and improvement of day-to-day operations. At the intersection of any of these complex issues you will find today's workforce looks much different than it did a few years ago.

Optimize patient access and flow—Identify and address opportunities to reduce avoidable admissions, move care outside of the inpatient setting, streamline inpatient flow and facilitate an efficient transition to the post-acute care setting.

Embed flexible staffing and scheduling models—Leverage data for effective scheduling. Predictive analytics allows for the census by mode, floor or staff to predict scheduling months in advance in some organizations. Advanced scheduling facilitates time to build pipelines, right-size float pools and develop staffing incentives.

Partner to enhance the workforce experience—Organizations have approached supporting the workforce in new ways, leveraging partnerships within the healthcare organization as well as outside of the organization and in the community. Support and engagement of the workforce begins before employees are hired (Figure 1 Care model redesign, Member Networks publication, 2022).

Figure 1: Supporting the workforce through innovative partnerships

| Partnership area | Pre-hire | Hire | Retain | Engage |
|-------------------------------------|--|---|--|---|
| Outside the healthcare system | Expand pipeline by addressing known barriers to program enrollment through academic – practice partnerships Engage with grade schools, high schools, community colleges and graduate programs to enhance the clinical and non-clinical pipeline | Hire members of the community interested in working in non- clinical roles | Engage with faculty to explore creative staffing solutions | Child and elder care resources to support workforce Understand social determinants of health for staff to fully understand how they can be supported (examples: food access, transportation) |
| Within the healthcare system | Employ students to increase capacity; consider apprenticeship programs Provide internships for finance, dietary, environmental services or other departments Recruit based on flexibility and availability | Bring human resources to the applicant to ensure quick/efficient interview and hiring process; consider direct hire or same day offer Ensure translation services are provided for candidates Provide incentives for interns to stay with organizations | Degree advancement and scholarship offering Support professional development and training | Internal travel programs Remote work options |

Member examples

A statewide apprenticeship program increases nursing retention rates

The New Jersey Collaborating Center for Nursing (NJCCN) Statewide NRP was launched in June 2020 and is implemented using the Vizient/AACN NRP™ curriculum to ensure standardization. The NRP is partially funded by the New Jersey Department of Labor and Workforce Development using U.S. Department of Labor guidelines for registered apprenticeship. To date, this NRP has enrolled over 1,900 new graduate nurse RNs and has demonstrated a first-year retention rate of 89.4%, which is higher than the Vizient first-year retention rate of 87.2% and the national overall RN retention rate of 77.5% (NSI, 2023) resulting in a cost avoidance of approximately \$9M (Cadmus & Roberts, 2022).





Source: Vizient/AACN Nurse Residency Program, NSI, Cadmus & Roberts

Deploying a multi-faceted approach to improve nursing engagement and retention rates

To address decreasing retention rates, a healthcare organization implemented a series of strategies that improved retention of RNs by nearly 5% over the course of a year. Implemented strategies include but are not limited to rapid response traveler RNs, international recruitment firms, clinical and non-clinical staff re-deployment, marketing a national recruitment and retention campaign, hard wiring retention recovery protocols, boomerang campaigns to re-hire staff that left the organization, improved onboarding and orientation strategies, increased virtual and live recruitment events with "on the spot" offers, and flexible scheduling for nursing positions.

Source: Vizient Member Networks, CFO Meeting

Measuring effectiveness of community interventions

The Vizient Vulnerability Index provides a look at variation in community vulnerabilities by zip code or census tract. By incorporating data from the Vizient Clinical Data Base (CDB) and the index, providers can identify the relationship between specific neighborhood vulnerabilities and their impact on patient health outcomes and utilization metrics. A health system located in the Midwest identified that maternal hypertension is more common among patients from more vulnerable neighborhoods. As a result of this insight, the organization created a neighborhood resource for maternal – infant health support, to ensure wellbeing and social needs are met at a critical point in both mother and baby's life.

Source: Vizient Member Networks

Assess the use of space and equipment to identify opportunities for growth, optimization and reimagination



Care redesign can be motivated by capital improvement expectations. The shift of care to alternative models and sites presents an important opportunity to create highly reliable and efficient sites of care. Improved utilization of current facilities, without significant capital expense, has proven to be a crucial strategy to achieve excellent financial stewardship. Leveraging available capacity will avoid or defer capital expenses for new buildings. Unused capacity often exists in acute and ambulatory settings.

