MedIT | Performance Report 2011
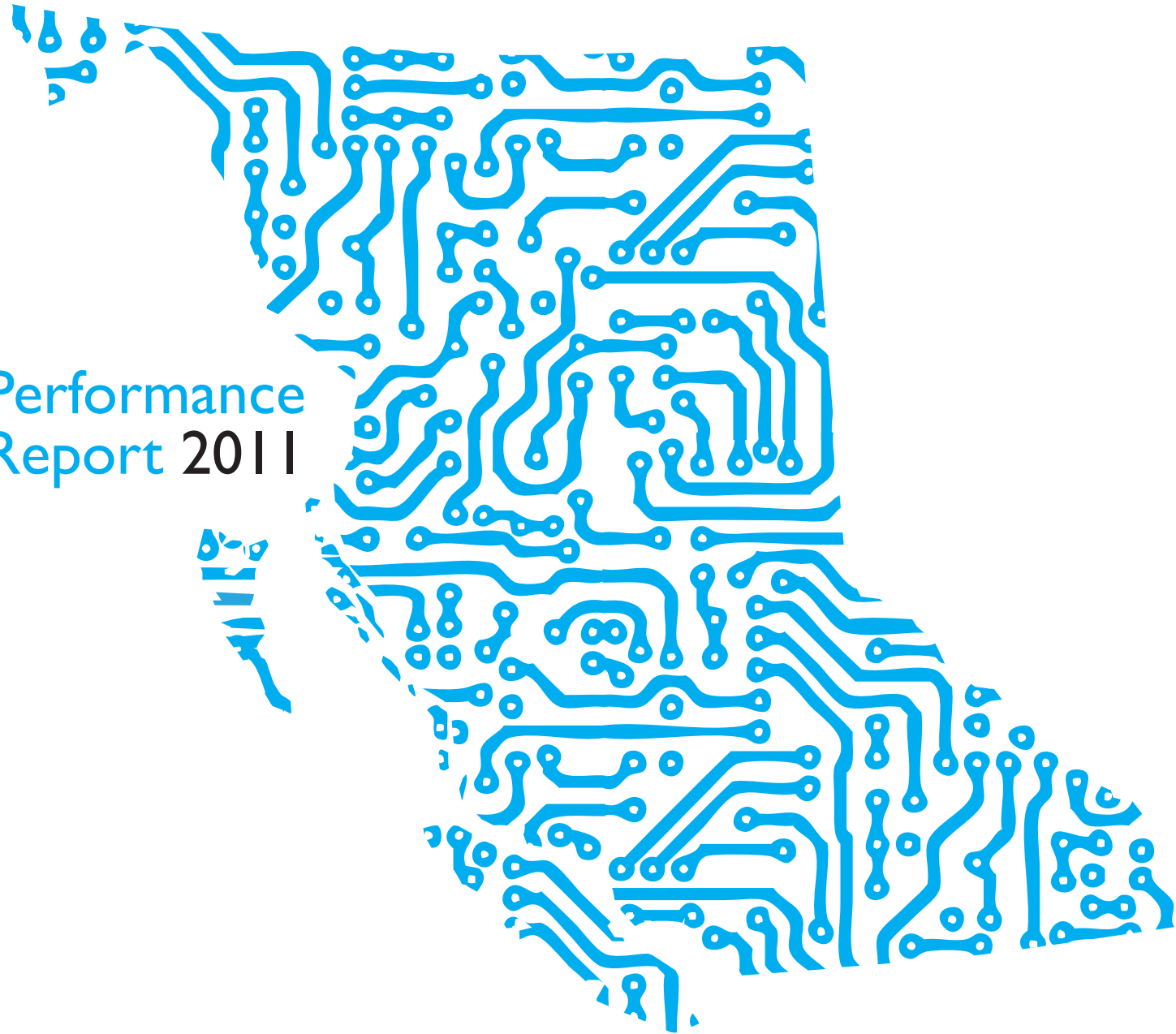
MedIT mission: To support excellence in health education, research, and service with innovative and sustainable technology solutions.

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A Culture of Responsiveness

Throughout our short history, we at MedIT have seen rapid development in our maturity as a service organization. Never has this been more evident than during this past year. We are increasingly recognized as strategically important in helping the Faculty of Medicine achieve its goals. The Faculty we serve looks to us as not just a group that supports its endeavours but as one willing to play a significant role as a member of the team, and one that is able to lead when the business asks for its leadership.

