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Community Health Center of the Future: A Framework

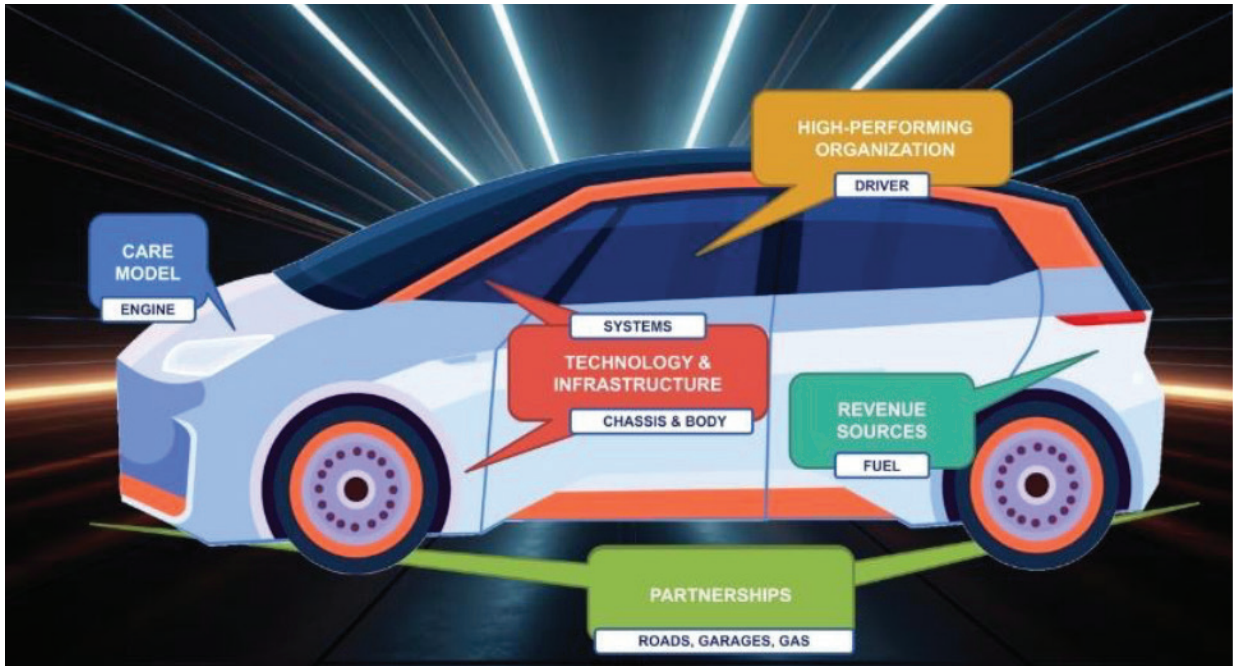
By Christian Milaster

Founder & CEO

Ingenium Digital Health Advisors

**“The Problem in Healthcare is not the Lack of Innovation.
The Problem is the Slow Pace of Innovation Adoption.”**

— Christian Milaster



Healthcare Center of the Future: A Framework

Community Health Centers, most commonly known by their government acronym FQHC (Federally- Qualified Health Center), are one of the key pillars of America’s healthcare safety net. Often defined by serving at least 25% of uninsured patients as part of their patient mix, these organizations play a critical role in the communities they serve.

The first of these organizations were created almost 60 years ago and have historically provided very traditional primary and behavioral health care to a very underserved population. With dwindling government funding, an increase in competition, even in rural areas, many community health centers (CHCs) are rethinking their strategy that ensures not only their survival, but allows them to thrive in the communities they serve.

As CHC leaders strategizing how to best prepare their community health center for the future, they are pondering questions like the following:

- How can we improve patient outcomes through more effective patient care approaches?
- How can we bolster financial sustainability through novel business models and more diverse revenue sources?
- How can we strengthen our mission through new relationships within and outside our community?
- How can we succeed through the judicious and prudent use of innovative digital health technologies to succeed?

