Magazica

Issue July 2025

Health
Hope, Happiness

Our First Anniversary

Revolutionizing Cardiac Surgery with a Heart:
Dr. Tirone David on Surgery, Science, and Lifelong Learning

How Sustainability is Reshaping Clinic Operations

The Future of Health Advertising

Seeing Clearly, Thinking Sharply: The Overlooked Link Between Vision and Cognitive Health
BY DR. DAVID SCHWIRTZ

And plenty more to explore on *Magazica*

How Clinics Are Shifting from Treatment to Wellness

The Canada's Walk of Fame's Inductee

DR. TIRONE DAVID

Table of Contents

Magazica

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One Year of Magazica:
From a Spark to a Movement

By Suman Dhar,
Editorial Head, Magazica

A year ago, I couldn't have imagined how one conversation between two instructors would evolve into something with so much heart, reach, and resonance. Magazica began with an idea—a simple but bold one: to create a platform where health communication could be more human, more honest, and more meaningful. It wasn't launched with noise or hype. It grew quietly, issue by issue, through the efforts of people who believed in what it stood for.

As the person fortunate enough to lead content at Magazica, I've watched this project grow from a handful of documents and calls into a living, breathing publication. But the foundation was laid by ***Ashkan Pourzeinali***, our founder, who had the foresight to see a gap in the way health stories are told, and a pathway to bridge it. He didn't push with ego; he led with clarity and conviction.

Ashkan brought together the first contributors, shaped the editorial philosophy, and mapped out the operational flow. Then came ***Moe Nabi***, our technology director, who took on the challenge of building not just a website, but a digital identity. And I stepped in to develop the content framework and voice of the magazine —one rooted in trust, warmth, and truth.

It All Started with a Spark

I first met Ashkan as a fellow instructor. We exchanged classroom tips, swapped ideas, and eventually had long, thoughtful conversations about the role of media, education, and purpose.

One day, amid our casual talks, he shared an idea: a digital health magazine that would make research relatable and give health professionals a place to share their knowledge with care, not jargon. That spark turned into a plan, then a project, then a publication.

Planning That Keeps Us Steady

Ashkan didn't seek the spotlight—he focused on building a workable structure. From bringing in early contributors to helping navigate initial challenges, his approach was steady and pragmatic. He supported the team in shaping a direction that was clear and manageable, even when timelines were tight or resources limited. The early planning practices he introduced helped lay the groundwork for the monthly rhythm we now follow.

Design That Breathes

Every issue of Magazica looks and feels cohesive because of Moe. His design work goes beyond aesthetics—it communicates mood, tone, and space. He treats whitespace like silence in a conversation and fonts like tone of voice. Moe doesn't just "make things look good"—he builds experiences that welcome readers in. Magazica's look is distinct, and that's thanks to his talent.

Our First *Anniversary*

Volunteers Who Turn Vision into Velocity

Like many passion-driven initiatives, Magazica is fueled by volunteers who believe in the mission.

- **Anthony Testa** joins us weekly, offering creative energy to the content desk and helping shape new stories.
- **Mohammadreza Alavi** works alongside Moe on SEO strategy to ensure the designs don't just look good—they get found too.
- **Divyam Bazala** and **Habbis** assist us with outreach and partnerships, quietly transforming cold leads into collaborations that keep us growing.

They do this not for fame or pay—but for the purpose, the learning, and the quiet joy of building something meaningful.

Twelve Months of Milestones

1. Launch Day. Our first issue went live in July 2024—just after Canada Day. A symbolic start for a platform rooted in health and community.
2. First Contributors. We owe our early momentum to doctors and professionals who generously offered their voices when we had little more than a concept.
3. From Articles to Audio. We expanded to a YouTube channel to give voice and visibility to our stories.
4. Relentless Publishing. We've delivered an issue every month since we began—no breaks, no excuses.
5. Official Nonprofit Recognition. We became a member of the Ontario Nonprofit Network, reinforcing our commitment to impact, not income.

What the Next Year Demands

Magazica has always aimed to serve as a bridge—connecting health professionals, researchers, and patients in a shared space of learning and dialogue. That bridge now carries more traffic. Our responsibility has grown, and so has our ambition.

In the coming year, we plan to introduce new formats, deepen our editorial scope, and bring more diverse voices to the forefront. Our core values—credibility, community, and clarity—will continue to guide every step.

A Note of Gratitude

Ashkan started the fire. Moe gave it structure. I've had the honor of helping it speak. But the real momentum came from everyone who believed in the mission—our contributors, readers, and volunteers.

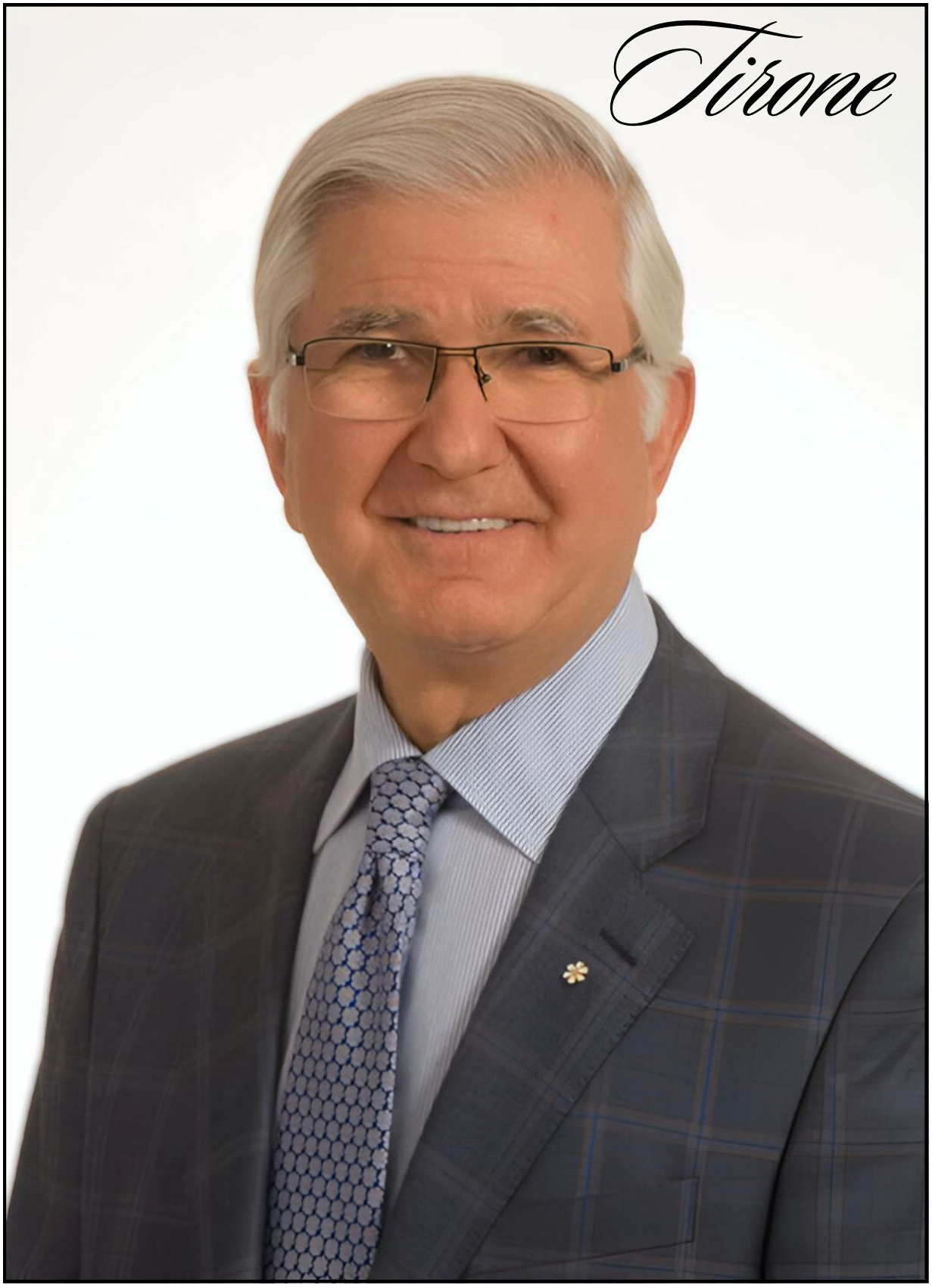
To every person who clicked on an article, watched an interview, gave feedback, or simply supported us from afar—**thank you**. You helped us reach this moment.

Magazica is just getting started. This is Chapter One. I hope you'll stay with us as the story unfolds.


Be Kind to
People on the
Internet

Interview

David Tirone



With a world-renowned cardiac surgeon and a pioneer in cardiovascular procedures

Dr. Tirone David is a world-renowned cardiac surgeon and a pioneer in cardiovascular procedures, credited with transforming heart surgery through innovation and precision. With a distinguished career spanning over four decades, he has performed more than 15,000 open-heart surgeries and introduced 16 groundbreaking techniques that have reshaped modern medicine. A prolific researcher with over 450 scientific publications, he continues to operate at University Health Network's Peter Munk Cardiac Centre in Toronto. A 2025 inductee into Canada's Walk of Fame and a recipient of the Order of Canada, Dr. David embodies excellence, mentorship, and an unyielding drive for medical advancement.

Revolutionizing Cardiac Surgery with a Heart:

Dr. Tirone David on Surgery, Science, and Lifelong Learning

Some people follow the rules. Others rewrite them. Meet ***Dr. Tirone David****, the cardiac surgeon who transformed heart surgery and redefined the pursuit of medical perfection. With over* ***15,000 open-heart surgeries*** *and* ***16 pioneering techniques****, he's not just saving lives—he's reshaping the future of cardiovascular medicine. Guided by curiosity, mentorship, and an insatiable drive to innovate, his journey is one of relentless improvement. This isn't just an interview—it's a rare glimpse into the mind of a master surgeon, a lesson in discipline, and an invitation to rethink everything we thought we knew about heart health.*

Magazica: Dear readers, it's a privilege and an honor to welcome Dr. Tirone David to our

conversation today. Dr. David is an internationally celebrated cardiac surgeon, a pioneer in cardiovascular procedures, and a dedicated innovator in healthcare. With a career spanning over four decades, he has performed more than 15,000 open-heart surgeries, contributed to 16 groundbreaking surgical techniques, and authored over 450 scientific papers. His passion for advancing medicine remains undiminished as he continues to operate twice weekly at University Health Network's Peter Munk Cardiac Centre in Toronto.

He is a 2025 inductee into Canada's Walk of Fame and a recipient of the Order of Canada, embodying excellence and humility. Dr. David's story is one of lifelong learning, mentorship, and an unyielding curiosity that has pushed the boundaries of medicine. Let's dive into the story of a legend who continues to inspire countless lives.

Dr. David, welcome to Magazica.

Dr. Tirone David: Thank you. It's a pleasure to be here.

Magazica: First of all, congratulations on being a 2025 inductee into Canada's Walk of Fame.

Dr. Tirone David: Thank you. It's a wonderful honor.

Magazica: Your career spans decades and is marked by numerous groundbreaking achievements. What was the moment or experience that first inspired your passion and dedication for cardiac surgery?