Our accomplishments

We have worked diligently over the past year to serve the Faculty's needs by developing—among other solutions—a centralized service desk to act as the single point of contact for MedIT customers; a program management office to consistently deliver solutions to business issues; and technology enabled facilities to support distributed health professions education. These accomplishments, and many more, are highlighted on the pages inside.

Our role

Along with these achievements, one of our most significant roles has been to enable collaboration within this diverse and distributed Faculty. It is a critical responsibility and doing it well requires deep collaboration among the MedIT team. We need to continue to identify ways to improve how we communicate with each other so that we are in a position to better respond to the needs of those we are here to serve—our customers and stakeholders.

Our culture

The Faculty of Medicine is extremely diverse with corresponding complexity. The countless fascinating challenges we face will not all be solved through technology. However, technology will continue to present new opportunities for the Faculty to address problems. And we as technology professionals will be asked to respond with all the flexibility and knowledge we can muster. It is this responsiveness—our ability to listen, understand, adapt, and evolve—that will continue to shape our culture and the service we provide.

Dave Lampron
Director, Technology Enabled Learning

Christopher Pryde
Director, IT Operations

Who We Are

MedIT provides the Faculty of Medicine with IT services that support medical education, research, and administration. We support our customers' unique needs through the following six management portfolios.

Client Services
Serves as the single point of contact and support for MedIT's customers and partners.

Program Management Office
Focuses on delivering successful projects and programs for MedIT's customers, stakeholders, and partners.

Infrastructure Services
Provides the foundational technology architecture, design, implementation, and operations for all customers.

Collaboration Technologies
Supports real-time communications technology (e.g., voice and video) to facilitate distributed education.

Application Services
Ensures that systems, applications, websites and databases provide maximum benefit to the Faculty.

Education Technology
Designs and supports learning technologies and provides instructional services to the Faculty.

MedIT by the numbers

9,675
Total # of calls to Service Desk

18,774
Total # of emails to Service Desk

4,629
Total # of videoconferences supported

10,781
Total # of tickets logged
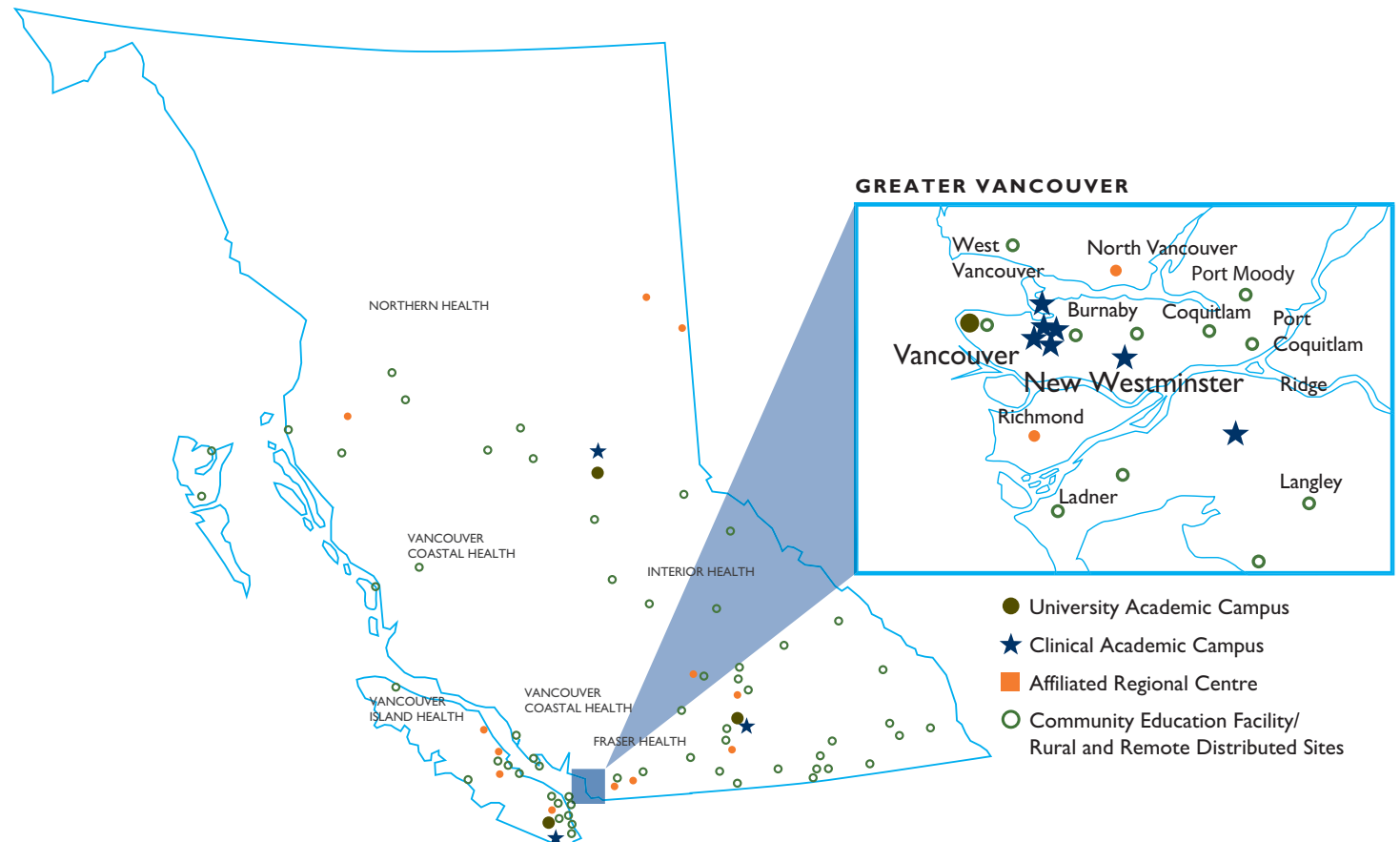
98%
Ticket closing rate

