



2020/21 eSIM Annual Report

Optimizing Patient Safety, Quality of
Care, and Health Outcomes



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WHAT IS SIMULATION?

Simulation is an educational technique in which clinical events are recreated to engage individuals, teams, systems and communities in an interactive, immersive and meaningful “real-world” experience, often through self-reflection and guided facilitation.



VISION

eSIM will be leaders in healthcare simulation in order to promote best practice, prevent harm, and enhance quality of care.



MISSION

eSIM’s mission is to lead simulation along the continuum of care within AHS by enhancing patient, workforce, system, and performance outcomes.



VALUES

- Quality • Safety • Impact • Mentorship • Accessibility •
- Interprofessional Collaboration •

FOUNDATIONAL STRATEGIES



Frontline Simulation



Faculty Development



Projects



Innovation

COVID-19 RESPONSE



Summary

At the declaration of a global pandemic eSIM restructured services to ensure a timely, efficient, and large-scale simulation response to the COVID-19 pandemic in Alberta. eSIM rapidly responded to this need by leading the intake, design, development, planning, and co-facilitation of over **400 acute care simulation sessions** (1-3 days per session) across all zones and clinical areas (urban and rural) to an estimated **35,000 learners** of frontline team members.

The simulation community has been drawn upon to use their skills in a multitude of ways (i.e. simulation scenario design, debriefing, facilitation, learner and system-focused approaches, surge planning bed capacity exercises, process and environmental scans with debriefing, needs assessments and risk reporting) during the pandemic to educate and prepare healthcare teams, systems, and processes.



Simulation Methods in COVID-19 Preparedness

- Table top surge planning with debriefing
- Process walkthroughs/environmental scans
- Low fidelity rapid cycle simulation and debriefing

>35 000

estimated learners in COVID-19 simulations

>3000

systems issues identified and mitigated through COVID-19 simulation

>400

COVID-19 simulation sessions

>600

teams we've shared eSIM COVID-19 resources with

Knowledge Sharing

When using a simulation for systems integration approach, the collection and sharing of systems issues and learnings is key to informing our organization. The following links are examples of some of this work. Several additional resources are available within the 4 Dashboard updates (please **click or scan** the QR codes).

4 Dashboard updates Shared with **>1500** people & teams to date



Shared Learnings Webinar Presented on Mar 24, 2020. **>1000** people registered and **>4000** views on YouTube



Rural Site Preparedness with Simulation Webinar Presented on Apr 16, 2020. **~1200** people registered



Publication

eSIM's tremendous COVID-19 response was published this summer in the journal *Advances in Simulation*. [Click here](#) to access this publication.

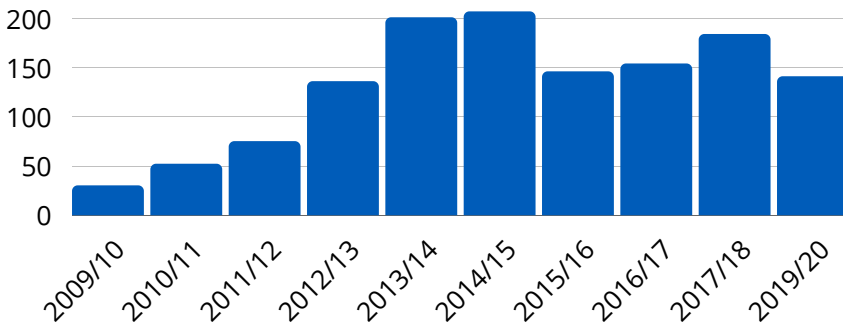


eSIM EDUCATE

WISE

WISE is eSIM's foundational learning course. The course is designed for individuals who will be directly involved in simulation providing a broad overview of core simulation concepts and principles to novice and intermediate simulation educators. This interactive and immersive 2 day course provides a mix of didactic, small group, and simulation based activities.