Revealing unused capacity related to space and equipment presents organizations with the opportunity to redesign the operating model without focusing on individual performance. A focus on building and space utilization to drive care redesign is often a non-threatening approach and a comfortable way to stretch the organization to achieve exceptional improvements. Through Vizient's process of utilization review, we can assess the current state capacity of certain redundant spaces, such as exam rooms, operating/ procedure rooms and diagnostics. A data-driven comparison of capacity to utilization reveals unused capacity.

Member examples

Approaching underutilized space with a renewed focus on optimization

A large medical office building attached to a regional medical center grew over time to become very siloed and inefficient. This situation is typical across many healthcare systems resulting from reactionary expansion projects rather than planned expansion projects. Consolidation of services within this space resulted in 30% of the space to become available for expansion of services. Additionally, the redesign of the space resulted in higher utilization of technology and staff. Some vacant positions that were difficult to fill are no longer needed. The redesign resulted in:

- Increased capacity
- Fewer staff positions to backfill
- More care delivery in less space

- Avoidance of capital investment
- Improved staff and provider satisfaction
- · Increased access for patient seeking care

Source: Vizient Facility Design Solutions participant

Leverage workarounds to identify opportunity for improved efficiency An organization implemented an Enterprise Effectiveness Team that has spent approximately 1,000 hours/shift in direct observation of work patterns and addressing opportunities to eliminate waste. The team identified workarounds and waste and is addressing one at a time (RNs stocking supplies, for example). RNs are empowered to share ideas to address workarounds and report feeling heard by leadership.

Source: Vizient Member Networks, System Chief Nurse Executive Meeting



Eliminate unnecessary documentation



Ensure that documentation requirements that do not support patient care or regulatory requirements are eliminated. A Vizient Member organization reported that RNs experienced a decrease in required clicks, saving approximately 10 – 20 minutes per day.

Assess organizational fit for the adoption of technology—Consider if the adoption of generative artificial intelligence, like ChatGPT, is the right fit for improved efficiency at your organization.

- Vanderbilt University Medical Center utilized ChatGPT to make the review and speed of computer system alerts more efficient; optimizing clinical decision support.
- A new technology has been deployed in a pilot capacity to help providers respond to patient inquiries in online portals.
- UC San Diego and UW Health are some early adopters in piloting technology that drafts messages within the electronic medical record to patients.

Identify and address variation

Building upon operational efficiencies, identifying variations in patient care, outcomes and resource utilization can be a subsequent step for performance improvement efforts. Key insights outlined here highlight both new ways of leveraging transparent data to improve resource stewardship and patient care.

Identify variations in resource utilization



Vizient has partnered with Phrase Health to connect patient-level risk-adjusted outcomes data with provider-level resource utilization data. This provides insight into electronic medical record configuration, decision support and order sets that can reduce variation in care. Insights revealed from data enable hospitals and health systems to act on known opportunities by:

- Identifying variation across medications, labs and other orders by linking them to order sets, departments, specialties and individual clinicians
- Reviewing order set utilization and monitoring corrective adjustments across departments, providers and specialties
- Visualizing how often an alert pops up, which provider types see it most and if individual providers are taking the appropriate actions
- Assessing and monitoring the effectiveness of quality improvement initiatives driving quality measures and patient outcomes
- Visualizing this graphically while also benchmarking performance across other health system comparators, as well as internal stakeholders

Address variations in the scope of practice across clinics—Leverage data to identify variations in scheduling, physician versus advanced practice provider scope of practice and responsibilities of team members.

Member example

Leveraging data to identify variation that drives high costs and inconsistent outcomes

A healthcare organization partnered with Vizient and Phrase Health to analyze utilization of resources. This team set out to explore the frequency of the sepsis best practice alert triggering for patients both in the emergency department and in the inpatient setting. By linking the order sets associated with the best practice alert and pairing that data with Vizient's Clinical Data Base, analysis revealed 9,368 (95%) patients without a diagnosis of sepsis had at a minimum one sepsis inpatient best practice alert shown to a provider. This step in linking data from the EMR to outcomes is critical in understanding the opportunities organizations have to decrease alert fatigue, as well as understand what best practice alerts might be over-triggering. Other insights revealed alerts triggering in the operating room, as well as lower sepsis order set utilization in the inpatient setting than expected, revealing an opportunity to review and improve the process.

