

# Alberta Doctors' Digest

## Foundation stones of medicine

**With this issue of Alberta Doctors Digest, we are pleased to continue our series on the Foundation Stones of Medicine**

When walking across the floor of a building, we may not be aware of the foundation stones that keep it in place. Similarly, patients travelling across the health care system are usually unaware of the intricate structure of specialty care that lies beneath what they see on their individual journeys.

So we are featuring an ongoing series of articles highlighting some foundational specialties. We think the perspectives of these colleagues will be illuminating for the public and perhaps even for members of the profession.

For November/December, we introduce: general internal medicine.

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It's hard to overstate the important role general internal medicine (GIM) plays in providing comprehensive care to complex and often critically ill patients.

"We are like a Swiss army knife of medicine specialties," explains Dr. Troy Pederson, a general internal medicine specialist at the Peter Lougheed Hospital in Calgary and the head of the AMA's Section of Internal Medicine. "Our skillset includes care of patients who have multi-system disease and are often balancing competing care plan issues. Sometimes it is about finding the best imperfect plan for a given patient."

Dr. Pederson explains that because of the nature of their work, GIM specialists are trained to work through diagnostic and management decisions in our complex and often acutely unwell patients. General internists work in hospitals, managing the care of seriously ill patients, and in community offices where they focus on disease prevention, diagnosis and management.

"In some community hospitals in Alberta, GIM physicians have taken on additional practice focus in areas such as medicine sub-specialties, procedures or work in ICUs. We have many general internal medicine colleagues who have taken on leadership in areas such as addiction medicine, clinical pharmacology, bariatric medicine, medical disorders of pregnancy, thrombosis, point-of-care ultrasound and peri-operative medicine. We're very nimble and adapt to the needs of the clinical environment where we work."

This is especially true in smaller hospitals, where the unique needs of the patients of that community will help shape the care GIM specialists offer. "No matter where we work, we

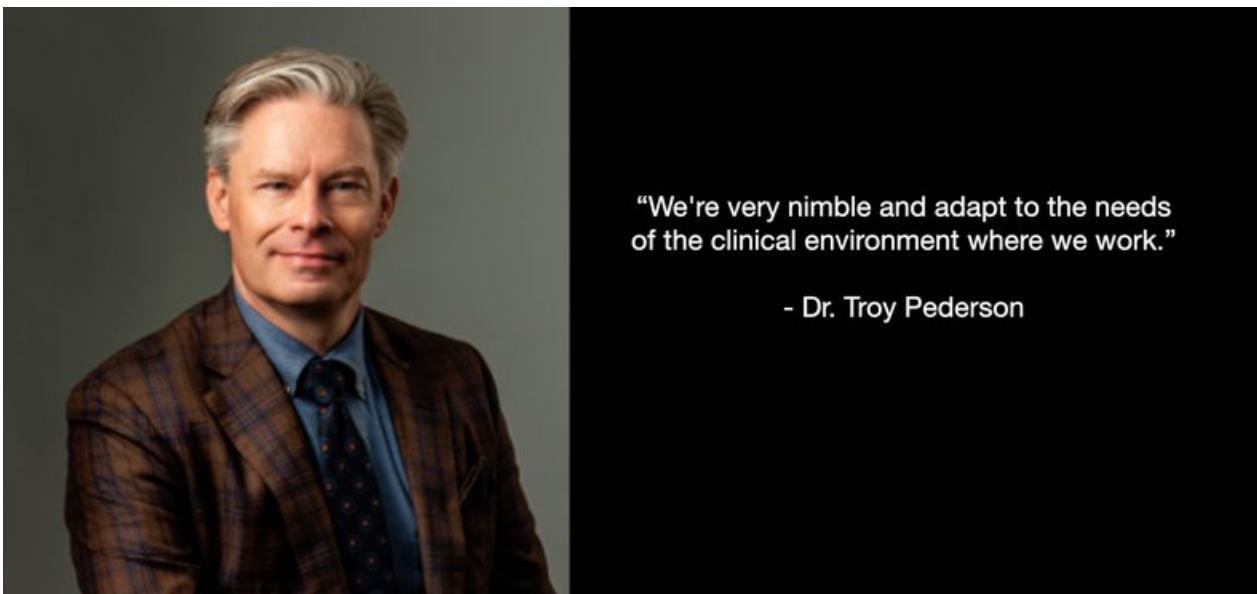
have the ability to do what's required to provide comprehensive medical care to complex patients.”