WISE PARTICIPANTS PER YEAR



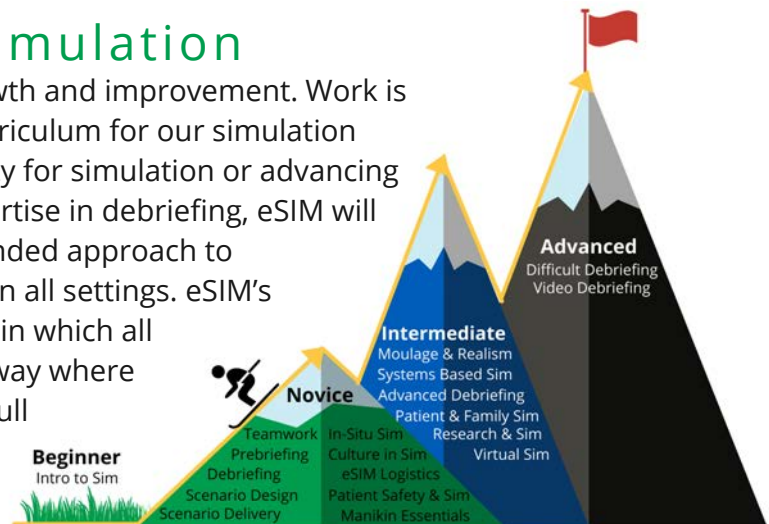
Total To Date

1,286

PARTICIPANTS TRAINED AND MENTORED THROUGH THE WISE COURSE

Taking on the Slopes of Simulation

eSIM recognizes the importance of continued growth and improvement. Work is underway on the development of a new tiered curriculum for our simulation faculty. Whether you are a beginner with a curiosity for simulation or advancing in your practice with hopes of black diamond expertise in debriefing, eSIM will have a course to support your growth, while a blended approach to curriculum delivery will ensure access to learners in all settings. eSIM's faculty development program will create a culture in which all can learn and grow in a standardized, supportive way where we all feel safe, valued, and invited to reach their full potential.

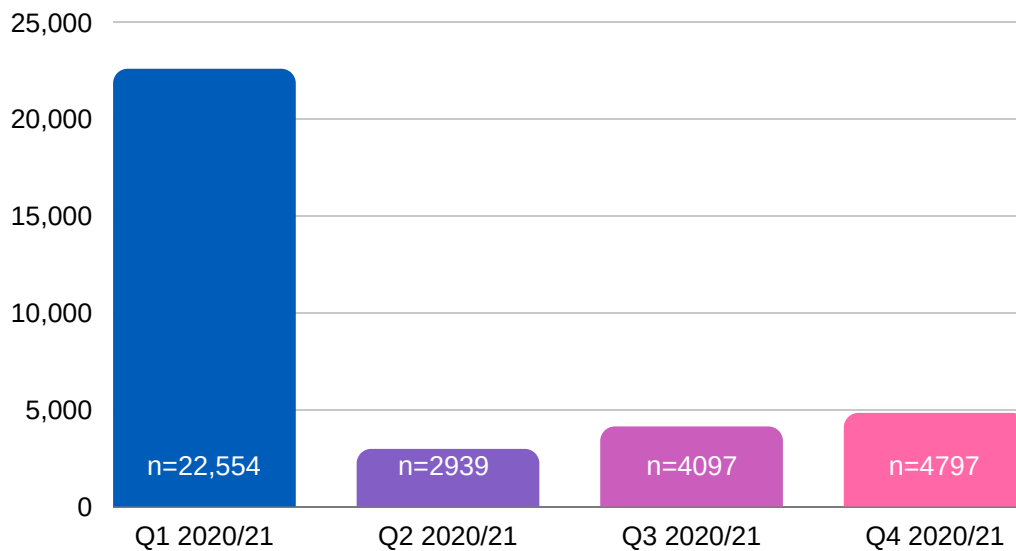


*Combination of video podcast, webinar, and in-person learning

eSIM Grand Rounds

eSIM Grand Rounds are an educational opportunity offered to the broader simulation community. These sessions, offered virtually, will include invited expertise shared by simulation consultants and experts in the field. Some examples of the expert panels and hot topics for discussions include: innovations in simulation, simulation for research, system focused simulation, clinical debriefing, interprofessional simulation, advanced debriefing, virtually facilitated simulation and indigenous themed simulation.

NUMBER OF PARTICIPANT ENCOUNTERS IN SIMULATION PER QUARTER



2020/21 Data at a Glance



Estimated 34,387 participant encounters over 2131 simulation sessions facilitated or supported provincially between Apr 1, 2020 - Mar 31, 2021.



In Q1 2020/21 eSIM facilitated or supported a huge influx of COVID-19 simulations, focusing on systems integration and COVID-19 preparedness.