Source: Vizient Data Operations

Sepsis best practice alert



Member example

Decreasing variation in scope of practice through annual workforce assessments

One health system leveraged Clinical Team Insights within their sleep clinic staffed with one physician and advanced practice provider (APP). The new patient wait time was over 100 days. When examining the role and responsibilities of the APP, the APP was only allowed to see established patients. The physician was productive in the 80th percentile, and the APP was in the 10th percentile of productivity. Compared to other sleep clinics, 88% of sleep medicine clinics allowed APPs to see new patients, which prompted the organization to ask why. They changed their scheduling practices, allowing the APP to see new patients, reducing the lag time for a new patient to 43 days and increasing APP productivity to the 70th percentile. Leveraging these assessments points organizations to variations and start asking why. 100 → 43 days → days new patient wait time

Source: Vizient Clinical Team Insights

Pursue strategic supplier partnerships



Strategic provider-supplier partnerships may have been viewed as optional pre-pandemic, but such partnerships are now necessary to address emerging industry challenges that impact patient care. Move beyond a transactional perspective by focusing on a supplier partnership that takes a strategic, clinical or operational approach. Consider taking inventory of strengths and weaknesses. Once opportunities have been identified, leverage supplier expertise to help achieve strategic goals and impact patient outcomes.





Network discussions, inquiries, conversations and idea generation across disciplines have focused on reimagining where care is delivered and who delivers that care. While not a new topic, a lot of time has been devoted to reimagining staff roles, paving the way for staff to function at the top of license. With new technology solutions on the market, new needs at the bedside and within clinics have required organizations to think differently about optimizing every member of the team. Additionally, the implementation and assessment of virtual care models has been a big topic of conversation among member networks participants.

Reimagine staff roles



For *unlicensed and/or certified staff* (e.g., CNA, PCT) establish roles and opportunities for these team members to assume tasks that prevent licensed staff from operating at the top of license. Examples include mobility technicians, technology troubleshooting and maintenance, bathing, activities of daily living, specimen collection, removing IVs and more.

For licensed staff some examples include,

- Leverage technology, for virtual care such as virtual nursing and virtual sitters, to retain and engage staff.
- Deploy licensed staff to support RNs during medication administration. This may be operationalized with shorter shifts for RNs to solely support medication administration or incorporate team members from different disciplines to support the process or may include pharmacy technicians or paramedics to assist with medication management.
- Consider the deployment of paramedics in non-emergent clinical settings, such as primary or preventative care and patient education. Additionally, consider deployment of paramedic nurse extenders in the ED.
- Leverage experienced RNs in a mentorship role for new graduates or staff new to the organization, either in person or virtually.
- Utilize supply carts to ensure necessary supplies are available and reduce redundancy.
- Consider re-introducing LPNs to part of the care team in the acute care setting.

Member examples

Introducing new team roles to meet technology demands

A large health system introduced a new role called the Patient Technology Technician (PTT). This role provides support to frontline nursing staff and CNA staff with use and maintenance of technology and medical equipment. The impact of this role has resulted in time given back to frontline staff, facilitating full scope of practice.

Source: Vizient Member Networks, AMC CEO Meeting

Deploying licensed staff in the community

Community paramedics (CPs) are experienced 911 paramedics with additional training in non-emergency medicine. Focus areas include primary and preventive care, chronic disease management, patient education and social determinants of health. CPs practice under the guidance of a physical medical director. CPs address healthcare service gaps in the aging population with rising multi-morbidity and address widening gaps in healthcare services availability in urban and rural areas.

Community paramedic impact opportunity

| Decrease in use of | Real time in home | Patient and family | Positive impact on ACO |
|--------------------------|--------------------------|--------------------|------------------------|
| hospital beds in setting | interventions to enhance | satisfaction | panel management |
| of overcapacity hospital | patient compliance | | |

Source: Vizient Member Networks Upper Midwest Meeting

Enable multidisciplinary team members to provide virtual care



Virtual care can be provided by physicians, RNs, RTs, pharmacists and social workers to fulfill roles and responsibilities that staff at the bedside may be pressed to accomplish. Examples of contributions and support include virtual admission, discharge, education, medication education and reconciliation, wound prevention, documentation, answering patient call lights and deterioration monitoring. Virtual team members provide an added layer of staffing support and quality management.

Leverage technology to alert for the need for intervention. Virtual, or non-virtual (e.g., modified early warning score, or MEWS) deterioration monitoring can be leveraged to flag patients and alert providers on the unit to assess the patient.