A Blueprint for the Future

In 2022, the Mid-Atlantic Telehealth Resource Center (MATRC) convened a group of health center leaders, representatives of healthcare government entities, national telehealth resource center leaders, and community health center experts to create a blueprint to offer Community Health Center leaders a valuable, pragmatic guide on how to prepare for and

transform their organization into a “Health Center of the Future”.

Guided by the objective to create a “cohesive set of comprehensive insights and pragmatic recommendations across a wide spectrum of elements that describe the health center of the future coalescing the diverse expertise of a multidisciplinary team.”, the team set out over a number of months to tackle this ambitious goal.

Just like “all models are wrong, but some models are useful”, the same logic applies to a framework such as the one for the Health Center of the Future. In no way can a framework represent the complexities and intricacies of a Community Health Center.

But that also wasn’t the goal: Rather, the elegance of the model lies in simplifying the complexities of reality to make them easier to manage, easier to plan — and easier to act on.

The Framework’s Core

At the core of the framework are three key elements that define the fundamental but also the innovative aspects of what a Community Health Center of the Future is made of:



Community-Focused Care Model

This element of the framework recognizes that a care model must be built around the needs and the preferences of the community. A future-proof care model must address the population health needs of the community — informed and guided by actual data.

In addition, a modern care model recognizes the patients’ traditional preferences for trust and quality, but also the more recent desires of “[the modern healthcare consumer](#)” for value and convenience. Especially the convenience aspect must be reflected, e.g., through virtual and asynchronous care delivery modalities in a hybrid environment, a.k.a., [telehealth for population health](#).

Enhanced Partnerships and Relationships

According to the second key element of the framework, at the heart of a sustainable Community Health Center of the Future lies a web of partnerships and relationships with partners within and beyond the community. With dwindling resources, partnerships and alliances create synergistic effects that amplify each partner’s unique abilities where 1 + 1 equals 3 or more.

As Einstein quipped: “The problems that exist in the world today cannot be solved by the same level of thinking that created them.” With our continuously improving understanding of the “Vital Conditions” that contribute to people’s health and well-being, it is clear that one organization cannot “go it alone”. The solution lies in strong relationships and partnerships with individuals and organizations. This includes, for example, a strong Health Center Board, partnerships with “social service” providers, and mutually beneficial sharing of expertise and insights with others that are serving the same population, etc.

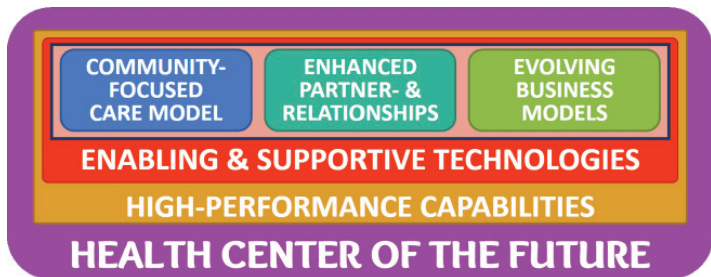
Evolving Business Models

While Fee-for-Service reimbursement, through the prospective payment system (PPS) rate, is still the primary drive of revenue, many health centers have branched into other revenue streams, including pharmacy-based services (including 340B), value-based care arrangements, or grant funded opportunities.

To survive in the long run, without jeopardizing the mission of FQHCs to serve the uninsured and underinsured on a sliding scale, community health centers must develop sustainable alternative revenue streams, such as outcome based, capitated payment models for subpopulations, direct to consumer services, or arrangements with the private sector.

Expanding Beyond the Core

While the focus on these three core elements are pivotal to a successful Health Center of the Future, they are in themselves not sufficient. Rather, two fundamental elements that will enable the success of these three elements are missing to make the framework complete: Enabling and Supportive Technologies and High-Performance Capabilities.