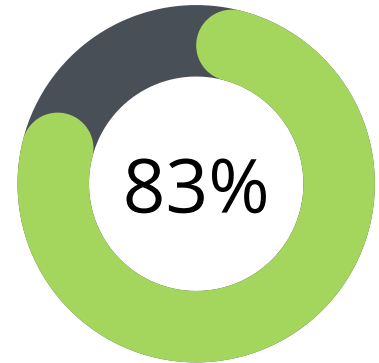
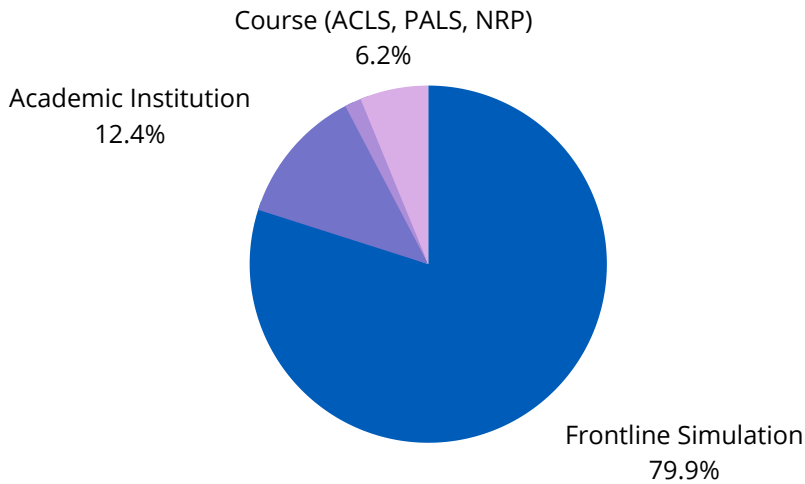


In December, eSIM launched a new booking and post session reporting system. This new system will help our team to better collect meaningful simulation data and outcomes. Please [CLICK HERE](#) to access the new booking request form. Already, we have seen a compliance rate in post session data reporting increase from 25% to 85%.



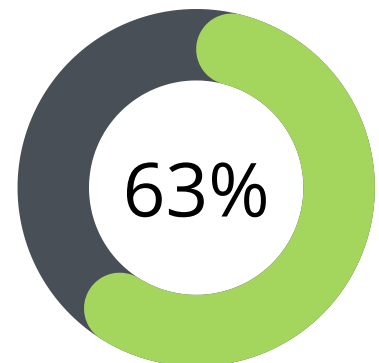
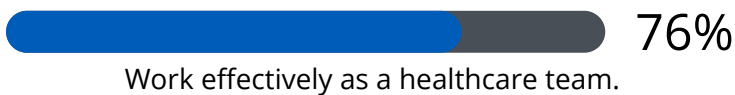
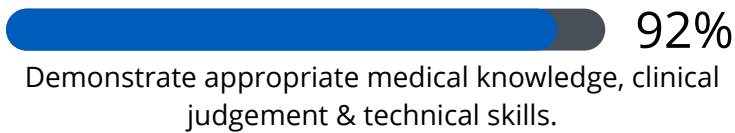
As eSIM works towards accreditation, the team has developed a series of standard **Operational Expectations and Processes** to ensure optimal simulation delivery, quality, and efficiency when working with multiple partners and end-users. Completed Operational Expectations and Processes can now be found on Insite. [CLICK HERE](#) to access.