Dr. Tirone David: Well, my father told me to become a doctor, but I wasn't very keen on the idea at first. Growing up in Brazil, before my teenage years, one of my uncles was a pharmacist. Back in the forties and fifties, pharmacists were very different from today. They were what we called "compound doctors," mixing different substances to create medicines that treated pneumonia, diarrhea, and other ailments.

I was fascinated by the chemical reactions involved. My uncle taught me how to weigh milligrams using ultra-sensitive scales. The idea that you could divide a gram into a thousand parts and measure a single milligram fascinated me. I thought chemistry was my future.

But my father had different plans for me. He said, "No chemistry. We already have a chemist in the family—you're going to be a doctor." In Brazil, you start medical school at 17 or 18, and at that age, you don't know much. In the first two years, you don't see patients—you study basic sciences like anatomy, physiology, and pathology. You dissect cadavers, but you don't practice medicine yet.

At 17, I wasn't entirely convinced about chemistry anymore, so I started medical school —and it was magical. I discovered a part of myself I didn't know existed. I was fascinated by the human body, its physiology, and its structure. Why are our hands shaped the way they are? I learned that the body evolves in an optimized form to fulfill its function—a necessity for survival.

As I progressed, I met my first mentor, Dr.Giocondo Artigas. He was an extraordinary surgeon, a technician unlike any other. I worked at a Catholic hospital, moonlighting to earn extra money. As I observed surgeries, I noticed that while most surgeons required pints of blood for transfusions, Dr. Artigas could perform complex abdominal operations with minimal blood loss.

My father admired Americans, and he encouraged me to come to the United States. I arrived as a surgical intern in New York, and during my internship, I realized that I wanted to focus on blood vessels, the heart, and arteries. After completing my internship, I began searching for a training program that specialized in both vascular surgery—surgery of the arteries and veins—and heart surgery.

I asked him how he did it, and he said, “Because I know anatomy. I know where to cut and where to sew. If you don’t cut blood vessels, they don’t bleed.” It was a revelation. Not all human beings are the same, and I gravitated toward his kind of excellence.

For the next 4 years, I worked with him, and he kept telling me, “If you want to learn beyond what I’ve taught you, you need to move away from Brazil. You have to go to the source where all these operations originated.”

I found the right program, and here I am. I never left Toronto. My journey took me from New York to Cleveland, then from Cleveland to Toronto, where I have remained ever since.

Throughout my career—from medical school to now—I have learned that mentorship is incredibly important. People who guide you in life shape your journey. First, you must respect them. You find someone you admire, someone you respect, and if there is a reciprocal mentor-mentee relationship, they will help direct you toward what you should pursue in life.

Magazica: Yes. We are very thankful to your mentor for guiding you and shaping your career, your growth, and your contributions here in Toronto. As Torontonians, we are grateful to you.

Dr. Tirone David: Mentorship even helps you redefine what you do in life. It's easy to go to work, do your job, return home, and forget about work. But my mentors taught me to think critically. They taught me to ask, "Why?" If something doesn't work well, seek a better answer—but before finding a better answer, you must first have a complete understanding of everything that currently exists in the field. Knowledge is the most important foundation for developing new concepts.

Magazica: Definitely.

Dr. Tirone David: Medicine follows the same principle. The approach I like to use is stepwise: you learn something, master it, then recognize its imperfections. Your goal should be to refine it without causing harm. This requires a delicate balance—being overly aggressive or overly inventive without responsibility can harm the patient. And that's the key—every decision impacts a human being.

I have learned many things through experience—by analyzing what I've done and observing its effects on patients. If the outcome isn't perfect, I try to understand why and modify what needs improvement.

Magazica: So first, you mastered all the available information, then you worked on refining and perfecting the process.

Dr. Tirone David: Yes, that's a great way to put it. You must first understand an object completely—gain as much knowledge as possible—before attempting to modify it.

Magazica: That aligns perfectly with our next question. You have performed over 15,000 open-heart surgeries, which is an incredible feat. Based on your approach of refining knowledge through practice and reflection, what drives your focus and preparation each time you enter the operating room?

> **"SCIENTIFIC ARROGANCE IS THE WORST THING THAT CAN HAPPEN TO US. THE MOMENT YOU THINK YOU KNOW EVERYTHING, THAT'S WHEN YOU BEGIN TO FAIL."**

Dr. Tirone David: First and foremost, surgery requires an intense level of attention and focus. I believe in details—no aspect of patient care is unimportant. From preoperative assessments to diagnostic tests, every step matters. When you offer surgery as a treatment, you must recognize that it exists because there is no better alternative.

Surgery itself is archaic. We take a flawed part of the body, reshape it, remove it, or replace it. But why does that part become abnormal in the

first place? The future of medicine lies in understanding these abnormalities and reversing them chemically and structurally—restoring the body's natural state.

That is where medicine should be heading—not where I am today. But in the meantime, we must continue to keep people alive, functioning, and thriving.

What we do today in surgery might seem completely outdated centuries from now. If someone listens to this conversation a thousand years from now, they might call me an archaic dinosaur, wondering why we resorted to cutting a human body to fix a malfunctioning part. The very idea of creating harm through surgical incisions in order to repair an issue might seem primitive.

Nevertheless, I'm realistic enough to recognize that in 2025, surgery remains the state of the art for treating many conditions. I don't know whether it will take 1,000 years or just 50, but eventually, surgery as we know it will become obsolete.

That said, surgery is, at its core, a type of therapy—it exists because there is no better alternative for addressing a malfunction in the body.

To truly innovate, one must first understand everything that preceded one's work. Only by knowing the full scope of prior knowledge can a surgeon execute a procedure that modifies or improves a malfunctioning part of the body—in my case, the heart.

Throughout my 45-year career, every surgical innovation I've contributed has aimed to enhance function beyond its prior state—whether by cutting, stitching, modifying, or adding tissue to correct abnormalities.

I am highly critical—of myself, my colleagues, and my field. It's part of my personality. But I'm also deeply analytical and open-minded enough to recognize that perfection is unattainable. What I do might be excellent, but it will never be perfect.

Magazica: Imperfection may be unavoidable.

Dr. Tirone David: Perhaps. But if I don't strive for perfection, how can I improve? The only way to make something better is to aim for an unattainable ideal.

That relentless pursuit of perfection is what drives innovation.

My very first innovation happened when I was still a student. A new material, polypropylene, had just been introduced, but surgeons found it too bulky for closing abdominal incisions. In slender patients, the knots protruded through the skin.

I decided to bury the knots deeper within the tissue to prevent them from being felt post-surgery.

That small technique became the subject of my first published paper—something simple, yet profoundly impactful for patient comfort.

Even small technical improvements can make a major difference. Why not pursue them?

Magazica: That's fascinating. Two qualities really stand out—your analytical mindset and your critical approach. They seem to drive your meticulous, detail-oriented decision-making.

I also had a shift in perspective today. Surgery is not just about fixing something—it's about healing and enhancing functionality beyond the patient's preoperative state.

Dr. Tirone David: Absolutely. That's exactly the essence of it.

Magazica: Fantastic. Your approach—being critical of your own methods to enhance outcomes—is universally applicable. Anyone can adopt that principle in their own field.
You're still actively operating and innovating. How do you maintain your focus and energy?

Dr. Tirone David: Twice a week is my official schedule—but there's no such thing as part-time heart surgery.

Years ago, I thought two days a week would suffice. I had gained proficiency; I didn't need to learn new surgical techniques anymore—I just needed to perform them.

But last week, for example, I ended up operating five days in a row. On Friday, I started at 9 AM and didn't leave the operating room until 2 AM. There was an emergency—a patient with multiple previous heart surgeries whose condition was deteriorating. Every part of their heart required reconstruction or re-reconstruction. It was complex.

So those two days often become three, four, or five.

Magazica: That's incredible. It makes my question even more relevant—how do you sustain your energy and focus, especially considering how demanding cardiac surgery is?

> **"SURGERY EXISTS BECAUSE THERE IS NO BETTER ALTERNATIVE– ONE DAY, IT WILL BECOME OBSOLETE."**

Dr. Tirone David: To be honest, it's largely mental. Let me give an example. I told my doctor that I was getting up two or three times a night to use the bathroom. When that happens, you go to bed at midnight, wake up at 3 AM, fall asleep again, and then wake up at 5 AM—your night is essentially over, and you're exhausted the next day.

She told me, "It has nothing to do with your prostate. Forget about your prostate—it's in your brain." I asked, "What do you mean, my brain?"

She explained, "I've watched you in the operating room. You perform 12-hour surgeries without ever leaving to go to the bathroom. Why is that?"

Magazica: That's fascinating.

Dr. Tirone David: The brain produces a hormone called the antidiuretic hormone. For instance, last Friday, I started surgery at 4 PM and finished at 2 AM—10 hours straight. Yet, during that entire time, I didn't need to empty

my bladder, because it wasn't filling up.

My brain produced the antidiuretic hormone, which prevents urine production. This is scientifically sound—it's a natural response. When you're fully engaged in solving a complex problem, your body prioritizes the task at hand, shutting down non-essential functions. That's why I said it is largely mental.

Magazica: That's laser-like focus.

Dr. Tirone David: Exactly. My body, my hormones, everything works in synchrony to execute the job. Of course, the moment I finish the surgery, I immediately have to use the restroom, because now I've relaxed—the patient is stable, the operation is done, and my bladder tells me, "Now is the time."

That's just one example. The brain produces far more than just antidiuretic hormones. It also releases endorphins—natural painkillers. If I have a sore knee or back, I won't feel it in the operating room, because my brain is blocking out everything except the task at hand.

Magazica: Endorphins—sometimes referred to as the body's natural morphine.

Dr. Tirone David: Precisely.

When I step into the operating room, I am transformed. My focus narrows to one thing—the patient and the operation. It's often said in medicine that doctors should not treat close friends or family members, but I have operated on several friends.

Magazica: Really?

Dr. Tirone David: Yes, and they understand how I approach surgery. The moment they are draped for the procedure, they are no longer my friends—they are patients with medical challenges that I must solve. It doesn't matter who is behind the surgical drapes—they could be my wife, my neighbor, or a stranger. I treat them all the same, because my duty is to solve their health problems. They have entrusted me with their care, and I am committed to doing my job.

Magazica: A professor of mine once said, "You must remove emotion from decision-making to achieve excellence."

Dr. Tirone David: That's true, but easier said than done, especially when dealing with life-or-death situations. For instance, sometimes I see a very sick patient and instinctively know—based on my experience—that surgery would be too risky. But the intense desire to help a suffering individual can sometimes override reason.

I must admit, I have made that mistake before. A patient I had first operated on when she was 18 came back to me decades later. She had wanted children, so I initially avoided a more invasive procedure for her. Then, at 45, she returned—her condition had worsened, and other doctors advised me not to operate because she wouldn't survive.

But she was miserable—her quality of life was deteriorating. I chose to operate. She didn't die, but a month later, she wasn't any better than before. The procedure ended up being futile.

Magazica: The desire to help a suffering soul can be powerful.