Enabling and Supportive Technologies

As mentioned in the descriptions above, each core element requires (and can significantly benefit from) technologies that enable community-focused care models, enhanced partnerships and relationships and evolving business models.

While Community Health Centers have long used technology, mostly for managing operations and the revenue cycle, many CHCs are only just now beginning to employ more “modern” technologies such as data analytics and, mostly fueled by the Covid-19 health crisis, video visits. Many health centers also had in recent years brief, grant-enabled flirtations with Remote Physiological Monitoring, though in most organizations these programs never went beyond any initial trials.

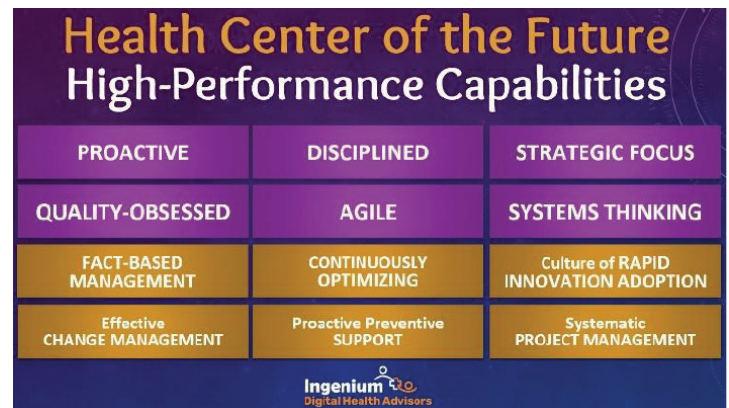
To prepare a Community Health Center for the future, leaders must realize that technologies, especially digital health technologies, are the key to enable and support new care models (and care delivery modalities), open the door to new kinds of partnerships and business models.

Since many leaders’ minds quickly turn to technology as the first and most important ingredient to prepare a health center for the future, it is important to emphatically emphasize that based on the collective expertise of all involved in this endeavor, the consensus was clear:

Technologies are only a means to an end and by themselves cannot create or ensure a Community Health Center’s future.

Technologies can, however, create novel opportunities that improve outcomes, create new revenue streams, increase clinician productivity, attract new patients, enable partnerships with employers and schools, etc., which we will explore in more depth below.

High-Performance Capabilities



But even the elements or the core model and the innovative enabling and supportive technologies will not be sufficient to ensure sustainable success.

As we have seen manifest in virtually all other service industries for decades, what is needed

to complete the model and make all the other elements work (and work well together) is the ability by the leadership team, the clinicians, and the staff to achieve a high level of efficiency and effectiveness, a level of excellence, of high performance.

And therein lies one of the biggest challenges of transforming a traditional community health center into a health center of the future. The same level of thinking, the same style of working will, simply put, not cut it.

But it can be done and it has been done – as one amazing community-focused health center has demonstrated over and over again, year after year for multiple decades: The [Southcentral Foundation in Alaska](#), a community-focused healthcare system serving the Alaskan Native and American Indian people.

In a [future article](#) we will explore the whole set of high-performance capabilities which you can see in the graphic above.