DISTRIBUTION OF PRIMARY SIMULATION ACTIVITY

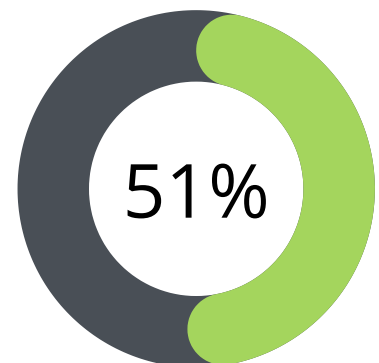


of simulations identified having an **impact on staff experience**

PERCENT OF SIMULATIONS WITH THE FOLLOWING IDENTIFIED LEARNING OBJECTIVES



of simulations identified having an **impact on patient safety**



of simulations identified having an **impact on quality**

eSIM INNOVATE

Virtually Facilitated Simulation for Remote and Rural Sites

The demand for timely COVID-19 preparedness simulation across Alberta highlighted some of the challenges in reaching many of the rural and remote sites across the vast geography of this province. eSIM responded rapidly by developing and launching an innovative approach to simulation delivery - virtual facilitation. Virtually-Facilitated Simulation eliminates the countless hours of travel required to reach many of these sites and affords the ability to involve content experts from across the province and nation, ultimately improving access to education and preparedness for our rural and remote healthcare teams. In less than 3 months this project has supported 15 sites, spanning over 160,000 km . Initial results are very positive, including consistent process improvement outcomes, participant feedback, and growing interest. eSIM Consultants Kristin Simard and Monika Johnson, along with physician champion, Dr. Sharon Reece, presented "The Pandemic Pivot: A Story of Innovation from Rural and Remote Canada" at this year's virtual i4 conference.



Indigenous Themed Simulation



Indigenous Themed Simulation is a partnership between eSIM and the Indigenous Health Program. Dry run sessions in rural Alberta began in September 2020 to test process, with plans to begin pilot sessions across Calgary Emergency Departments, Urgent Care settings, and focused rural sites (all dependent on individual site capacity at his time). These sessions create a space for meaningful conversation and sharing, enhanced by participation of Indigenous Advisors and Hospital Liaisons as experts and actors at each session, and the incorporation of traditional practices such as smudging, prayer and talking circles.

Through simulation, we hope to advance the integration of knowledge of cultural competence—attitudes of personal bias, communication strategies and awareness of organizational resources—of health care providers' practice. **Learner experiences to date overwhelmingly show the value in this education and the continued need for experiential learning to build culturally competent care.**

eSIM in the Canadian Journal of Anesthesia

In October, the *Canadian Journal of Anesthesia* published the article "Impact of aerosol box on intubation during COVID-19: a simulation study of normal and difficult airways," in which simulation was used to study the use of an "aerosol box" during intubation. This represents a collaboration involving the University of Alberta Department of Anesthesiology and Pain Medicine, the Department of Education Psychology, and AHS eSIM.

[Click here](#) to access this publication.



eSIM MOTIVATE

New Simulation Lab Now Open at Medicine Hat Regional Hospital



The **new simulation lab** at the Medicine Hat Regional Hospital officially opened for business in fall 2020! This space includes three patient areas for simulations, a dedicated debriefing space, and video capture and streaming recording systems so staff can review their work, as well as a perioperative simulation lab. The opening of the lab was made possible by the Medicine Hat & District Health Foundation.

eSIM Accreditation

eSIM is establishing and shaping our program to apply for accreditation with the Royal College of Physicians and Surgeons of Canada (RCPS(C)) for the Fall of 2021. Simulation accreditation is a voluntary process that includes an external review of a simulation programs' ability to provide simulation-based education activities that reflect the highest administrative, educational, and ethical standards. Accreditation ensures simulation-based learning activities are planned and delivered according to the latest educational scholarship, and have a demonstrated impact on patient safety and quality care provided by health professionals. Becoming accredited under RCPS(C) will allow eSIM to be part of a network of internationally recognized simulation programs, be able to self-approve Royal College Maintenance of Certification credits (physicians), be a preferred facility for Royal College simulation-based learning activities, and to gain support through access to medical education experts, customized coaching, web-based tools, Continuing Professional Development Accreditation Conference, and Simulation Summit.

Connect Care

Edmonton Zone eSIM was involved with Wave 2 of Connect Care rollout with requests for simulation through Connect Care implementation leads, site CNE leads and Zonal programs (Emergency Medicine and Obstetrics). Key resources for the success of the sessions included Connect Care implementation facilitators, local Educator leads, Physician champions and content experts from the University of Alberta Wave 1. Future involvement of eSIM for Connect Care rollout waves will look to incorporate lessons learned to ensure the best approach for simulation training.



Stollery Simulation Centre Launch



eSIM was thrilled to welcome two new Simulation Consultants at the tail end of the 2020/21 fiscal year. These are new Stollery Foundation Funded positions which will work closely with the Provincial eSIM Program and will support the development of a Stollery wide simulation program to enhance simulation education for Stollery programs, staff, and families. eSIM looks forward to seeing the growth in this new program as our new team members transition into their new roles as simulation champions.