Dr. Tirone David: Yes, but sometimes it can lead to emotionally driven decisions. One of the most profound hospital mottos I've ever seen was at Padre Pio Hospital in Puglia, Italy. Above the entrance, there was an inscription that translated to, *"A house to alleviate human suffering"*

That is the essence of medicine. Doctors and hospitals exist to alleviate suffering.

Magazica: And you've done that in remarkable ways over your 45-year career—pioneering 16 surgical procedures.

Dr. Tirone David: Out of the 16 procedures I developed, perhaps nine or ten were truly original—ideas that had never been conceived before. The rest were modifications of existing techniques aimed at improving them, pushing them closer to perfection.

Magazica: For those nine or ten groundbreaking discoveries, can you share the story behind one? What motivated you, and what was the thought process behind it?

Dr. Tirone David: One of the simplest but most impactful discoveries happened in 1985.

By that time, it was widely understood that if a heart valve was malfunctioning, the standard treatment was replacement. However, valve replacements were far from perfect—they improved a patient's condition but had several long-term complications. We realized that, whenever possible, repairing a patient's own valve yielded far better outcomes. However, a poor repair was worse than a replacement.

This created a complex, gray area—choosing

between repair and replacement wasn't always clear-cut. As surgeons, it became our responsibility to refine our judgment, moving closer to definitive solutions.

Back in 1985, most surgeons specializing in mitral valve disease could only repair about half of the affected valves. The available techniques were limited.

While traveling, I visited a professor in New York City experimenting with Gore-Tex in a laboratory. He was testing its use for replacing tendons and other fibrous cords in the body. I observed his work and asked if he minded if I attempted to use the material in human heart surgery. He encouraged me to try.

I returned to Toronto and began experimenting, first using Gore-Tex in animal models—six pigs—to understand its effects. Once I was satisfied with the approach, I applied the technique in human surgery, replacing the affected valve structures instead of replacing the entire valve.

I performed the surgery, then waited cautiously. After two to three months, I performed an echocardiogram on the patient—it was perfect. I waited another three months—still perfect.

That gave me the confidence to proceed with another case, and another. Within five years, by 1990, I had performed the procedure on over a hundred patients, with none experiencing failure.

At that point, it was clear—I had stumbled upon something transformative. We published the results and shared them with the international medical community. The technique soon became widely adopted.

The concept itself was simple: replacing a fibrous cord that supports the heart valve rather than replacing the entire valve. Yet it had a profound impact—it saved at least half of the patients who would otherwise require full valve replacement.

Alternative repair methods existed, but none were as durable. Many failed after a few years, while my technique remained effective—as long as it was performed correctly.

This seemingly small modification completely changed patient outcomes for mitral valve repair and eventually proved useful for all four heart valves.

Another significant breakthrough involved the aortic valve. Before 1985, if a young patient—often teenagers or adults in their 20s and 30s—came in with an aneurysm in the ascending aorta, the standard operation was the Bentall procedure. Developed by Hugh Bentall, it involved replacing the entire aorta with a synthetic Dacron conduit and placing a mechanical valve inside it. While effective, it forced young patients to rely on artificial valves for life.

I learned the Bentall procedure and performed it frequently. But one day, I saw something remarkable—a 16-year-old patient's aortic valve was pristine, completely normal. The supporting tissue was failing, but the valve itself was perfect.

> **IF I DON'T STRIVE FOR PERFECTION, HOW CAN I IMPROVE? THE ONLY WAY TO MAKE SOMETHING BETTER IS TO AIM FOR AN UNATTAINABLE IDEAL.**

It struck me—why was I replacing the entire system when only the surrounding tissues were defective?

Instead of following the standard protocol, I decided to replace the supporting structures while leaving the natural valve intact. I didn't tell anyone about the deviation at first—just the parents, who were eager for a solution that would avoid an artificial valve.

Years later, this approach became a recognized surgical technique, preventing thousands of young patients from unnecessary valve replacement.

I monitored the first patient closely for a month, then two, then three. She remained in perfect health.

Magazica: Fantastic.

Dr. Tirone David: Encouraged by the success, I offered the procedure to a second child, then a third. From 1985 to 1992, I performed this new operation multiple times.

This technique was entirely revolutionary, unlike anything that had been done before. Eventually, the procedure was named after me —it became known as the "David Procedure." Though there have been variations over time, the core principle remains: preserving the patient's natural valve when the surrounding tissue is failing.

Magazica: That's incredible.

Dr. Tirone David: This innovation has had a major impact on life expectancy and quality of life for patients. By preserving their natural valve, they avoid complications associated with artificial replacements, leading to better long-term outcomes.

Magazica: Hearing these stories—the way they unfolded, the positive impact on human lives—it's truly inspiring.

Many of our readers seek inspiration in making healthier lifestyle choices. From your vast experience, what are the key actions individuals can take to protect their heart health?

Dr. Tirone David: I wish I had a definitive answer. Most advice on heart health consists of well-known principles: don't smoke, stay physically active, eat well, and avoid unhealthy foods.

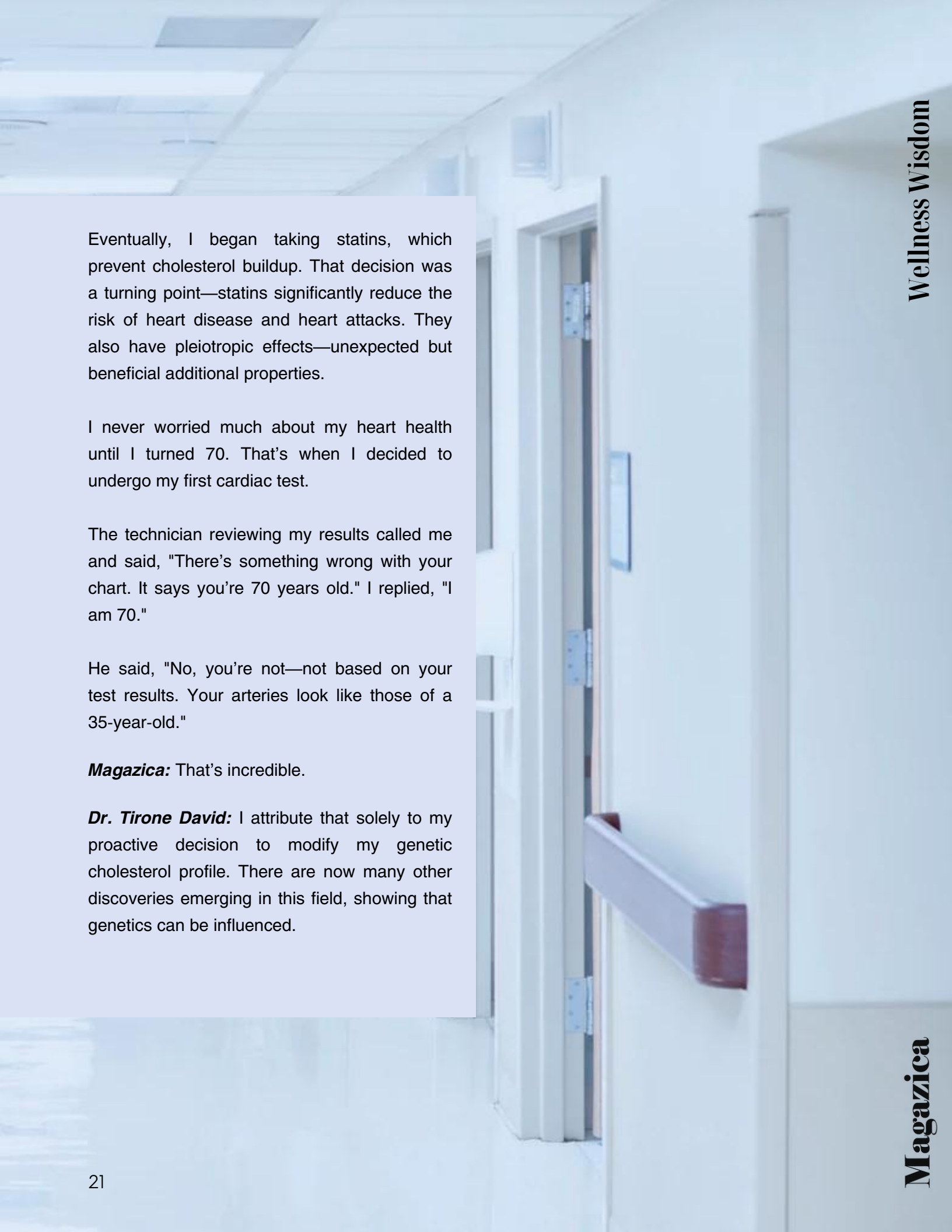
Unfortunately, even if someone follows all these guidelines, one major component of heart disease is not easily modifiable—genetics. Our hereditary makeup plays a significant role.

Magazica: That's true.

Dr. Tirone David: However, even genetics can now be modified, at least to some extent.
Let me share a personal story—I have a family history of high cholesterol. My mother had it, and two or three of her children, including me, inherited it. By age 32, I was already a fully trained heart surgeon, yet I knew I had high cholesterol.

I met a Hungarian cardiologist, a brilliant woman who guided me early in my career. She frequently traveled to Europe and had extensive knowledge of European medicine. She told me about a medication being used in England and other parts of Europe to lower cholesterol by blocking its production in the liver.

She suggested that I start taking it. At first, I was resistant—I never liked medication. But she insisted, saying, "It might make a difference in your life."



Eventually, I began taking statins, which prevent cholesterol buildup. That decision was a turning point—statins significantly reduce the risk of heart disease and heart attacks. They also have pleiotropic effects—unexpected but beneficial additional properties.

I never worried much about my heart health until I turned 70. That's when I decided to undergo my first cardiac test.

The technician reviewing my results called me and said, "There's something wrong with your chart. It says you're 70 years old." I replied, "I am 70."

He said, "No, you're not—not based on your test results. Your arteries look like those of a 35-year-old."

Magazica: That's incredible.

Dr. Tirone David: I attribute that solely to my proactive decision to modify my genetic cholesterol profile. There are now many other discoveries emerging in this field, showing that genetics can be influenced.

Magazica: So, in summary, what key health actions would you recommend?

Dr. Tirone David: The well-known risk factors still apply:

- ***Diet:*** *Reduce fat intake and limit carbohydrates.*
- ***Physical Activity:*** *Stay active. Don't park right next to the mall entrance—park farther away and walk.*
- ***Walking:*** *Perhaps the single most important form of exercise.*
- ***Weight Control:*** *Avoid excessive weight gain.*
- ***Cholesterol Monitoring:*** *Get regular tests. If your lipid profile is abnormal, modern medications can help modify it chemically.*

Magazica: We're nearing the end of our conversation, but before we wrap up—throughout this discussion, your humility has been remarkable. It was even mentioned in your professional introduction. What role do humility and curiosity play in driving innovation in your field?

Dr. Tirone David: Scientific arrogance is one of the worst qualities an investigator can have. The moment a scientist believes he or she knows everything, he or she is bound to fail.

Magazica: That's a powerful statement.

Dr. Tirone David: My humility comes from the knowledge that I don't know everything.

I have shared stories from my career, but I am well aware that within the next decade or two, someone will likely dismiss my techniques as outdated. Science evolves, and what is cutting-edge today may be archaic tomorrow.