Member examples

Applying expertise in a new way: system wide tele-triage

A health system launched an ED tele-triage program staffed by 60 FTEs. The program establishes a patient flow center which manages all transfers within the health system, across nearly 30 sites. Advanced practice providers are able to initiate patient workups and evaluate patients in triage from a remote location. Outcomes achieved include:

- Decreased door-to-provider time and left without being seen rates
- Provider cost-savings through consolidated resource utilization, throughput improvement and cumulative capacity improvements

Source: Vizient Connections Summit

Deploying delivery robots



A chief nurse executive shared experiences and outcomes since deploying delivery robots in the organization. Delivery robots have been leveraged to deliver supplies, and also engage staff. In a 2022 survey of Vizient Members, several organizations identified the use of delivery robots for the following applications:

- Pharmacy deliveries
- Delivery of patient samples to laboratory
- Delivery of hospital equipment and supplies to units
- Both patient and staff engagement

Source: Vizient Member Networks, Chief Nurse Executives Network



Provide care in optimal setting—When working to optimize patient access and flow, levers across the system of care must be accessed to relieve capacity constraints. Foundational strategies to keep top of mind when engaging in this work include a systems approach, utilization of advanced data and analytics and a current assessment of space, technology and workflows. Data from Vizient's Operational Data Base (ODB, Figure 3) highlights constraints in the emergency department as patients still board in the ED for hours before they are admitted. Leveraging benchmarking data aids in the prioritization of improvement opportunities.



Figure 3: Emergency Department boarder hours per patient admitted, N=130

Member examples

Virtual care programs deployed to reduce inpatient days

Sg2 estimates that virtual care programs, including remote patient monitoring, could potentially achieve a 3% reduction in inpatient days from chronic conditions such as hypertension, diabetes and obesity.

Source: Sg2 Executive Briefing, Capacity Crunch: Estimates show trio of care redesign strategies offer potential relief

Growing a hospital at home program

A healthcare organization launched an acute care at home program. The program provides acute inpatient-level care at home. Patients are admitted via the hospital emergency department or inpatient unit. Care is provided through both virtual and in-person visits, and patients a monitored remotely 24/7. Conditions treated in this setting include heart failure, COPD, UTI and other infections. Both clinical and social criteria must be met for patients to be eligible. This reimagination of care has required a strategic approach to supply chain. With a home hospital bed capacity of 30, and plans to grow, there have been over 1,500 home hospital admissions since September 2021 and over 8,000 acute care facility-based bed days saved.

Source: Vizient Member Networks, LISN Meeting

As healthcare organizations build upon elements of care redesign outlined throughout this compendium, they work toward system optimization. Organizations that have achieved this level of optimization are positioned well to pivot, adapt and evolve in the healthcare landscape of today and beyond.

Create infrastructure that supports innovation—Structure, resources and culture that fosters and supports innovation, iteration and encourages the development of new ideas (especially those on the front lines) is critical to evolution.

Member example

Healthcare Innovation Lab

The Lab, part of a multi-site health system, is run by clinicians, data scientists, program managers and healthcare administrators that work together to identify innovations in clinical care delivery. Since inception of the lab about five years ago, 453 ideas have been evaluated, 16 projects implemented, with an estimated benefit to over 50,0000 patients.



Source: Vizient Member Networks AMC CEO Meeting

health management

Leverage data to identify opportunities to support staff—Nearly 20%* of healthcare support workers percent of healthcare support workers reported food insecurity in the past 30 days. The Vizient Vulnerability Index can be leveraged to better understand and meet the needs of the healthcare workforce.

*Srinivasan, M., Cen, X., Farrar, B., Pooler, J. A., & Fish, T. (2021). Food insecurity among health care workers in the US: Study examines food insecurity among health care workers in the united states. Health Affairs, 40(9), 1449-1456. doi:10.1377/hlthaff.2021.00450

Food insecurity in last 30 days





Addressing employee vulnerabilities and obstacles to engagement and retention—Vizient is leveraging the patentpending Vizient Vulnerability Index, initially leveraged to analyze social drivers of health for patients across zip codes, to identify opportunities to better support and engage employees.

Neighborhood vulnerability

Leverage insights from this index to analyze employee vulnerabilities, including the impact on turnover and unplanned PTO.