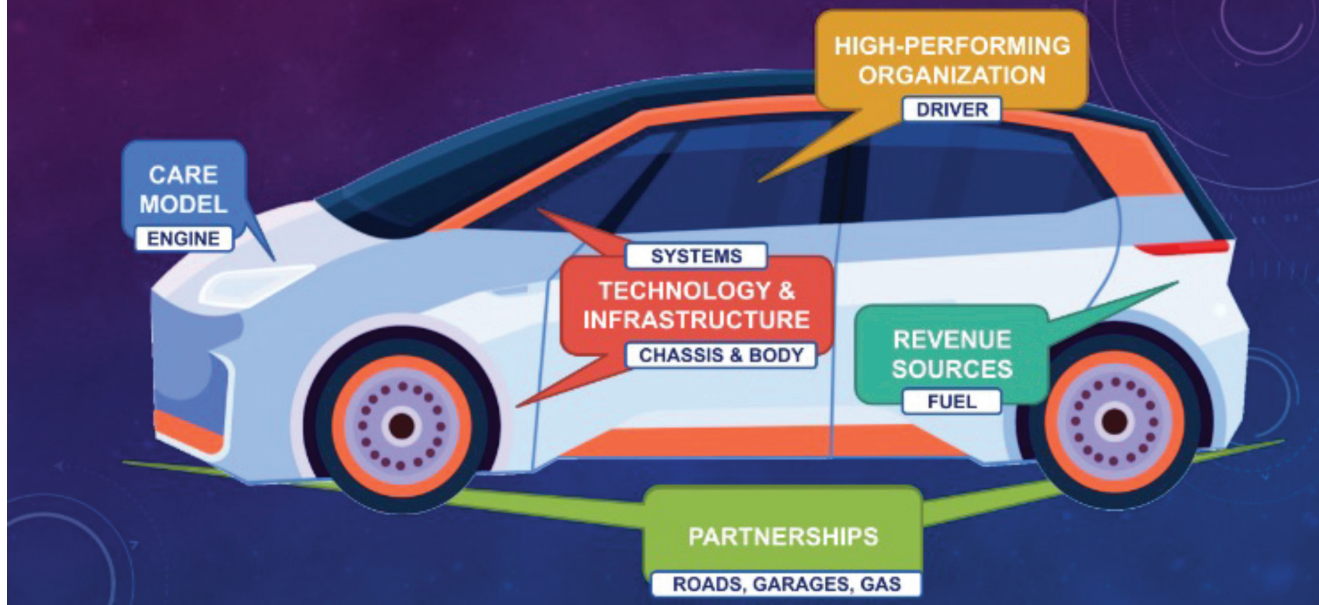
A Model for the HealthCARE Center of the Future

When you want to make a long journey, especially one into the future, you are best served by a car that is well equipped, like the one below:

In our model, the **Community-Focused Care Model** is the Engine and the **Evolving Business Models** are the Fuel. The **Enhanced Partnerships and Relationships** are the environment in which the car operates, whereas the **Enabling and Supportive Technology** is represented by the systems and the chassis.

And at the steering wheel is the **high-performing organization** – because even the fastest and best equipped car will not go very far without a qualified driver.

HEALTHCARE CENTER OF THE FUTURE



Healthcare Center of the Future: Enabling and Supportive Technologies

For Community Health Centers to chart a course for the future, last week we shared a Framework for the Health Center of the Future developed by a multidisciplinary team brought together by the Mid-Atlantic Telehealth Resource Center (MATRC).

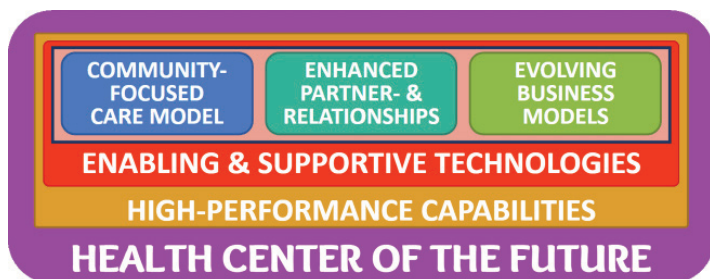
At the core of the framework are **evolving business models** that leverage **enhanced partner- and relationships** and a **community-focused care model**.

While this multifaceted approach can provide the engine, fuel, and infrastructure for a successful health center, by themselves they do not constitute a blueprint for the future. It is only through the pursuit of two additional key concepts that health centers can transform to be ready for the future: Enabling and Supportive Technologies and High-Performance Capabilities.

In today's article, we'll cover the first of these two:

Enabling and Supportive Technologies

For many years, Community Health Centers have used "supportive technologies" to automate or scale their core operations. These technologies, such as the EHR or revenue cycle management solutions, today represent table stakes in healthcare that no longer are considered modern or innovative.