Understanding that is what keeps me humble.

I may be highly skilled right now, but my knowledge applies only to this era. That's why curiosity is critical—it drives progress. The ability to keep asking questions leads to better solutions.

You must be inquisitive in whatever you do. It applies to all professions—whether you are a musician, an architect, a cleaner, or a garbage collector. If you keep thinking of ways to improve your craft, you will inevitably make things better.

Magazica: That's a profound perspective. One last question—do you have any dreams you hope to fulfill in the near future? And what advice would you offer to young professionals, particularly aspiring cardiac surgeons and specialists?

Dr. Tirone David: I think it's *extremely* important to love what you do.

If you wake up in the morning and feel like your work is a burden, thinking, *Oh no, I don't want to do this today*, then maybe it's time to find something else.

If nothing interests you, I won't have much advice. But if you can seek out something that excites you—something that makes you feel *alive* and eager to keep going—that's one of the secrets to happiness. When you're

passionate about your work, you naturally do it well.

Magazica: That's an insightful perspective. And what about your dreams for the future—your mission or vision for cardiac health and treatment?

Dr. Tirone David: At my age, my primary focus is to stay physically and mentally well, so I can continue doing what I love.

That being said, I also recognize that life is finite. Eventually, I will have to step away and say, *Well, that was my contribution—thank you*. At that point, I'll probably learn to play golf and go fishing.

But for now, I remain dedicated to my work.

Magazica: What an extraordinary career you've had! It's remarkable, contributory, and even philanthropic. Whatever words I use, they still fall short in capturing the full scope of your impact.

Dr. David, thank you for sharing such valuable time with us, offering **incredible insights** for our readers and viewers. We truly appreciate it.

Dr. Tirone David: The pleasure was mine.

> ***Humility comes from knowing I don't know everything. Today's cutting-edge technique may be outdated tomorrow.***
>
> *Dr. Tirone David*

Preventive Medicine in Canada:

How Clinics Are Shifting Focus from Cure to Wellness

By Editorial Team

It's a relatively rare occurrence now, in Canada, to visit the clinic only after feeling the onset of new symptoms or a known illness. A preventative health and wellness focus, rather than cure, is quietly transforming the Canadian patient experience. Clinics and other health care providers are putting more effort, and resources, into early detection, health promotion, risk reduction, and long-term well-being. As a result, screening programs, wellness initiatives, vaccinations, dietary guidance, fitness support, and mental health management are increasingly becoming routine for Canadians, wherever they turn to for help.

A constellation of factors are driving this change. Chronic diseases, from diabetes and cardiovascular problems to obesity and high blood pressure, continue to afflict large swaths of the population. However, recent studies

indicate that most of these illnesses are preventable through lifestyle modification and early detection. Moreover, if these conditions are left unchecked, they can contribute to secondary and tertiary health issues, as well as severely limit a patient's mobility and quality of life. The clinic of the future, then, becomes a wellness partner, working with patients to help improve and maintain long-term health and fitness.

Clinics are responding to this trend in a variety of ways. For one, many clinics now have dedicated staff for dietetics, mental health, physiotherapy, and even general health coaching, to work in tandem with family physicians, GPs, and nurses. The emphasis, increasingly, is on treating the whole person – their lifestyle, habits, environment, stress levels, personal goals, and concerns – as a team. This is a shift in perspective, recognizing that our health is affected by more than our biological and genetic predispositions.

Preventive Health Care

Technological advances are helping here, too. Canadians are more likely than ever to own fitness trackers and wearables, use health-related smartphone apps, and participate in virtual care for convenience. Tracking data on everything from sleep and steps to blood pressure, diet, and mood can be automatically shared with health care providers, flagging early warning signs and helping motivate healthier choices. Some clinics now offer virtual remote health coaching as a way to help patients make gradual changes to their behaviour that will have long-term benefits.

In addition, preventive care makes financial sense for policy-makers and insurers. The costs of hospitalizations and emergency care are considerable, both in terms of direct system costs, but also the out-of-pocket burden for families and employers. Data from Canadian and international studies both show that long-term health care costs are lower when the health care system invests in prevention. By keeping people out of hospital or preventing the progression of chronic conditions, the system saves money while at the same time it can provide a better quality of life for patients.

Government health agencies are starting to adapt, too. Several provinces, for example, have begun funneling dollars into initiatives designed to help Canadians live more active lifestyles, eat healthier, quit smoking, and pay more attention to mental health. Family health teams and community health centres are also structuring themselves differently to support more preventive services within routine care. Public health and education campaigns also encourage adults as well as children to get regular checkups, partake in cancer screenings, and keep up to date on their immunizations.

The one challenge, of course, is that access to preventive services is not equal across Canada. Rural communities, First Nations and Indigenous populations, and some urban low-income neighbourhoods all face structural challenges when it comes to preventive health. Barriers include transportation difficulties, fewer clinics, and longer wait times. Even where they are available, health literacy is an issue – many Canadians are simply unaware of what types of

preventive services are available to them and why they matter.

Education and outreach are the first steps to remedying this problem, and they are increasingly becoming part of the preventive care equation. Clinics are offering more community-based workshops and partnering with schools to get public health information directly to parents and children. Culturally tailored materials, in both online and print formats, are available to help Canadians understand the importance of looking after their health proactively. In fact, wellness assessments are now part of the intake process in some clinics, looking for early warning signs and identifying lifestyle risks as part of personalized care planning. They are relatively small shifts, but ones that are part of a much larger cultural one in the Canadian health care system.

What is now emerging, in other words, is a vision of a health care system that is more personal and more empowering. It is a model that encourages patients and the public to co-create their health journey in collaboration with their providers. They are not passive victims, caught up in the vicissitudes of biological chance, but rather are active participants with the agency and capacity to make choices that will improve both individual health outcomes and whole communities.

The professional training of health workers is also being affected. Medical and nursing schools, for example, are introducing more courses in preventive medicine, public health, and patient communication skills. Future health care providers will be learning to talk to patients about nutrition, physical activity, stress reduction, and sleep in a way that speaks to different demographics, and at different stages of life.

Preventive health in Canada is not just about reforming the clinic experience – it's also about more and better investments in public health. The results of these efforts are starting to show, and while more can always be done, there is little doubt that the tide is shifting toward prevention. Screening rates are on the rise in some provinces, more Canadians are reaching out for mental health support, and there is a broadening of vaccination programs to reach not just children, but adult and senior populations, too.

Prevention Is Still the Best Medicine

The rise of preventive health, in Canada, reflects a broader change in how we conceptualize health itself. It is no longer simply the absence of disease, but a state of complete physical, mental, emotional, and social well-being. By redefining the role of clinics and care teams, Canada is not only responding to new challenges, it is re-engineering the foundation of care for a healthier future.

References

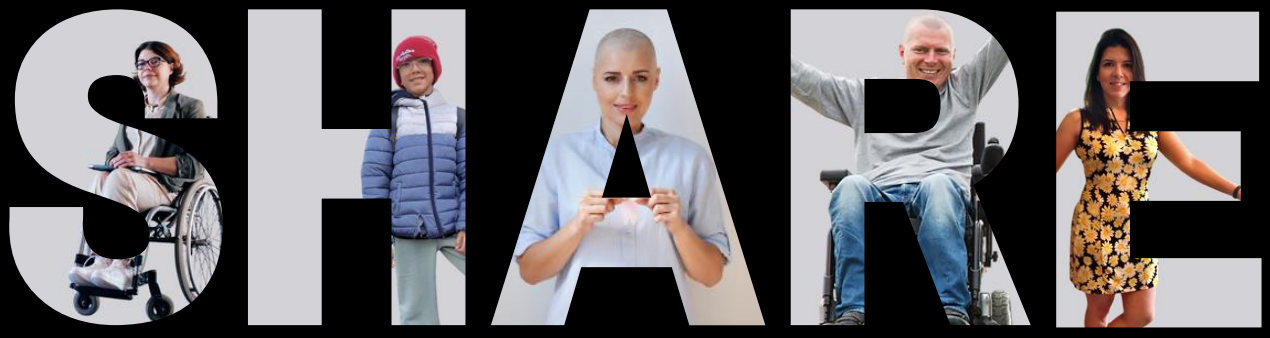
HIMSS Greater Kansas City Chapter. (n.d.). Shifting Toward Preventive Medicine with Health Information and Technology . Retrieved from https://gkc.himss.org/resources/shifting-toward-preventive-medicine-health-information-and-technology

Scientific American Custom Media. (n.d.). In the U.S. Healthcare Industry, a Slow Shift Toward Prevention . Retrieved from https://www.scientificamerican.com/custom-media/the-new-science-of-wellness/in-the-u-s-healthcare-industry-a-slow-shift-toward-prevention

Creyos Health. (n.d.). Why Preventive Care Is Important . Retrieved from https://creyos.com/blog/why-preventive-care-is-important

CVS Health. (2024, January). A Reboot for Preventive Health Care . Retrieved from https://www.cvshealth.com/news/primary-care/a-reboot-for-preventive-health-care.html

Office of Disease Prevention and Health Promotion. (2024, January). Prevention Is Still the Best Medicine. U.S. Department of Health and Human Services. Retrieved from https://odphp.health.gov/news/202401/prevention-still-best-medicine



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The Future of Health Advertising:

Why Educational Content Outperforms Traditional Ads

By Editorial Team

Healthcare advertising has changed drastically in recent years. Content marketing, or the practice of producing content to engage and retain target audiences, is significantly outperforming traditional forms of advertising in the health space. A recent report from Growth Natives notes that consumers expect to be “empowered with digital content to help make better informed decisions” in their healthcare journeys, citing wellness blogs, symptom checkers, instructional videos, and condition-specific webinars as increasingly popular (Pawar, n.d.). In the competitive Canadian healthcare market, clinics, hospitals, and brands are all stepping up to the plate, building a pipeline of trustworthy educational content that is helping people make decisions and overcome health challenges.

Traditional ads in health—say, a glossy print advertisement in a doctor's office or a radio jingle on the commute home—have simply not been as effective in the digital age as they once were. The healthcare marketplace is crowded, with big-name clinics competing with smaller operations for attention and access. In the B2C health space, trust is currency, and service providers who take the time to become trusted sources of information and education are winning the long game.

Beyond Commercials: Why Educational Content Works

For many of us, our health is one of our most personal matters. We might face a barrage of emotions when navigating health issues, from fear to embarrassment to frustration. Often, we must face uncertainty and make complex decisions, sometimes involving considerable financial outlay. As a result, we are less susceptible to advertising messages—we aren't buying shiny objects or clever slogans. We are looking for answers. We are seeking answers to questions that matter to us in ways that respect our intelligence, that are relevant to our current health situation, and that we can trust not to mislead or take advantage of us.

In this environment, content marketing is thriving. Healthcare providers who create and disseminate trustworthy content are the ones who are gaining credibility, connecting with real people who are doing the same research they are and coming to the same conclusions.

Comparing the statements of a traditional ad to an educational alternative reveals an important distinction:

Traditional: Book your appointment today!