NORTH ZONE SUMMARY

ZONE LEAD: KEN BRISBIN

ZONE CONSULTANTS: MONIKA JOHNSON | KRISTIN SIMARD | ERIN RANDLE

ZONE TECHNICAL CONSULTANT: SHENEEL LAL



208

Total simulation sessions booked



3130

Total estimated participants



25

Sites supported through simulation



141

COVID-19 Sessions



93%

Of sessions impacted staff experience



>440

Hours of simulation education

“Thank you all, great work and very much appreciate all your efforts to support our teams through this pandemic.

We sorted out a lot of important processes today.

This is the first intubation I have ever been involved in and feel I now have some idea what to do and expect.”

PROJECTS & SPOTLIGHTS

1. Virtually-Facilitated Simulation (VFS)

Creation and implementation of the innovative VFS program offers direct access to simulation education for rural and remote communities across Alberta through a user-friendly virtual platform. Teams practice together using their available local resources, and in their own environments. *See funding secured through RhPAP to support this work.

Impact & Outcomes:

Increased access to educational opportunities across prohibitive geography never before possible within AHS and has extended beyond COVID-19 response.



Knowledge gaps identified & addressed



Communication gaps identified & tools shared



Process issues identified & managed

2. Human Organ Procurement & Exchange Program (HOPE)

eSIM has supported the professional development of the coordinators with the HOPE program through creation and implementation of various donor scenarios, extending to the various sites across the province.

Impact & Outcomes:

Improved support and rapport between coordinators and families experiencing loss.



Patient and family centred care



Communication gaps identified & tools shared



Address policies and potential barriers to donation

3. Palliative Care Emergencies

Palliative care emergencies were the stimulus to work alongside the North Zone Palliative Care Team to offer education sessions and simulations to local teams. The focus of the sessions involved anticipatory planning, inclusive of patient and family centred care, encouraging local teams to address process improvements and resource allocation.

Impact & Outcomes:

Improved patient and family centred care in palliative care emergencies. Local teams are empowered to identify and address process improvements and resource allocation requirements.



Patient and family centred care



Empowering local healthcare teams



Process improvements & resource allocation addressed

EDMONTON ZONE SUMMARY

ZONE LEAD: KEN BRISBIN

**ZONE CONSULTANTS: CHRISTINA EICHORST | ANDREW REID |
NICHOLLE OOMEN | MEGAN ROLLEMAN**

ZONE TECHNICAL CONSULTANT: SHENEEL LAL



490

Total simulation sessions booked



7506

Total estimated participants



20

Sites supported through simulation



177

COVID-19 Sessions



74%

Of sessions impacted patient safety



1950

Hours of simulation education

“I learned a lot during this simulation. Many take-aways including the importance of effective communication with your team.”

I thought we were prepared for COVID-19 until we ran the system focused simulations. They helped us realize changes we need to action in order to be prepared for the anticipated surge.”

PROJECTS & SPOTLIGHTS



1. Edmonton Pandemic Response Unit Commissioning

The eSIM Team continued to support the COVID-19 response training as Alberta focused on getting through a challenging wave 2 of the pandemic. This included commissioning the new Pandemic Response Unit in Edmonton via Systems Integration Simulations to prepare the new space for patient care and orientation of staff to new spaces and equipment.

Impact & Outcomes:

Identification and mitigation of systems issues and potential latent safety threats. Staff training for new environment and processes.



Improved knowledge of new equipment



Latent safety threats identified & mitigated



Systems issues identified & mitigated

2. OPACCA Simulations

eSIM, together with CVICU Clinical Nurse Educators at the Mazankowski Heart Institute, offer an in-situ simulation training day for new staff that focuses on the skills and knowledge integral to emergency cardiac management.

Impact & Outcomes:

Hands-on learning experience through simulation increases staff self-confidence, communication skills, and clinical knowledge within their own interdisciplinary team.



Communication & clinical knowledge improved



Improved patient safety



Improved staff engagement

3. Connect Care Wave 2

Edmonton Zone eSIM was called upon to support the Wave 2 Connect Care rollout. Simulations were provided to 7 sites within the Edmonton Zone – Leduc, Devon, Westview, Strathcona, Northeast Health Centre, Sturgeon, and Fort Saskatchewan focusing on the Emergency Departments, Surgical Suites, Obstetrics and Inpatient Units.