For too long, Community Health Centers have treated the investment in and the support of technology like a utility or custodial services, thereby missing the immense possibilities to create clinical, financial, or strategic advantages.

As a fundamental mindset shift, leaders taking their organizations on the journey to become a **Community Health Center of the Future** must clearly declare and treat technology as a gift that enables the implementation of innovative **business models**, that creates opportunities for better **partner- and relationships**, and opens the door to a novel **community-focused care model**.

Technology can no longer be shunned as “the necessary evil” to support health center’s operations. Rather, technology should be revered as the opener to unprecedented opportunities, as the enabler of new business and new care models.

Through technology, Community Health Centers can offer novel approaches that improve health outcomes, create new revenue streams, increase clinician productivity, attract new patients, enable partnerships with employers and schools, etc.

The World of Health Center Technologies

To explore and evaluate a suitable set of technologies to become a Health Center of the Future, it is helpful to understand the vast landscape of health technologies through segmentation.

In its simplest form, there are two basic sets of healthcare technologies that healthcare organizations employ: Practice Technology and Patient Technology.

Practice Technology helps to run the practice and its operations. This includes the phone system, the scheduling system, the email system, the billing system, etc. While some of it impacts the patient indirectly or sometimes even directly, the primary purpose of practice technology is to improve the efficiency of a health center’s operations.

Patient Technology is intended to benefit the patient directly or indirectly. Many of the technical innovations over the past 15 years have focused on patient-facing and patient-affecting solutions.

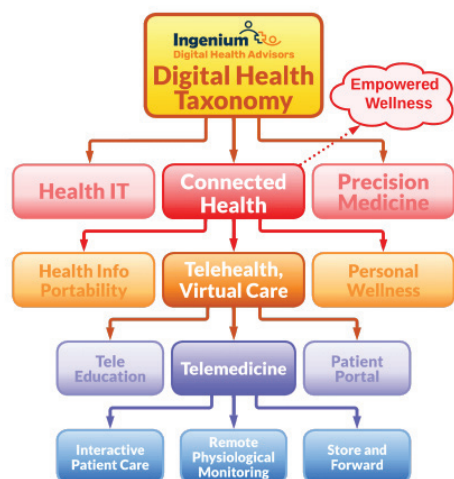
While much efficiency and cost savings can be gained from optimizing the practice, the true game changing opportunities lie in the domain of **Patient Technology**. When we look at the three core elements of the Health Center of the Future, it is mostly that domain that can offer the greatest preparation for the future.

A Digital Health Taxonomy

A large portion of today’s technologies that captivate the interest of community health center leaders is the domain of “**Digital Health**”.

To understand the potential of what Digital Health can do to enable the various elements of the “Health Center of the Future”, we first must differentiate the various “flavors” of digital health.

The following diagram is a simplified, hierarchical taxonomy of the various digital health terms that are in use today. As a starting point to understanding the various elements, here are brief definitions of the various terms depicted.



Digital Health

Digital Health is the overarching term for all technologies used in healthcare. Specifically for healthcare delivery organizations such as community health centers, digital health is the use of technology to improve the efficiency and efficacy of care decisions, care delivery, and ancillary healthcare processes.

Health IT

The traditional collection of healthcare technologies, such as electronic health records, clinical decision support systems, enterprise image management, revenue cycle management solutions, etc. Most of the practice technologies fall under this umbrella.

Precision Medicine

Precision Medicine (also sometimes referred to as individualized or personalized medicine) are technologies that enable the tailoring of treatment to the patient’s unique specific biology. Examples include custom-fabricated implants, T-cell treatment, or 3D bioprinting.

Connected Health

Connected Health is a vision for Empowered Wellness. It transcends episodic care and takes a more comprehensive, long-term view. In a Connected Health world, providers, caregivers and patients have access to the right information at the right time in the right form to make better decisions.

Connected Health not only connects providers to patients (as in Telehealth), but also consolidates health-relevant information from multiple sources inside and outside the system, to inform decision making. Ultimately, better outcomes are about better decision making — including the decisions patients make.