Content-driven: 5 Questions to Ask Before Your First Physiotherapy Visit

Patients are seeking answers as they navigate complex medical decisions. Filling that information void with trustworthy content can be an effective way to build rapport and trust while also clearly explaining where your services and solutions fit. Rather than relying on transactional advertising that attempts to sell them a service, clinics can instead provide solutions by integrating relevant services as part of the education process.

Humans love learning; we are naturally curious. When educational content is done well, patients and prospects find answers to their questions and begin to trust the organizations that provide them. This is a clear win-win: information is never wasted, and in an ideal world, potential patients get the care they need.

Reciprocity and Empowerment in Health

Psychology plays a significant role in this patient-provider dynamic. The principle of the "reciprocity effect" describes the powerful sense of indebtedness we feel when someone else has already "gifted" us with something. When patients turn to a healthcare organization for trustworthy information or guidance that helps them make an informed decision, they are more likely to "return the favor" in some way, such as by booking a consultation with that organization or taking some other kind of positive action.

Educational content also respects the agency of healthcare consumers and decision-makers. It's about patients being invited into the decision-making process, not told what to do or forced into a corner where they must choose. This allows the content provider and the potential patient to establish a collaborative relationship for exploring options and working toward a solution. Again, this is more in line with recent approaches to patient empowerment and shared decision-making, particularly with respect to chronic conditions, mental health, and preventive care.

Canadian Clinics Turning the Tide

Clinics and health brands across Canada are already capitalizing on this opportunity. Telehealth platforms have incorporated blog libraries full of answers to frequently asked questions. Dentists send monthly emails with tips for better oral hygiene. Physiotherapy clinics are offering explainer videos to teach about proper stretching or injury prevention. Mental health apps like MindBeacon and Headspace are weaving educational resources into their service delivery so users can better understand topics like anxiety, depression, and mindfulness techniques.

What all this content has in common is that it doesn't sell. It simply supports. By aligning itself with the interests of its target audience and offering information when it is most needed, a brand can position itself as a valuable resource and an engaged member of the patient's journey, not just a service provider at the end of that journey.

Effective Content Types for Healthcare Marketing

Of course, no two audiences are identical, and no two healthcare marketing plans will be the same. Certain types of content tend to work better than others, depending on audience and campaign. Proven content strategies for Canadian healthcare providers include:

Blog Posts and Articles: Blogs and general health articles about everyday medical conditions are the bread and butter of medical and health content. Short, 500-word articles on useful, everyday health issues like "How to Improve Sleep Without Medication" or "Understanding Your Child's Vaccination Schedule" are typically optimized for SEO, which helps people find trustworthy health information when they're searching online.

Videos and Webinars: Video is among the most engaging types of content and is well suited to a variety of subjects. From testimonials to behind-the-scenes looks at a medical procedure, videos can be used in many ways across the health spectrum.

Infographics and Checklists: Infographics and other visual summaries are an excellent way to distill complex or dense information into easily understood ideas. This can be helpful for both first-time patients who are new to the topic and/or for health issues where there is stigma or shame associated with the topic itself.

Email Newsletters: Regular email updates are a tried and true way to keep patients up-to-date. Tips, seasonal reminders (winter allergies? flu season? dental check-ups?), or new services

can be integrated into a regular update strategy to remind patients of the organization and maintain contact at regular intervals.

Social Media Posts: Social media platforms like Instagram, YouTube, and LinkedIn allow organizations to demonstrate their human side. Posting clinic staff profiles, involvement in health awareness campaigns, or quick-fire health facts are just some of the ways clinics can humanize their brand and maintain regular contact with patients and prospects.

Measuring Success in the Long Term

This may all sound very woo-woo and idealistic when compared to traditional advertising, which is often focused on shorter-term conversion rates like clicks or impressions. The value of educational content is built slowly over time. A popular article may not immediately lead to an appointment, but each time a prospect searches for health information and your clinic is on the first page, your credibility as an expert source is increased. Data from healthcare CRM systems can help track which pieces of content are performing best in terms of driving website traffic, time-on-site, or other conversion to inquiry.

Patients and prospective patients are also changing the game. They aren't trying to manipulate or game the system; they aren't searching the web for the best doctor the same way they might hunt for the lowest price for a new fridge. Instead, they see themselves as informed partners in their healthcare, which means that clinics and providers that acknowledge this and adapt to this approach

are seeing stronger patient loyalty and positive word-of-mouth referrals.

Healthcare Ads: Navigating the Regulatory Environment

As in all areas of advertising, service providers in health must be aware of strict regulatory guidelines on ethics and transparency. While it's possible for individual practitioners to veer off the straight and narrow, reputable organizations are committed to remaining compliant with all of Canada's laws and regulations on medical advertising and patient privacy.

Unlike advertising in most other spaces, health ads must comply with regulations on everything from the language used, to the audience the ad is directed to, to the implications of certain health claims. This makes an emphasis on education over sales not just effective, but a necessary approach in order to ensure that all content shared online is both helpful and fully compliant with Canada's Food and Drugs Act as well as provincial regulations.

The Case for the Future: Content-Driven Healthcare Ads

Content-driven healthcare advertising isn't a fad or a trend; it's a response to the real way that people seek and engage with information today. Healthcare providers that want to compete must produce compelling, relevant content and share it through a variety of content types and platforms to reach potential patients where they are, both physically and digitally. In a world where patients have access to the same information providers do, building educational content resources is a necessary and effective step to get ahead of this challenge.

There is no magic bullet to advertising success. But, in a world where service providers in almost every industry are all trying to sell you the same widgets, standing out and building trust may be the most powerful marketing tool of all. Teach first, sell second: for Canadian health organizations that want to cut through the noise and connect with real patients, that is the winning strategy.

References

1. Pawar, S. (n.d.). Healthcare Marketing Strategies to Revolutionize Healthcare. Growth Natives. Retrieved from https://growthnatives.com/blogs/digital-marketing/healthcare-marketing-strategies-to-revolutionize-healthcare/

2. U.S. National Library of Medicine. (n.d.). Marketing in Healthcare and Communication Platforms. NCBI. Retrieved from https://www.ncbi.nlm.nih.gov/

3. mHealthIntelligence. (2024). Mobile Health App Usage Among Adults in North America. Retrieved from https://mhealthintelligence.com/

4. Healthline. (2024). How Health Content is Changing Patient Behavior. Retrieved from https://www.healthline.com/

5. Canadian Medical Protective Association. (2023). Advertising and Professionalism in Healthcare. Retrieved from https://www.cmpa-acpm.ca/

Digital Health Tools That Are Transforming Patient Engagement in 2025

By Editorial Team

In 2025, the healthcare industry in Canada is experiencing a period of digital growth unlike any it's ever seen before. Apps, chatbots, telehealth, AI-enhanced video visits, and more are helping to transform the traditional health system into a digital-first landscape that puts people—not patients—at the center. Patient engagement is no longer a "nice to have"—it's becoming a core component of system reform.

Over the years, the healthcare sector in Canada has focused on being more "patient-centric," building on the decades-old idea that patient experience and engagement should be an industry priority. But while many health systems and service providers were talking the talk, true patient engagement remained relatively elusive—until now. Thanks to innovative digital health tools, Canadians' experiences with health care are becoming more interactive, responsive, and inclusive every day.

Mobile apps, personalized portals, messaging platforms, digital visit booking, and other care coordination tools are giving patients more control of their own care and more direct access to their health data and health care providers than ever before. At their core, these digital tools have three main pillars: accessibility, efficiency, and trust. One of the first and most significant steps to making health care more accessible was the development of AI-enhanced, remote visit tools, which can range from virtual walk-in clinics to secure, HIPPA-compliant video or audio consultations.

These remote care tools offer patients a range of options for getting care where and when they need it. For many clinics, that can even mean translation tools, for patients who don't speak one of Canada's official languages as a first language. In the last five years alone, digital health technology has advanced to the point that it can help users access services not just in another language, but with integrated, digital diagnostics and even in-person mental health therapy—all via smartphone or laptop.

At the same time, the tools themselves are becoming more focused on the end-user experience, with real-time patient feedback systems, intuitive user interfaces, and customer service touchpoints built into every app and service. In some hospitals and clinics, real-time patient feedback and diagnostic data are being funneled into predictive analytics platforms. These systems allow staff to not only analyze their system's past performance but to create dynamic systems that proactively identify potential problems. In the best examples, hospital management teams and providers can flag and correct issues like high patient dissatisfaction, missed follow-up appointments, or undiagnosed or emerging symptoms before they become a problem.

Digital-first care is a term that's been on the rise in recent years. In its simplest form, it's the idea that healthcare systems should design the patient care experience to begin digitally and often continue that way. From AI-powered chatbots, to digital remote monitoring tools, to intuitive mobile and web appointment platforms that auto-adjust and respond to patient inputs and behavior, the process is becoming smoother every day. "As the provider and payer landscape becomes more competitive," Randstad Digital's David Nickelson has said, "patient care experiences and efficiencies become essential for retaining patients and ensuring high-quality outcomes."

Artificial intelligence (AI) is also increasingly becoming a tool that has the potential to further transform the patient engagement experience. In some cases, AIs can serve as virtual nurses and care assistants, providing patients with 24/7 access to some level of care and advice. AI-based symptom checkers, for example, are able to understand natural language queries and provide basic diagnoses, referrals, and health advice.

These tools are not designed to replace caregivers, but to streamline and scale their reach. Across many provinces in Canada, hospital systems are experimenting with the use of AI for improving chronic care management and other interventions.

But technology, on its own, is not the only way to boost engagement. One of the best ways to ensure your patients are engaged is to work to build trust, transparency, and equitable care at every stage. Patients care about not just being heard and valued, but about having the care experience be safe, transparent, and equitable for all users. As more patient-provider interactions and care services have gone digital in recent years, concerns about data privacy, data ownership, and security have become more and more of a priority.

Patients are more likely to use technology—and feel comfortable sharing data with systems—if they trust that information is safe. In the last five years, top health systems have begun to include privacy policies and data encryption requirements into their tech stack at every stage, from digital billing portals to third-party apps used in medical or administrative settings. Transparency in data collection and pricing policies, as well as a commitment to clear, transparent pricing and accessible communication, is also a critical step to building patient trust.

Equity is a similarly important pillar of successful patient engagement. In a multicultural country like Canada, tools and solutions that don't take into account local language or accessibility needs will fall short. That's why multilingual support, easy-to-use interface designs, inclusive communication, and language parity are now becoming an essential part of any technology planning and development process. For that reason, some platforms now even use technology to automatically adjust text level and visual

elements based on an individual user's need.

Staff-facing care engagement tools are also playing a more important role. In many hospitals and clinics, staff are using digital feedback and performance data tools to better understand their own strengths and knowledge gaps, as well as better coordinate internally between care teams. After all, staff who are well supported and trained are more likely to provide a better experience for patients. Staff engagement, which is often the first step in quality patient care and improved satisfaction, is only becoming more vital to overall system success.

As Canada continues to move through 2025, digital health tools are increasingly becoming the infrastructure that modern care is built on. It's no longer enough to simply have the tools—they must be an organic and essential part of the patient experience. These tools help reduce wait times, decrease unnecessary visits, and improve adherence to patient care plans and monitoring regimens, as well as offer people more personal control over their own health and data.