Impact & Outcomes:

A total of 196 staff participated in the simulation based education post foundational connect care training. Future involvement of eSIM for Connect Care rollout waves will look to incorporate lessons learned to ensure the best approach for simulation training.



Improved staff confidence with new processes



Improved staff engagement



Identification & mitigation of potential systems issues



CENTRAL ZONE SUMMARY

ZONE LEAD: KEN BRISBIN
ZONE CONSULTANT: NADINE TERPSTRA
ZONE TECHNICAL CONSULTANT: SHENEEL LAL



194

Total simulation sessions booked



3615

Total estimated participants



29

Sites supported through simulation



115

COVID-19 Sessions



94%

Of sessions impacted staff experience



796

Hours of simulation education

“Every potential improvement solution is only a theory until tested and proven. eSIM is such a unique environment to test theories and implement what works. Nice to see the knowledge translation rather than information transfer. Awesome.”

PROJECTS & SPOTLIGHTS



1. Virtually-Facilitated Simulation (VFS)

Creation and implementation of the innovative VFS program offers direct access to simulation education for rural and remote communities across Alberta through a user-friendly virtual platform. Teams practice together using their available local resources, and in their own environments. *See funding secured through RhPAP to support this work.

Impact & Outcomes:

Increased access to educational opportunities across prohibitive geography never before possible within AHS and has extended beyond COVID-19 response.



Knowledge gaps identified & addressed



Communication gaps identified & tools shared



Process issues identified & managed

2. Suspected Anaphylaxis Simulations

Collaborating with medical and surgical educators from Red Deer, simulation training was offered with nursing teams to support the change of practice with RNs prescribing and administering of IM epinephrine in an emergency with suspected anaphylactic situation.

Impact & Outcomes:

Reinforced clinical knowledge, assessment and critical judgment skills in practice situations where epinephrine is used.



Improved clinical knowledge



Improved patient safety & outcomes



Improved staff confidence & experience

3. Collaboration and Engagement

This past year, the eSIM team provincially worked together as never before. Various clinical areas worked together to support COVID preparedness simulation for frontline teams and then transition teams to continue to support clinical and systems simulation, incorporating the new world of COVID PPE donning & Doffing, protected intubation, etc.

Impact & Outcomes:

The results of these successes were perhaps most apparent in the rural and remote areas of our province. Central zone saw an increase in physician engagement participating in and facilitating COVID-19 and other clinical simulations in urban and rural sites.