Connected Health is the vision of knowledge-empowered care: A fully-connected healthcare system where patients and providers can easily connect with one another regardless of their locations — doctors connecting with patients, generalists connecting with specialists, and caregivers connecting with loved ones. It’s a system where all pertinent information (patient condition, health history, treatment options) is readily available to facilitate quality decisions.

The step from Telehealth to Connected Health is a big one and an evolution long in the making. No longer will technology be driving care (as did telecommunications technology), but rather the prefix “connected” shifts the focus to relationships: closeness between people, interactions among systems, and connections between bits of information (soon made more accessible through AI).

Telehealth (or Virtual Care)

While there are fancier and longer definitions out there, at its core, Telehealth is simply **“delivering care at a distance”**. Telehealth is technology- enabled communication with patients who are not right next to the doctor. This includes education of patients at a distance

(TeleEducation) as well as giving patients access to a variety of self-service options, such as reviewing clinical notes, scheduling appointments, paying bills, or refilling prescriptions through a **Patient Portal**.

In most contexts, **Virtual Care** is synonymous with Telehealth, though that term was more frequently used by the media to focus on video visits and telephonic care.

Telemedicine

While I often use the terms Telehealth and Telemedicine interchangeably, I still prefer using Telehealth for the overarching notion of care at a distance, with telemedicine being a subset focused on “**practicing medicine at a distance**” to describe the interactions of clinicians with patients, including examination, assessment, consultation, and treatment.

At the lowest level of the taxonomy, Telemedicine breaks down into three common subsets:

Interactive Patient Care, which includes video visits, tele exams, but also asynchronous secure texting. I.e., any technology-enabled bi-directional communication between clinicians for the purpose of delivering patient care.

Remote Physiological Monitoring, the continual and periodic collection and transmission of key vital signs including weight, blood pressure, pulse, oxygen saturation, temperature, or blood glucose.

Store & Forward, the long-time tried and true transmission of key data about the patients condition for future review by a clinician, ranging from electronically transmitted EKGs (including via fax) to photographs of skin lesions or other visual or audio-visual recordings.

For more information on the digital health taxonomy, please see my [white paper on the Ingenium Digital Health Taxonomy](#) or articles on [the various aspects of Digital Health](#).

Beyond the Telehealth Terminology

While an understanding of the various technologies involved in enabling and supporting the Community Health Center of the Future is important, it is by itself not sufficient.

In future installments in this series we will explore

- Guidance on creating a culture of **accelerated adoption of Digital Innovation** to create and maintain competitive relevance in this world of fast-paced technology innovation.
- The importance of adopting a mindset of **Information Management** to enable data-driven decision making and management by facts.
- A systematic approach to **selecting, validating, implementing and supporting technologies**, including governance, change management, process & workflow design, training, etc.
- Illustrative examples on using technology to enable **community-focused care models, enhanced partner- and relationships, and innovative business models**.

Enabling the Care Model of the Future

While it is beyond the scope of these articles (and even beyond the scope of the MATRC-sponsored workgroup) to fully define the hallmarks of a “care model of the future”, here are three examples of where technology would enable the creation of an evolved care model.

Technology-enabled expansion of care services

In today’s world, the majority of care is (still) delivered through one-on-one, real-time in-person clinician-patient encounters, though group treatment options are available in some circumstances.

A technology-enabled expansion would not only take the delivery of care outside of the exam room (a.k.a., video visits), it could also eliminate the need for real-time interaction (e.g., asynchronous secure messaging) or even replace much of the standardized elements of care (e.g., the explanation of a diagnosis, or preparation for a surgical procedure).

Furthermore it is conceivable to enable proactive pathways through near-real-time feedback loops and to seamlessly bring specialized multidisciplinary teams to the patient, vs. the reliance on a single clinicians.

The opportunities for better care and hyper-optimized clinician time are technologically within reach.