They're also transforming people's care experiences. At their best, digital health tools and technologies give patients more say in how and when they get care. They also change how people think and feel about their health care. Digital-first health systems are increasing access, building on the decades-old idea that patient experience and engagement should be an industry priority.

The result is more Canadians than ever who are involved in their own care, more informed about their health care options, and more respected and valued as whole people, not just patients. As technology and AI becomes even smarter, more advanced, and even more integrated, the future of healthcare engagement will only become more personalized, proactive, and predictive. For now, though, the future is already here—and it's digital, dynamic, and deeply human.

References

1. Relias. (n.d.). Patient Engagement Technology: 6 Tools Enhancing the Healthcare Experience. Retrieved from: https://www.relias.com/blog/patient-engagement-technology

2. Siwicki, B. (2025, January 3). In 2025, Look for More Digital-First Patient Engagement and Data-Driven Decisions. Healthcare IT News. Retrieved from: https://www.healthcareitnews.com/news/2025-look-more-digital-first-patient-engagement-and-data-driven-decisions

3. Government of Canada. (2024). Digital Health Technologies in Canada. Retrieved from: https://www.canada.ca/en/health-canada/services/health-concerns/digital-health.html

4. Canadian Medical Association. (2023). Virtual Care in Canada: Progress and Possibilities. Retrieved from: https://www.cma.ca/virtual-care

5. Healthcare Information and Management Systems Society (HIMSS). (2023). Transforming Health through Digital Innovation. Retrieved from: https://www.himss.org/resources

Article

David Schwirtz

By the Vice President of Innovation at New Look Vision Group

Dr. David Schwirtz is Vice President of Innovation at New Look Vision Group and IRIS, The Visual Group. A practicing optometrist with over 15 years of experience in clinical care and eye health innovation. Dr. Schwirtz joined IRIS in 2009, and has since held senior leadership roles in professional development, regulatory affairs, and medical strategy. He continues to bridge clinical practice with innovation, developing technologies and programs that improve vision care across Canada.

Seeing Clearly, Thinking Sharply:

The Overlooked Link Between Vision and Cognitive Health

Vision and Cognition: An Emerging Connection

What if an eye exam could do more than protect your vision and provide a prescription for glasses? What if it could help protect your mind? As Canada's population ages, the conversation around dementia has increased in volume and urgency. Much of the public dialogue has focused on genetics, diet, lifestyle, and vascular health as key factors associated with cognitive decline. Yet a surprisingly simple and important risk factor continues to receive little attention: vision loss. Recent research suggests that up to 19% of dementia cases could be attributed to a vision impairment, an extraordinary statistic that calls for greater awareness among public health leaders, clinicians, and caregivers.

The Brain's Window: Why Vision Matters

The association between the eye and the brain is well documented. In fact, the light-sensitive part of the eye, called the retina, is an extension of and is directly connected to the

brain. With this kind of connection, it's no surprise that up to 80% of our experience of the world is visual. Vision is critically important for engaging with our environment. When a patient gets a new prescription for glasses, it's not uncommon for them to feel a bit off balance as they adapt to clearer vision, and they need to use caution as they move around their world.

Cataracts and Cognitive Decline: A Preventable Threat

One example of a vision impairment that may be linked to an increased risk of dementia is cataract. Cataract is a condition where the clear lens on the inside of your eye becomes discoloured and foggy. The onset of cataract varies between individuals, but patients tend to notice symptoms in their 60s. These symptoms start out mild and can include changes in glasses prescription. As the condition progresses, vision will decrease and visual distortions, such as glare and halo, will start to occur, especially at night. What is particularly important is that cataract is quite common, and the prevalence increases with age. It's estimated that more than 50% of individuals over the age of 80 have this condition or have already been treated for this condition.

Research shows that leaving a visually significant cataract untreated can cause areas of the brain to shrink. This means that proper care including diagnosis, monitoring and treatment of cataract is a promising modifiable risk factor for dementia.

The treatment for visually significant cataract is a surgery.During cataract surgery, the foggy and discoloured lens is removed through an incision that is millimetres in size and replaced with a man-made lens. Modern cataract surgery is a marvel; it uses technologically advanced equipment and the skills of talented eye surgeons. For a patient, this translates to a procedure that often takes 10-30 minutes to complete. Once complete, the recovery time is 3-4 weeks. Patients can see throughout recovery; visual clarity improves and toward the end of the timeframe they can be assessed to determine if a new pair of glasses would further improve their vision. Even still, any surgical procedure will be accompanied by risk and so it's important to make sure that any decision to proceed with this type of surgery is based on an informed discussion with an eye doctor or eye surgeon.

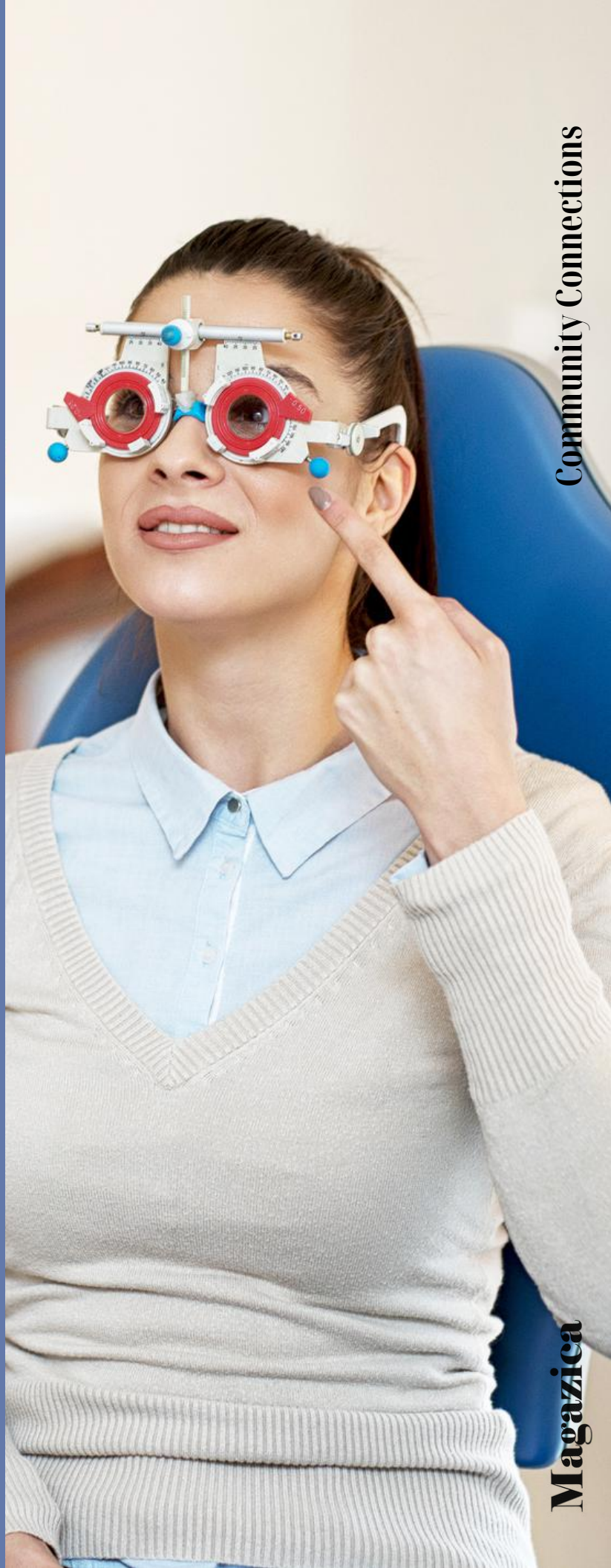
Beyond the Eyes: How Vision Loss Affects the Whole Person

Vision impairment affects far more than sight, it impacts how individuals engage with the world around them. There is growing recognition within the clinical and research communities that vision loss contributes to social isolation, depression, anxiety, and, ultimately, is associated with cognitive decline in older adults. The connection between eyesight and brain health is both biological and behavioural: when vision deteriorates, people often reduce physical activity, withdraw from social settings, and forgo cognitively stimulating tasks, factors that, together, accelerate cognitive decline. Research has shown that clarity of vision matters when it comes to cognitive health. In one study, the researchers demonstrated that worsening visual clarity is associated with greater declines in language and memory.

Oculomics and AI: The Future of Eye-Based Diagnostics

Technology may act as a powerful healthcare tool. More specifically, oculomics is a fascinating area of study that was formally introduced in 2020 and touches on the relation between eye health and brain health. This field involves biomarkers which are unique molecules or characteristics that can be measured and can predict or diagnose a condition. We are finding that the eye may be a unique source of biomarkers that can tell us about things like cognitive health. Additionally, this research also shows that the eye has a connection to not only the brain but to the vascular, immune and metabolic systems.

One example of technology as a healthcare tool involves artificial intelligence-enabled retinal imaging. IRIS the Visual Group has actively been involved in developing such a tool since 2021. A retinal image is a picture of the light sensitive part of the eye and this technology has been around for decades. Our recent work has focused on using artificial intelligence to analyze these pictures. In this context, artificial intelligence is a software that highlights areas of concern in the picture, and then uses a database to better categorize the concern and identify if it might impact visual health. This software then produces a report that can assist an eye doctor with diagnosing, monitoring and treating eye conditions. Furthermore, the analysis can be used to help patients understand what is going on with their eyes and engage them in their care. The technology is continuing to improve because eye doctors can provide feedback to the