Where We Are

MedIT services can be found wherever the Faculty of Medicine is located. The Faculty occupies over 1.5 million square feet of academic space spread over 75 health authority sites and four university academic campuses. We work in strategic partnership with the following groups:

- Fraser Health Authority
- Interior Health Authority
- Northern Health Authority
- Provincial Health Services Authority
- University of Northern British Columbia

- University of Victoria
- Vancouver Coastal Health Authority
- Vancouver Coastal Health Research Institute
- Vancouver Island Health Authority

"We are in the business of taking care of people, including our colleagues at our partner institutions. We rely on each other to perform at our best."

- Dave Lampron, Director of Technology Enabled Learning

NORTHERN HEALTH

VANCOUVER COASTAL HEALTH

INTERIOR HEALTH

VANCOUVER COASTAL HEALTH

VANCOUVER ISLAND HEALTH

FRASER HEALTH

GREATER VANCOUVER

West Vancouver
North Vancouver
Port Moody
Burnaby
Coquitlam
Port Coquitlam
Vancouver
New Westminster
Ridge
Richmond
Ladner
Langley

- ● University Academic Campus
- ★ Clinical Academic Campus
- ■ Affiliated Regional Centre
- ○ Community Education Facility/ Rural and Remote Distributed Sites

Who We Help

MedIT is the elective IT service provider for the Faculty of Medicine and provides support to the following types of customers:

Research

Faculty of Medicine researchers annually attract more than half of UBC's funding for research. Their focus on research excellence finds them at world-renowned centres and institutes, often residing within health authority jurisdiction. MedIT works with our health authority partners to provide researchers with adequate storage, secure virtual private networks for access to data, and advice on high performance computing.

Education

MedIT manages one of the most sophisticated videoconferencing systems in Canadian higher education. This system supports the Faculty's goal to deliver innovative health education programs that are responsive to the needs of our communities. We also use our technological insight to develop new approaches to enabling learning in underserved regions (e.g., online access to recorded lectures and student assessments).

Administration

The administration of the Faculty is complex and is built on intricate partnerships. It requires central solutions with distributed control. We provide a standard suite of enterprise applications (e.g., one45; Online Application System) and appropriate network infrastructure to sustainably support our activities across the province. We also provide essential tools for collaboration (e.g., intranet; web conferencing) and secure protection (e.g., personal firewall software) for the critical information we exchange.