### **The journey to modern general internal medicine**

Modern general internal medicine has evolved significantly over the years. Dr. Pederson notes that initially the Royal College of Physicians and Surgeons of Canada had two streams: a surgery stream and a medical stream. In the 1970s, emerging areas of expertise such as cardiology and later gastroenterology began to appear within internal medicine. “Through the 80s, there was a lot of emphasis on sub-specialty medicine, and the remaining internal medicine physicians at that time had two main roles. The first was in academic centres where we contributed heavily to the educational portfolio within foundational teaching of internal medicine. This included medical teaching teams and educational leadership roles in medical schools and residency programs. The second cohort was in community-based hospitals – places where there weren't a lot of sub-specialists available, and these physicians were the true clinical generalists.”

By the mid-1990s, there was a growing need for care of patients who were living longer with their single-system diseases and the complexity of their care plans crossed specialties. Patients with multi-system illnesses and diseases increased, as did the acuity and complexity of these patients' care plans in and out of hospital. As this evolution continued, general internal medicine as a sub-specialty also gained momentum.

In 2007, the Royal College recognized general internal medicine as a sub-specialty of internal medicine. This sub-specialty encompasses the values of clinical generalism and is characterized by its breadth of clinical activity and alignment of practice profile with health needs of local populations.



Dr. Troy Pederson, Calgary

## **General internal medicine and COVID**

The importance of general internal medicine in Alberta was especially evident during the early waves of COVID, when patients with complex comorbidities were flooding hospitals.

“When COVID arrived in hospitals, general internal medicine was front line both clinically and operationally,” explains Dr. Pederson. “There was an important synergy with emergency medicine, family medicine and ICU, but there was a large cohort of patients who were hospitalized and were not in ICU and too complex for other physicians. The valuable tool kit of the general internist was a prized resource, and we were the first in and last out with each wave.”

Many of the COVID patients who were admitted to hospitals had complex health issues, including diabetes, heart failure or COPD. Because of the experience general internal medicine physicians bring to their work, they were able to support the complex clinical care needs of these patients through their recovery and sometimes through end of life with our compassion and palliative care skills. “We brought a unique skill set that was needed and appreciated by our colleagues during COVID. We were really the backbone across the hospitals in non-ICU care of very sick patients.”

### **Increasing demands and pressures**

Dr. Pederson explains that a lot of the pressures on general internal medicine right now are coming from an inpatient care environment where many of the stressors on our health care system are capacity issues. “We’ve certainly been oversubscribed as a service. Because our patients inherently come with a higher level of complexity, we’re required to juggle a lot of competing needs. In order to deliver optimal care, a chronic complex patient inherently requires a lot more time and system support. The complexity of patients continues to increase over time. While it’s great that we are capable of providing that care, as complexity increases, the capacity for a physician goes down. A GIM physician looking after five patients may have a similar cognitive load to a sub-specialist looking after 10 because they only have one specific problem to address.”

The increased complexity of patients and the resulting increased demand for general internal medicine care mean the system is desperately in need of more generalists. “We’re needed not just in hospitals, but around hospitals, supporting the primary care teams, supporting discharges from hospital, supporting complex patients and undifferentiated patients in the community,” says Dr. Pederson.

He also notes that as more people struggle to access primary care, more are showing up in emergency rooms. Having general internal medicine specialists supported in the community could help alleviate some of the pressure, making it easier to care for patients with complex medical conditions outside of acute care settings. A well-supported, community-based general internal medicine model could allow patients with complex needs to see an internist who could manage their care, rather than expecting them to navigate their way to multiple specialists.

“Our system hasn’t figured out how to support the care of complex patients in a way that values the skill set of the general internal medicine specialist or how to optimize capacity for a GIM seeing those patients. We need a model that incentivizes high-quality complex

care delivery teams, both inpatient and outpatient.” A more modern GIM community model could also better support the primary health care system and sub-specialties.

As our health care system continues to buckle, Dr. Pederson says the time is right to rethink how we care for complex patients. There is a cohort of patients who are seeing several sub-specialists. These patients may potentially benefit from a care model that integrates all their clinical management in one place. GIM will never replace the expertise of our sub-specialty colleagues, but there is an opportunity to find those places where multi-specialist follow-up can be consolidated in certain patients, positively increasing capacity in other areas.

### **Richness, variety and impact**

Despite the challenges and the increasing complexity of patients, Dr. Pederson continues to love what he does. “We’re very nimble, which is important when you have a very broad range of different problems that you’re dealing with. We’re diagnosticians above all else and that requires a knack for problem-solving.”

He especially enjoys the richness and the variety of the work, something he hopes continues to attract medical learners to the specialty. “Because of the huge engagement of general internal medicine within the training programs – we work as program directors, faculty, advisors and educational leaders – we can help provide positive role modelling that shows learners that they could travel our career path. It’s a privilege to take that path and to work to provide the kind of comprehensive, complex care our patients need.”