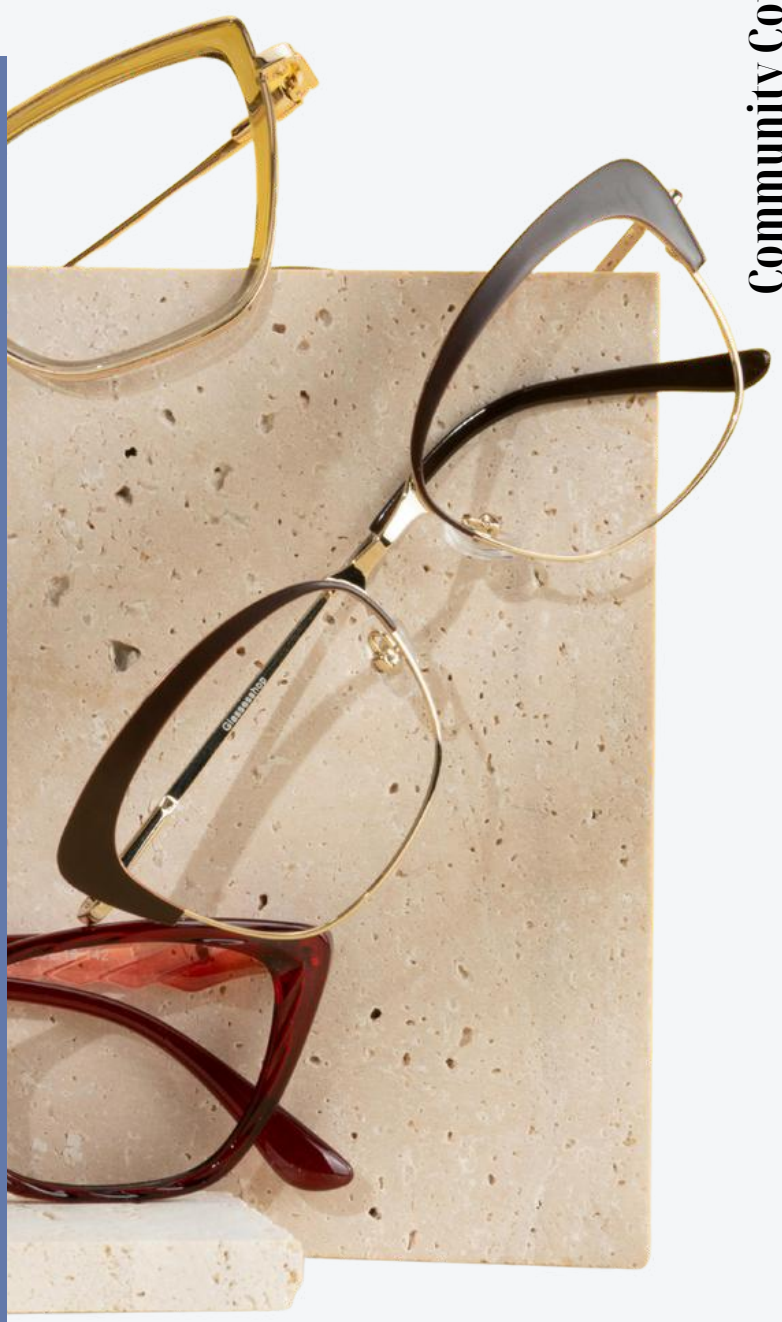
software. The software has the capability to learn and adjust its analysis based on this feedback. While the doctor always makes the final decisions, this is an example where technology and doctor experience work collaboratively to improve patient outcomes. While it's still early days and these tools aren't yet widely available, it's easy to imagine a future where they could even predict the likelihood of developing a vision impairment.

Taking Action: Eye Exams as a Public Health Strategy

It is estimated that nearly 1 million people in Canada will be living with dementia by 2030 and that this number increases to 1.7 million by 2050. The personal and societal cost of this condition is staggering, and so it's important to do everything that we can to proactively address mitigatable risk factors. Vision is one of these factors and the Canadian Association of Optometrists provides guidelines on how frequently an individual at low risk should have an eye exam. For school age children aged

6-19 years old, you should have an eye exam annually. For adults aged 20-64, you should have an eye exam approximately every two years. For adults aged 65 or older, you should have an eye exam every year.

The topic of dementia is often accompanied by feelings of worry, anxiety and concern. Fortunately, vision health is a modifiable risk factor. With regular eye exams, earlier detection, and the integration of tools such as AI-enabled retinal imaging, there is a real opportunity to support cognitive health through better eye care. The growing field of oculomics, where the eye serves as a window into the brain, represents a powerful shift in how we approach both vision and neurological health.



Green Healthcare:

A Sustainable Approach to Clinic Transformation Essay

By Editorial Team

From hospitals to clinics, healthcare across Canada and the world is being quietly revolutionized. No, the change is not solely in patient care practices but in the energy that powers them, the buildings that house them, and the policies that sustain them. As environmental awareness grows, the healthcare sector is pivoting towards sustainability as a core value. Green Healthcare Initiatives (GHIs) are sweeping the industry, promising a more responsible and efficient way to deliver care while protecting our planet. This is no longer an experiment in a few eco-conscious clinics—it's rapidly becoming the new standard.

Why It Matters

To begin with, healthcare is resource-intensive. Hospitals and medical facilities are huge consumers of electricity, water, and single-use materials. As of 2022, healthcare was responsible for nearly 5% of all global greenhouse gas emissions. No wonder so many hospitals are taking stock of their footprint and exploring how to improve.

Green Healthcare Initiatives are essentially any practice, technology, or policy that reduces healthcare's environmental impact. This could mean:

Energy/Water Conservation: reducing energy/water use, installing energy-efficient lighting/heating/cooling, using renewable sources.

Design Efficiency: Designing hospitals to be more efficient (e.g., natural lighting, green roofs).

Medical Waste Management: Reducing, reusing, and recycling medical waste.

Eco-friendly Technology: Adopting new technologies like digital records, telemedicine, etc.

GHIs are not just good for the planet; they're good for human health. Air pollution from medical waste, poor indoor air quality, hazardous materials, and even direct exposure to toxins like heavy metals or endocrine disruptors can affect patients and staff. But it goes beyond that. By taking care of the planet, GHIs are also implicitly committing to a healthier future for patients and caregivers, not to mention the indirect but very real benefits for operational costs as energy efficiency improves and climate change mitigation becomes more urgent. The challenge: making this transition not as an afterthought, but as a foundational part of operations.

Cutting-edge research by Sahoo, Kumar, and Thakur (2025) underscores the critical importance of leaders in green healthcare transformations. A comprehensive literature review produced a causal-loop and framework to represent the interconnected factors critical to green healthcare performance and success. The authors note that while many clinical practices are evaluated and implemented as GHIs, they are rarely embedded as a strategic and operational institutional norm or culture. The most successful hospitals have exceptional organizational cultures in this area and are the ones making the biggest impact. Proactive, patient-safety-focused leadership and investment in technologies, tools, staff, and innovation are the primary drivers of GHI success. According to the authors, we refer to this capacity in hospitals as Green Organizational Capital (GOC). GOC is defined by enabling (transformative) leadership, stakeholder influence, and factors within the organization that show it is primed and prepared for GHI implementation.

Canadian Healthcare's Response to Green Initiatives

Canadian hospitals are already getting on board. Many healthcare facilities have started leading with the use of sustainable energy-efficient systems. Energy-efficient infrastructure: LED lighting, energy-efficient Heating Ventilation and Air Conditioning (HVAC) systems, insulation, window treatments, and even solar panels are all gaining more prominence and consideration in new builds and infrastructure planning. Smart practices like using occupancy sensors for lighting and heating also help to drive down emissions and create long-term savings as well. According to MD Consultants (2023), clinics can expect to see at least some cost reductions on utility and energy bills with no drop in patient satisfaction.

In a similar vein, reducing waste is the next key element. The disposable hospital model relies

on endless gowns, gloves, syringes, IV bags, and more. While this convenience has real clinical benefits, there is a growing movement to reduce waste wherever possible with increased recycling, more sustainable procurement policies, and even reduced pharmaceutical disposal. Electronic health records (EHR) are also playing a huge role in this. By moving to paperless or low-paper operations, clinics can save on resources, manage patients better, and streamline processes.

New sustainable clinics are being designed and built to be more environmentally friendly from the ground up. Sustainable green buildings in healthcare, from new designs to retrofits, include features like natural lighting, non-toxic materials, green or living roofs, rainwater collection systems, and more. Location is also part of it, with many facilities choosing sites closer to mass transit and cycling routes to incentivize low-emission commuting. Clinics are becoming agents of sustainability not just by what they do inside their walls but also how they're designed.

Of course, in the digital age, there's also the question of technology. New tools like AI, blockchain to track supply chains, and even telemedicine solutions are beginning to reduce the waste and inefficiency of many clinic operations. Technology can improve clinical outcomes, streamline operations, and help shrink the physical footprint and travel needs of healthcare professionals. The caveat: these tech tools are still vastly underutilized in the healthcare sector (Sahoo et al., 2025). There is an incredible opportunity for tech to lead on this front.

But this is not all about facilities and equipment. Green healthcare also refers to making spaces better for patients and staff. Greener facilities tend to have better indoor air quality, less exposure to toxins, and a more comfortable environment to work or be a patient in. As MD Consultants notes, this has positive effects on both patients (lower respiratory and allergy issues, safer procedures, better healing) and hospital staff (fewer sick days, less stress, less irritants). In the long run, better regulation, improved patient outcomes, and lower costs are important outcomes to factor here as well.

Even in a crowded marketplace, taking a lead on sustainable operations can differentiate a clinic in the eyes of prospective patients and boost its reputation. This is not an insignificant consideration in a country where consumers increasingly view sustainability as an indicator of ethical and future-thinking organizations. Green practices have never been more important in building and maintaining a clinic's public image.

The Path Forward: Addressing the Challenge
Barriers: The reality is that implementing GHIs isn't always easy, especially for smaller or rural hospitals. Capital investment in green tech or retrofits may not be available or prioritized. Recycling programs may be limited, regulatory frameworks might not exist. This is why policy frameworks, funding support, and public-private partnerships will be critical to ensuring GHIs scale across Canada.

Conclusion

Sustainability in healthcare is not just about the

buildings or the medicine; it's about aligning with harm reduction across the board. Green Healthcare is an extension of the medical profession's guiding principle: "do no harm." So as more clinics go green, the industry becomes not just a leader in healthcare but a beacon of hope for the future.

References

• Sahoo, M., Kumar, A., & Thakur, V. (2025). Promoting green healthcare initiatives: A systematic literature review, conceptual framework and future research agenda . Journal of Cleaner Production. https://doi.org/10.1016/j.jclepro.2025.145024

• MD Consultants. (2023). Sustainable Healthcare: Building Environmentally Responsible Medical Practices. Retrieved from https://mdconsultants.ca

• Perry, P. (n.d.). Greener Clinics, Better Care. Retrieved from uploaded manuscript: "Greener Clinics.docx"

Medical Device ETFs Get a Lift from Surgery's Return and a Wave of Acquisitions

By Mahdi Khazaei

When elective surgery schedules collapsed during the pandemic, exchange-traded funds (ETFs) that track makers of implants, heart pumps, and surgical robots lost their place in many portfolios. This year they are edging back into the spotlight. The largest fund in the space, the iShares U.S. Medical Devices ETF (ticker IHI), has gained about seven percent so far in 2025, according to BlackRock's data for 3 July, while the broad S&P 500 Health-Care index is roughly flat over the same stretch. ishares.com

Behind the modest rally is a simple reality: patients are finally getting procedures they put off for two years. Hospital operator HCA Healthcare told investors in April that admissions rose 2.6 percent in the first quarter and that demand for knee replacements,

cataract fixes, and other discretionary operations shows no sign of fading. reuters.com More procedures mean more screws, catheters, and pacemakers, so suppliers are shipping inventory at a healthy clip. Intuitive Surgical, the robot maker that sits near the top of IHI's holdings, said in January that global use of its da Vinci systems jumped 18 percent year on year and that it expects at least a low-teens percentage lift for 2025 as hospitals work through backlogs. reuters.com

Investors drawn to the story have a short menu of vehicles. IHI is the large-cap, market-weight option with roughly five billion U.S. dollars under management. It leans heavily on familiar brands such as Abbott Laboratories, Intuitive Surgical, and Boston Scientific. By contrast the SPDR S&P Health Care Equipment ETF (XHE) spreads its money equally across about sixty names, so smaller innovators carry as much weight as giants. That structure looks great when start-ups are in favour, but it can sting when interest rates are high and cash-burning companies trade at a discount. As of the end of May, XHE was still down eight percent for the year. ssga.com

Performance gaps like that raise a question: is the recent bounce just the last gasp of a recovery trade or the start of something longer? One clue lies in a wave of takeovers that has swept through the sector. Big medical-technology companies have decided it is cheaper to buy the next breakthrough than to build it themselves, and that desk-drawer pipeline is often sitting in the very same small caps that XHE owns.