Technology-enabled virtual team-based care

A few years ago, the concept of the patient-centered medical home (PCMH) swept through the healthcare world and brought a new meaning to the age-old saying that it takes a village to care for a child - and definitely a multidisciplinary team to care for a sick villager.

But the complexities of quality communication across a multidisciplinary team were challenging enough within one co-located team, given the rigidity of supportive technologies to accommodate the myriad of unique circumstances. In addition, once patients received or team members delivered care virtually, the timely exchange and maintenance of the integrity of information became daunting and close to impossible.

With the availability of technology solutions that support “virtual team-based care” in a much more flexible, customizable way, new opportunities opened up to not only treat patients remotely, but to also integrate super-specialized team members that are not embedded in the core team of the PCMH.

Technology-enabled Care Coordination

Treatment in the 21st century rarely happens in isolation provided by a single clinician. Rather, a multidisciplinary approach involving specialists (from endocrinologist to cardiologists), therapists (from psychological to occupational), and technicians (from phlebotomists to sonographers) is required to achieve the best possible outcome.

Once again, the complexities of timely and accurate information stand in the way of scalability (treating more patients, in more geographic areas), comprehensiveness (involving even more specialists, therapists, or technicians), or simply quality care.

With computers being predestined to dealing with complex and vast amounts of information, innovative solutions can enable timely, comprehensive, and high-quality care coordination. Yet those solutions cannot stand alone, making their use inefficient and prone to error. Rather, fully EHR-integrated solutions are needed that are optimized for the desired care coordination workflows in order to be “future proof”.

Technologically enabling Value-based Care

Software-based tools for performing analytics and evaluating elements of a value-based contract or care delivery model

Some tools available. They are expensive both to license and implement. Each implementation is custom and must be specifically configured to measure and score relevant elements of a given contract or goal.

Process and outcome-based “values” are definable/configurable at the clinic or health system level and reported using commonly understood algorithms and formats. Scores and reports from different systems are compatible/comparable/standardized. Common “values” can be easily configured (e.g., “Second next available appt” or “Percent of diabetics with A1c of xx”).

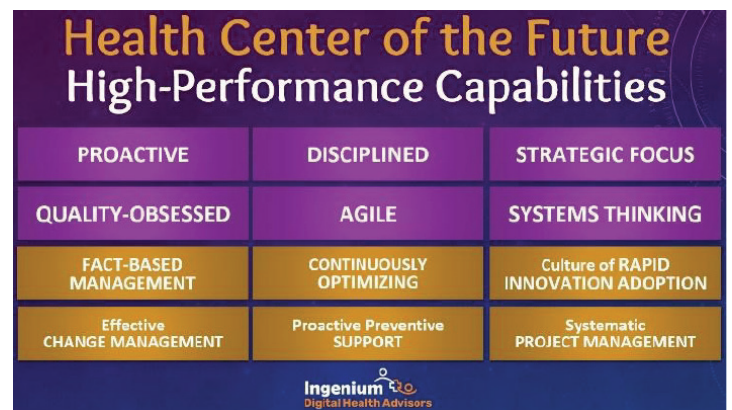
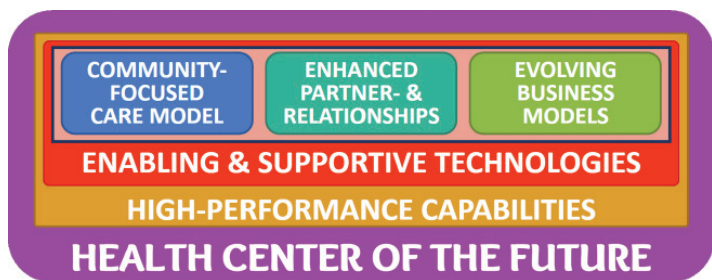


Do You Have What It Takes? by Kathy Letendre

In partnership with both the Mid-Atlantic Telehealth Resource Center (MATRC) and the National Association of Community Health Centers (NACHC), we have guided the design and dissemination of a framework for becoming a Health Center of the Future. In the coming months, NACHC will share additional educational and supportive resources for health centers in this endeavor.

base of the framework and are key to long-term success and resilience.