Southern Medical Program

MedIT played a vital role in enabling the creation of the Southern Medical Program (SMP) in the Southern Interior of BC in 2011. We developed technology enabled facilities* and ensured their seamless integration into the provincial distributed medical education model.

"The first students of the Southern Medical Program are now using buildings calibrated to deliver the highest quality educational experiences."

Along with our partners in Space Planning & Facilities Management, MedIT worked diligently to **ensure the technology would perform successfully and transparently for the end users**—students, faculty, and staff. We collected requirements, assessed needs, and developed specifications. We also consulted with architects, engineers, construction staff, and the people who would be using the buildings.

Result

The result of these efforts has been remarkable. **The first students of the SMP are now using buildings calibrated to deliver the highest quality educational experiences.**

Along with their counterparts in the Island Medical Program, the Northern Medical Program and the Vancouver-Fraser Medical Program, students are able to participate in:

- videoconferenced lectures and rounds

- computer-based pathology and histology labs; and
- clinical skills sessions taught through video, hands-on demonstrations, and simulation activities.

Standards

As part of these efforts, we have also continued to develop **a library of technology and facility development standards**. They ensure the educational experience is comparable among all the geographically-distributed programs. We created these sustainable and flexible standards through consultation with students, faculty, and staff, and refined them to meet the constant evolution of technologies used in health professions education.

Support

With the creation of the SMP, we have also developed and implemented **cross-institution support agreements** with the

Interior Health Authority's Telehealth group and IT staff at UBC's Okanagan campus. These agreements ensure that staff are available to provide continuous educational delivery support to geographically distributed facilities.

In addition to providing consistent staffing, these agreements enable us to:

- work more closely with our partners in institutions throughout the province;
- leverage areas of local staff expertise; and
- create cost efficiencies by partnering with existing service providers.

Looking ahead

Overall, our support of the SMP contributes significantly to the successful expansion of the distributed medical education program to the Southern Interior.

Where?: The Health Sciences Centre at UBC's Okanagan campus; Kelowna General Hospital Clinical Academic Campus; Kootenay Boundary Regional Hospital; Vernon Jubiliee Hospital; and Royal Inland Hospital.

Customer Satisfaction Initiatives

Created a centralized Service Desk as a single point of contact for all MedIT customers.

Established a standard one-business-day response time for customer queries.

Developed service level agreements detailing expectations for all MedIT customers.

Program Management Office

Since its creation in September 2010, MedIT's Program Management Office (PMO) has been leading change by using a consistent, yet flexible, project methodology to deliver initiatives aligned to the Faculty's strategic goals.

"This Program Management Office framework enables us to focus on delivering successful projects on time and within budget."

Our PMO encompasses all the people, processes and tools to **manage projects and influence project performance**. It is based on a four-pillar structure: (1) demand management, (2) resource management, (3) reporting and support, and (4) practice management. This PMO framework enables us to focus on delivering successful projects on time and within budget.

Deliverables

As part of the development of the PMO, we have implemented the following deliverables:

- **Project dashboard**. The dashboard provides a clear picture of our current and future projects. It serves as a tool to track project progress, clarify project goals, and enable decision making.

- **Project initiation process**. This initiation process includes a project charter which helps project leaders align project sponsors, project teams, and end users. Our project charter template has been adopted by several of our partners.

- **PMO team**. The formation of a dynamic, collaborative PMO team has positively influenced the organization by supporting the planning and successful execution of projects.

Through the PMO, we have been able to guide the successful delivery of numerous flagship programs and projects involving capital infrastructure, software applications, and process improvements.

Looking ahead

We will be providing a comprehensive package of standardized processes and training for staff to **further develop and foster a project management culture**.

In the coming year, the MedIT PMO will also continue to take a flexible approach towards project management, while remaining focused on continuous improvement, and fulfilling its **mandate to support the Faculty of Medicine.**

People Initiatives

Recognized staff contributions via an employee-of-the month program.

Developed an orientation package for all MedIT staff members.

Revamped and standardized our performance development plan as part of the IT Career Framework.

Evolution of the Service Desk

The role of IT contact centres is evolving. They are uniquely placed to manage customer relationships and ultimately have a role in supporting all the IT work that is done for an organization.