The string of deals started last April, when Johnson & Johnson agreed to buy Shockwave Medical for about 13 billion dollars. Shockwave's catheter sends sound waves through clogged arteries, a niche that fits neatly beside J&J's existing cardiovascular lines and promises a ten-billion-dollar addressable market, according to analysts quoted at the time of the announcement. reuters.com Less than nine months later Stryker reached for Inari Medical in a 4.9 billion-dollar all-cash deal, betting that Inari's minimally invasive tools for dangerous blood clots will accelerate its own push into peripheral-vascular care. reuters.com Boston Scientific followed suit in January with an agreement to acquire privately held Bolt Medical, aiming to expand its cardiovascular portfolio even further.
news.bostonscientific.com

These transactions matter for ETF holders because the funds receive a takeover premium overnight, then recycle the cash into the next target. Every buy-out also signals to the market that strategic buyers see value the stock market has missed. Portfolio managers at several Canadian pension funds now argue that the combination of rising hospital volumes and a steady bid from cash-rich acquirers puts a floor under the device group even if macro conditions wobble later this year.

There is another tailwind: hospitals are finally spending on capital equipment again. Executives at HCA and Tenet have told Wall Street that staffing shortages, once a drag on volumes, are easing. With operating rooms humming, administrators can justify orders for new robots, imaging consoles, and patient-monitoring systems. The mix of procedures is also evolving. Weight-loss drugs have grabbed

headlines, but surgeons still implant heart valves, repair joints, and remove tumours. In many cases those drugs extend life and therefore enlarge the pool of people who will eventually need surgery. Some device makers, such as Boston Scientific, are even eyeing combination therapies in which digital health tools track patients after procedures, creating recurring revenue streams that were rare in the old single-use-device model.

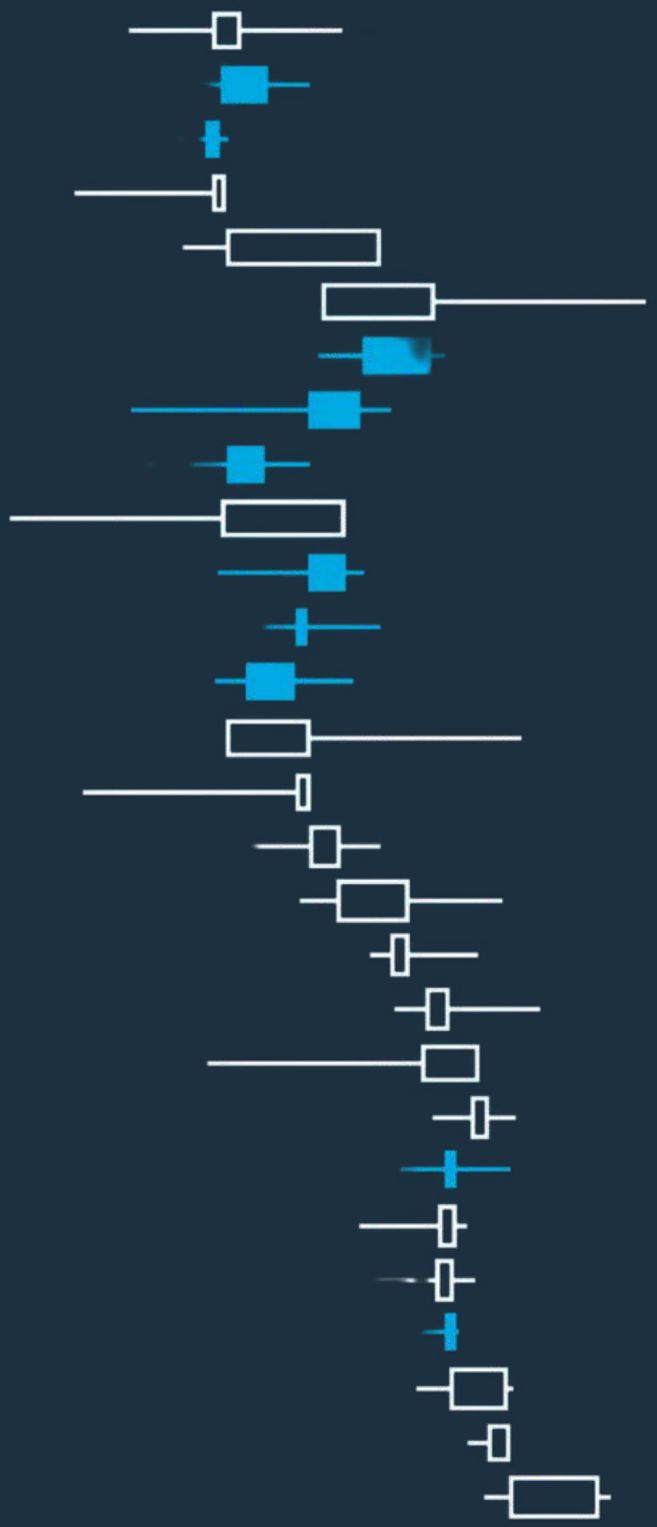
Of course, medical devices are not immune to risk. The sector faces the same tariff overhang that worries pharmaceutical importers, and a strong U.S. dollar can pinch earnings translations for global players. Supply-chain kinks linger on certain microchips and sterile plastics. There is also the elephant in the operating room: insurance reimbursement. If elective surgeries keep rising faster than expected, insurers could lean harder on hospitals to hold down prices, a step that would eventually ripple back to suppliers. Still, device companies have navigated pricing pressure for decades and have generally used innovation to stay one step ahead.

For investors who prefer to let someone else pick the winners, an ETF remains the easiest way to gain exposure. IHI offers stability through its heavy dose of blue chips and has a thirty-five basis-point expense ratio, while XHE brings lottery-ticket upside, along with more volatility, at roughly the same fee. A third option, the First Trust Indxx Medical Devices ETF, is much smaller and less liquid, which makes it suitable only for investors willing to accept wider bid-ask spreads.

The bottom line is that the medical device story in 2025 is no longer just about filling post-pandemic backlogs. Hospitals are investing for growth, makers of hardware and software are merging to grab share, and the pipeline of robots, AI-guided imaging systems, and minimally invasive tools looks busy enough to keep that cycle turning. Investors who want a simple doorway into the theme can still find it in a low-cost ETF, but they should understand the differences under the hood before writing the ticket.

Sources

- iShares U.S. Medical Devices ETF, fund page, data as of 3 July 2025
- SPDR S&P Health Care Equipment ETF, performance table, State Street Global Advisors, 31 May 2025
- HCA Healthcare beats profit estimates on strong demand for medical care, Reuters, 25 Apr 2025
- Intuitive Surgical beats estimates on strong demand for surgical robots, Reuters, 23 Jan 2025
- Johnson & Johnson to buy Shockwave Medical in 13 billion-dollar deal, Reuters, 5 Apr 2024
- Stryker strikes 4.9 billion-dollar deal for Inari Medical, Reuters, 6 Jan 2025
- Boston Scientific announces agreement to acquire Bolt Medical, company release, 8 Jan 2025



Multilingual Services' Role in Enhancing Patient Experience in Diverse Communities

By Editorial Team

In our increasingly multicultural world, language has emerged as a key driver of healthcare quality and access. Millions of Canadians and other North American residents who speak English as a second language, or not at all, often feel like outsiders navigating an alien system. Misunderstandings, frustration, and isolation are not uncommon. Multilingual services are helping to change that. Language barriers limit access to care, prevent diagnoses, and lead to poorer outcomes. Patients with limited English proficiency (LEP) are more likely to experience medication errors, miss preventive services, and misunderstand

treatment plans. These are not simply inconveniences. They represent a serious and unacceptable gap in patient safety and equity. Carenet Health and Momentive research found that 34.5% of surveyed US patients reported poor customer support due to language barriers.

The good news is that a solution exists: a multilingual and culturally responsive health care system. Services with language access are about more than just translation. They build trust, safety, and dignity back into the patient experience. Leading healthcare organizations are implementing models that include in-person, over-the-phone, and video remote interpretation services. Translated materials like consent forms, prescriptions, and health education resources are also increasingly available. This helps patients to understand their conditions, make informed decisions, and feel confident in the care they receive.

Multilingual pharmacy services play a critical role in making health care inclusive and effective. For example, Smile Pharmacy provides language assistance for appointments in English, Spanish, and Portuguese to ensure patients understand dosage instructions, potential side effects, and medication interactions. Without this support, a simple misunderstanding about medication can quickly turn into a serious medical event.

Multilingual services also help to alleviate the emotional burden and distress patients may experience when they don't feel seen or heard by the system. Speaking one's own language is an important piece of feeling in control and empowered as a patient. But it's also a basic safety and care quality issue. Too many patients have stories of feeling disempowered and isolated when they couldn't express their health concerns in English. In the real world, these kinds of solutions can have an immediate and powerful impact. A Spanish-speaking woman was able to accurately describe her symptoms to a bilingual pharmacist, preventing a major medication error. A Portuguese-speaking senior was given clear instructions about diabetes management, leading to better outcomes and more confidence.

Artificial intelligence-driven technology is helping to democratize the reach of language-inclusive healthcare. Automated translation tools are now available for scheduling systems, phone support lines, and even clinical documentation and notes. Translation applications and multilingual chatbots can also greatly enhance the patient experience — particularly in telehealth scenarios. That said, technology should be a force multiplier for — not a substitute for — qualified interpreters.

While these examples are promising, challenges and gaps remain. Many organizations lack the budget or staff to provide comprehensive language services. Some institutions still use family members to help patients fill out forms or translate conversations, creating privacy and confidentiality concerns and risking poor communication. Apps and online translation services still lack the accuracy and cultural fluency needed for complex medical interactions. These are problems that must be solved, not excuses for inaction. Government

regulations like the U.S. Civil Rights Act (Title VI) require that all healthcare communication must be accessible for patients using federally funded health programs. The federal standards for CLAS in Canada also provide a mandate to ensure healthcare equity and accessibility.

So what's next? Healthcare providers can take steps to create best practices in this space. Training all staff on cultural and linguistic competence, hiring multilingual staff, engaging certified interpreters and translators, and incorporating tools into clinical systems are all great places to start. From patient intake forms that record preferred language to care instructions translated into multiple languages, CLAS guidelines offer a proven foundation for these initiatives.

Canada's population is only going to become more diverse with time, and the time to invest in these solutions is now. Healthcare is always better when it meets patients where they are in terms of the language they speak and the culture they come from. Better still, it's a smarter and safer way to provide care. In a system that wants to be equitable, every patient should feel seen, heard, and understood.

References:

- https://theraexstaffing.com/breaking-language-barriers-in-healthcare-the-role-of-multilingual-professionals/
- https://smilerxnj.com/multilingual-services/
- https://www.simbo.ai/blog/the-role-of-multilingual-support-in-enhancing-patient-equity-and-communication-in-healthcare-settings-1215977/

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