- Economic
- Education
- Access
- Neighborhood

Housing

Social

Clean environment

Transportation

- Single parents
- Food deserts



The index helps identify social needs at the regional, local and hospital levels



Employee support, tailored to employee needs,supports staff retention and engagement

Member example

Systemwide optimization to address labor and capital constraints

A large health system is on a journey towards 'Systemness', where they act as one organization by operating with greater coordination, integration and productivity. To propel the organization forward on this journey, system is focusing on strategy, structure, culture, and community. The organization is focusing on redesigning the cost structure to minimize indirect cost and optimize use of scarce resources.

Source: Vizient Member Networks, CFO Meeting

A call to action

Charles Darwin said, "It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change." As healthcare organizations are challenged to evolve in new ways, this compendium provides strategies to redesign care, with highlights of how health care executives and c-level leaders in Vizient Member Networks are addressing care redesign. We hope it informs and inspires you as you look forward and continue your care redesign journey.

Vizient, along with your fellow Member Networks organizations, are your partners in building the elements of care redesign, together. For more information, contact our Member Networks team at Membernetworks@vizientinc.com.





Transformative workforce optimization through advanced analytics and pattern recognition

At Vizient, we're harnessing the potential of advanced analytics to drive transformative changes in healthcare workforce optimization. Our approach offers a level of detail and actionable insights that surpass the scope of traditional approaches to productivity and labor cost management.

One of our recent engagements with a large, complex health system exemplifies the benefits of this new methodology. Our comprehensive performance improvement evaluation and rapid project implementation identified a potential \$20 million in labor savings. But the distinguishing feature of our approach was the deep insight we could provide about the main drivers of these opportunities within the healthcare system.

Our advanced analytics not only validate the true scope of savings opportunities but also identifies the contributing factors within each department. This granular approach provides organizations with tangible solutions to unlock these savings and creates a pathway for sustainable performance improvement.

Supporting our endeavor is the Vizient Workforce Technology Suite that offers a continuous, interactive visual analysis of productivity, supplemented by insights into staffing and volume patterns. It highlights potential areas for improvement and allows for in-depth examination of the root causes that affect each department's productivity and labor costs.

An added advantage of our advanced methodology is its seamless integration into budgeting processes. We've been able to translate these benchmarks into operational targets, providing healthcare leaders with a precise, actionable roadmap for improved performance and immediate budget integration.

By merging the strength of traditional methods with innovative data analytics and pattern recognition, we believe we're shaping the future of workforce optimization in healthcare.

Source: Vizient Total Performance Management Engagement

Additional resources

- Read: An improved supply chain means higher savings for Baptist Memorial Health Care
- Read: Optimizing patient access and flow: strategies to improve capacity
- Click here to learn more about the care redesign collaborative opportunity that starts in September 2023.
- Register: Informational webinar for collaborative on healthcare sustainability, August 23.
- Register: 2023 Vizient Performance Improvement Series
 - Reducing Length of Stay to Improve Capacity, September 13
 - Strategic Supplier Relationships, October 11
 - Care at Home, November 29
- Access the Vizient Clinical Data Base (CDB), the definitive healthcare analytics platform for performance improvement. CDB provides high-quality, accurate and transparent data on patient outcomes — such as mortality, length of stay, complication and readmission rates and hospital-acquired conditions — that enable hospitals to benchmark against peers; identify, accelerate and sustain improvements; reduce variation; and expedite data collection to fulfill agency reporting requirements.
- Access the Operational Data Base that provides hospitals with transparent, comparative insights on their operational characteristics to support performance improvement, reduce costs and pinpoint best performers. Our transparent data and benchmarking capabilities can also be used to make informed decisions about supply utilization, employee productivity and budgeting.
- Learn more about how Vizient experts work with hospitals to develop strategic plans that enhance capital, facility and construction spend management. Our solutions deliver the right capabilities at the right time, tailored to your needs and aligned with your goals.
- Learn more about how Vizient support workforce optimization and engagement.
- Access Vizient blogs that cover clinical, quality, operational, analytics, pharmacy and supply chain topics.
- Vizient's podcast channels are dedicated to critical issues you face: healthcare strategy, performance improvement and of course, patient care. Listen here.



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Learn more about Vizient Member Networks **online** or contact **MemberNetworks@vizientinc.com**.

As the nation's largest member-driven healthcare performance improvement company, Vizient provides solutions and services that empower healthcare providers to deliver high-value care by aligning cost, quality and market performance. With analytics, advisory services and a robust sourcing portfolio, we help members improve patient outcomes and lower costs.

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