"Our Service Desk is now a single point of contact for IT issues. It's the face of our organization."

With a focus on increased efficiency, we united the IT Help Desk and the Videoconference Service Desk into one centralized Service Desk. **This move enabled us to provide centralized, consistent support to our customers**.

Our Service Desk is now **a single point of contact** for IT issues. It is the face of our organization to the thousands of customers we serve each year.

Continuous improvement

Along with uniting the two service desks, we have also followed the principles of continuous improvement to further refine service to our customers.

We have **developed centralized processes** for handling:

- critical incidents;
- service outages;
- ticket logging; and
- internal communications.

We also produced a weekly, monthly, quarterly, and annual scorecard to track our performance.

Depth of support

As part of the merging of desks, we have increased the type and depth of support we provide directly at the Service Desk.

Staff now have applications and network expertise that enable them to troubleshoot issues without having to escalate to staff members outside the Service Desk.

Customer service

We increased the emphasis on customer service skills to complement our technology-based expertise when helping clients. As the staff at the Service Desk are key customer relationship builders, **their ability to communicate effectively is critical**. Staff received customer service training and participated in communications courses as part of their professional development.

Looking ahead

Serving as the main entry point for IT-related support and customer service, the role of the MedIT Service Desk will continue to grow in importance.

Sustainability Initiatives

Created a shared dashboard that makes our projects visible to all staff for operational sustainability.

Developed a Rationale for Purchase form.

Built the infrastructure for telecommuting.

IT Career Framework Partnership

MedIT is committed to cultivating strategic partnerships. Our participation in building the IT Career Framework is one such example. We were one of four UBC pilot groups that came together to create the Career Framework.

"The Career Framework provides these staff…with visibility into IT opportunities throughout UBC, regardless of locality."

Working with UBC IT, the Centre for Teaching, Learning and Technology, and IT Services at UBC's Okanagan campus, we created a structure to **guide staff in building their careers at UBC**. We have also developed resources to assist managers with recruiting and developing staff.

Visibility into opportunities

MedIT is the most geographically diverse pilot group, with employees at locations throughout the province. The Career Framework provides these staff (and all other members of the Information Systems & Technology job family) with visibility into IT opportunities throughout UBC, regardless of locality.

Staff can see their current position in the context of the entire IT workforce which makes it **easier to plan future career steps**.

Competencies identified

Due to the diversity of the work within the Faculty, MedIT requires positions with a variety of skills—both technical and interpersonal. The Career Framework identifies **which skills and competencies are required for each type of position**.

This helps hiring managers pinpoint the competencies they are seeking and ensure job postings attract suitable staff. As well, staff are able to **make more informed decisions** about what professional development they need for different roles.

Alignment

MedIT has successfully aligned the majority of MedIT staff job descriptions to the Career Framework and will complete this process in 2012. By having consistent job description templates, MedIT managers and team leads **can post job positions more efficiently**.

They can also more easily select interview questions that will help them find suitable candidates by having the core competencies identified for each type of role.

Looking ahead

In 2012, we will be focused on continuing to support our managers and team leads in leveraging the Career Framework to create further efficiencies in the recruitment and hiring processes.

MedIT will also be creating a toolkit to encourage **consistent recruiting practices, and staff performance development planning**.

Strategic Partnership Initiatives

Created a vision for mobile learning with MD Undergraduate Program students, faculty and staff.

Played key role in creating the BC Simulation Technology Working Group with partners.*

Established a working group for service desks at UBC's Point Grey campus to share best practices.

Built interdisciplinary teams and exchanged expertise with partners at UBC's Okanagan campus, UNBC, UVic, UBC IT, and the Provincial Health Services Authority.

*Partners: UNBC, UVic, Nanaimo Regional General Hospital, CESEI, Northern Health Authority, and BC Children's and Women's Hospital.

Videoconference Reliability

In the past year, we initiated a program to improve videoconference service availability between Faculty of Medicine academic and clinical sites. A reliable network connection is essential for the effective distributed delivery of the health professions education continuum.

"[The goal is to] improve the availability of education delivery across the province."

After identifying a risk in only having a single connection point between academic and clinical videoconference networks, we brought together groups from BCNET (BC's provider of a high-capacity, advanced fibre optic network infrastructure), the health authorities, UBC IT, the University of Northern British Columbia, and the University of Victoria.