As depicted in the diagram below, the first six are high-performance leadership traits. The other six are high performance organizational capabilities. I will elaborate on a few of each.



This article is the third part in a series. Christian described the [overall framework](#) and then highlighted several of the [enabling and supportive technologies](#).

Leadership Characteristics, such as these, are often the difference between wild success and average performance:

I'll focus here on the high-performance capabilities. These key building blocks sit at the

Disciplined

The premier model for organization excellence is still the Baldrige criteria for performance excellence. As Jim Collin's described it: "I see the Baldrige process as a powerful set of mechanisms for disciplined people engaged in disciplined thought and taking disciplined action to create great organizations that produce exceptional results."

Indeed, disciplined thinking, planning and execution are hallmarks of high-performance. Leaders who develop and hone the characteristic of discipline in themselves and their leadership teams are better poised to read shifts in their market, to methodically & rapidly evaluate new opportunities, and to enact the plans they develop in order to produce improving results.

Quality-obsessed

High-performing leaders are not satisfied with good enough. They are continuously raising the bar, striving for better clinical outcomes, increased patient engagement, and virtual ways to stay connected with patients for continuity of care.

They measure what matters, look for patterns, uncover root causes, and implement improvements.

Quality is the name of the game. Quality in every aspect of their clinical and operational work.

System thinking

High-performance leaders look at problems and opportunities from a systems point-of-view. They look upstream and downstream to determine how a change here will impact parts of the system there. They view their organizations, as well as their relationships with partners and collaborators, as a cohesive and interconnected web. They recognize that all processes need to work in harmony for maximum effectiveness and efficiency.

Organizational Capabilities, such as these, are key differentiators of performance:

Fact-Based Management

I have written a number of pieces on the critical mindset and skillset of being a data-driven leader. When we measure what matters, the facts become key drivers of our decision-making, improvement efforts, and strategic priorities.

Too often, organizations short change the effort needed to manage by fact. They rely all too often on managing by opinion or simply by experience. The best organizations manage by fact.

Effective Change Management

As they say "The only constant is change." And yet we often fail to recognize the impact on people and systems when we do not thoughtfully orchestrate the timing of the change process. Changes are thrust upon staff without a well-considered plan, sufficient advance communication, nor adequate time for learning a new procedure before instituting the next one.

And while our couple dozen change efforts may not seem unruly, marry that with the dozens of changes coming from other angles, other departments, from regulators and insurers and the like. And then you will see the wisdom of conscious change management.

High-performance organizations are masters in change management. The ADKAR® model is a wonderful construct.

Culture of Rapid Innovation Adoption

My colleague Christian has been quoted as saying: The problem in healthcare is not innovation; but the slow pace of [innovation adoption](#).

Health centers and others in the healthcare ecosystem are well-served to establish a systematic approach to scan for and evaluate pertinent innovations. Knowing which ones to adopt to enable your organization to meet or even exceed your



About Christian Milaster

Christian Milaster optimizes Telehealth Services for health systems, health centers and clinics; and advises Digital Health startups and established Digital Health solution and service providers. He is a Master Builder of Digital Health and Telehealth Programs and the Founder & CEO of Ingenium Digital Health Advisors, a boutique consultancy focused on enabling the delivery of extraordinary care.

Born, raised, and educated as an Engineer in Germany, Christian started his career at IBM Global Services before joining the Mayo Clinic in Minnesota, where he worked for 12 years in various roles before launching Ingenium 10 years ago in 2012.



This attestation confirms the collaboration between the National Association of Community Health Centers (NACHC), the Mid-Atlantic Telehealth Resource Center, and Ingenium Digital Health Advisors on the publication titled "The Community Health Center of the Future".



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