Their goal? **To improve the availability of education delivery across the province**.

Secondary network

The group undertook extensive inter-organizational work to architect, design, implement, and test an automatic secondary network connection.

With this second connection in place, if the primary network were interrupted, instead of losing the connection to the videoconference, **the connection would be moved instantly and automatically to the secondary network** without the participants having any indication of trouble.

For example, in the rare instance that there is an interruption to the primary network during a videoconference lecture to students—instead of the lecture being cut off with a potential loss of learning—the videoconference would continue on the secondary network and the students would not even be aware of the change.

Minimized risk

Much of the learning and collaboration that takes place within the health professions education continuum is **highly dependent on these complex interconnected videoconference networks**.

The creation of this secondary connection dramatically **minimizes the risk of interruption to education**. It also ensures that the extensive administrative work done via videoconference has robust support in place.

Looking ahead

Thanks to this work and the efforts of our partners on this initiative, medical education delivery continues to become more reliable, enabling the Faculty of Medicine to support more health professionals in more regions of the province.

Services and Solutions Initiatives

Produced 25 videos on how to incorporate educational technologies into the curriculum.

Built a new online application system for the MD Undergraduate Program.

Migrated 40 Faculty of Medicine websites to a new content management system, WordPress.

Virtual Patients for Health Professions

Over the past year, we have matured our virtual patient service offering as part of our instructional design suite of services. This support is helping students practice clinical reasoning skills in a safe environment.

"The designers transform… templates and associated storyboards into fully interactive, media-rich virtual patients that are ready for release to students."

Virtual patients are interactive computer simulations used in health care education. When working with virtual patients online, students emulate the role of a healthcare provider by making decisions and receiving feedback about clinical reasoning, therapeutic decisions and patient management planning.

Video is often used to bring these clinical experiences to life by illustrating many aspects of treating and diagnosing a patient, such as performing clinical tests, identifying disorder-specific abnormalities, and conducting interviews.

Our service

Our instructional designers are able to offer full-service support for virtual patients that are aligned with the Faculty's virtual patient curricular strategy. The designers transform faculty members' virtual patient templates and associated storyboards into fully interactive, media-rich virtual patients that are ready for release to students.

We also offer a self-service support model, where customers receive assistance through a starter kit. The kit includes an authoring guide which provides a description of the case-authoring process and describes the various elements of storyboarding. We have also begun to offer a quarterly workshop on creating virtual patients as part of this self-service model.

How are they being used?

One example is a government-funded project undertaken with the Department of Physical Therapy. We developed virtual patient cases to help (a) internationally educated physiotherapists prepare for entry-to-practice in BC and (b) Canadian-trained physiotherapists re-enter the workplace. The virtual patient cases are being used to help these physiotherapists prepare for the written and practical components of the Canadian national examinations.

We also developed virtual patients for the MD Undergraduate Program. These virtual patients were designed to help students with clinical reasoning such as recognizing the signs and systems of gastrointestinal bleeds, assessing and managing a patient with postpartum hemorrhage, and describing clinical findings with a patient presenting with heart failure.

Looking ahead

The emphasis on providing students with clinical experiences during their education is expected to grow within the Faculty. We anticipate there will be an increased demand for virtual patients. We have laid the groundwork for this service and will continue to develop it to meet the needs of students and faculty.

Communications Initiatives

Ensured all projects had a communications plan.

Created social media guidelines.

Developed internal staff blog to facilitate organizational awareness.

Moving **Forward**

We are a customer service organization. As such, we strive to continuously improve not just the services we provide but ourselves. We must find ways to be ever more **responsive to the needs of the customer**. We must listen in new ways in order to understand better what those needs are.

Listening to customers will allow us to design services that will work for them. This implies constant communication and deep collaboration. We should consider that we are in an ongoing conversation with the Faculty of Medicine in which **strategic relationships are being built**, important **ideas are being cultivated**, and **realistic expectations are being set**.

The way forward requires no change in course. Our next year looks very much like our last; improved communication with each other, our partners, and our customers for the benefit of the Faculty.

We want MedIT to be known for its culture of responsiveness, and **we need your voice in the conversation** to ensure it is.

Contact Us

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