Improved staff confidence with new processes



Improved staff engagement



Identification & mitigation of potential systems issues

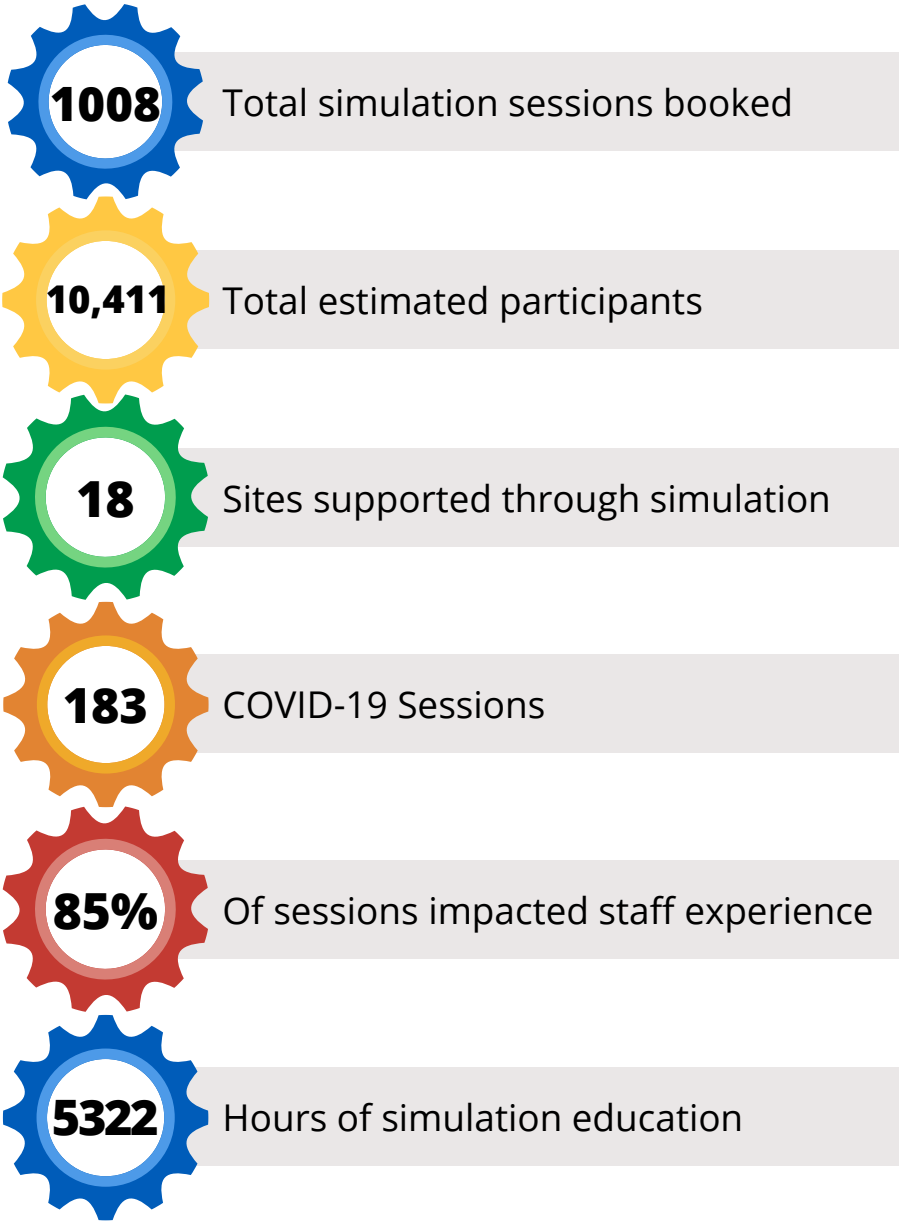


CALGARY ZONE SUMMARY

ZONE LEAD: SUE BARNES

ZONE CONSULTANTS: ANDREA FAID | CHERIE SERIESKA | ERICA MEUNIER | JENNIFER SEMAKA | MIRETTE DUBE | TARA FUSELLI

ZONE TECHNICAL CONSULTANTS: DAN DUPERRON | DARREN STEIDL



“The simulation alleviated anxiety regarding IO insertions and running rapid transfuser.

I’m so grateful to know that the eSIM team is working hard to assist health care teams to perform best practices and learning from simulation events.

Great opportunity to practice infrequently occurring events.”

PROJECTS & SPOTLIGHTS



1. Community Cancer Clinics

Patients requiring chemotherapy treatments continue to grow across the province leading CancerCare Alberta (CCA) to seek, promote, and support treatment closer to home in partnership with Community Cancer Clinics. CCA is wanting to determine if advanced chemotherapy (1st time treatments) infusions at Community Cancer Clinics can be administered safely.

Impact & Outcomes:

Simulations were used to demonstrate that all necessary safety processes are in place within the rural site to manage acute infusion reactions as a result of giving C1D1 advanced infusions.



Increased access for patients & families



Improved patient & family centred care



Potential latent safety threats identified & managed

2. Continuing Care Support for COVID-19 Preparedness

The creation of an Environmental Scan/Process Walkthrough tool directed to IP & C and educator teams in Continuing Care was created to support assessing, preparing, and adapting provincial care areas during the pandemic.

Impact & Outcomes:

Supported Continuing Care areas with challenges faced in day to day interactions in infection control and PPE processes, ultimately streamlining practice to improve client and staff safety.



Potential systems issues identified & mitigated



Improved patient safety & outcomes



Potential latent safety threats identified & managed

3. Communicable Disease Simulation Curriculum

eSIM supported Communicable Disease Control with helping to design simulation scenarios for the different contact tracing departments. The teams came together to develop multiple training videos to implement simulation and debriefing to rapidly train the over 1000 contact tracers hired by AHS.

Impact & Outcomes:

Increased competence and confidence for the teams as they participate in the many different contact tracing scenarios.

“Simulation sessions definitely helped solidify my knowledge.”

-CDC Staff Participant



Improved staff confidence



Improved staff engagement

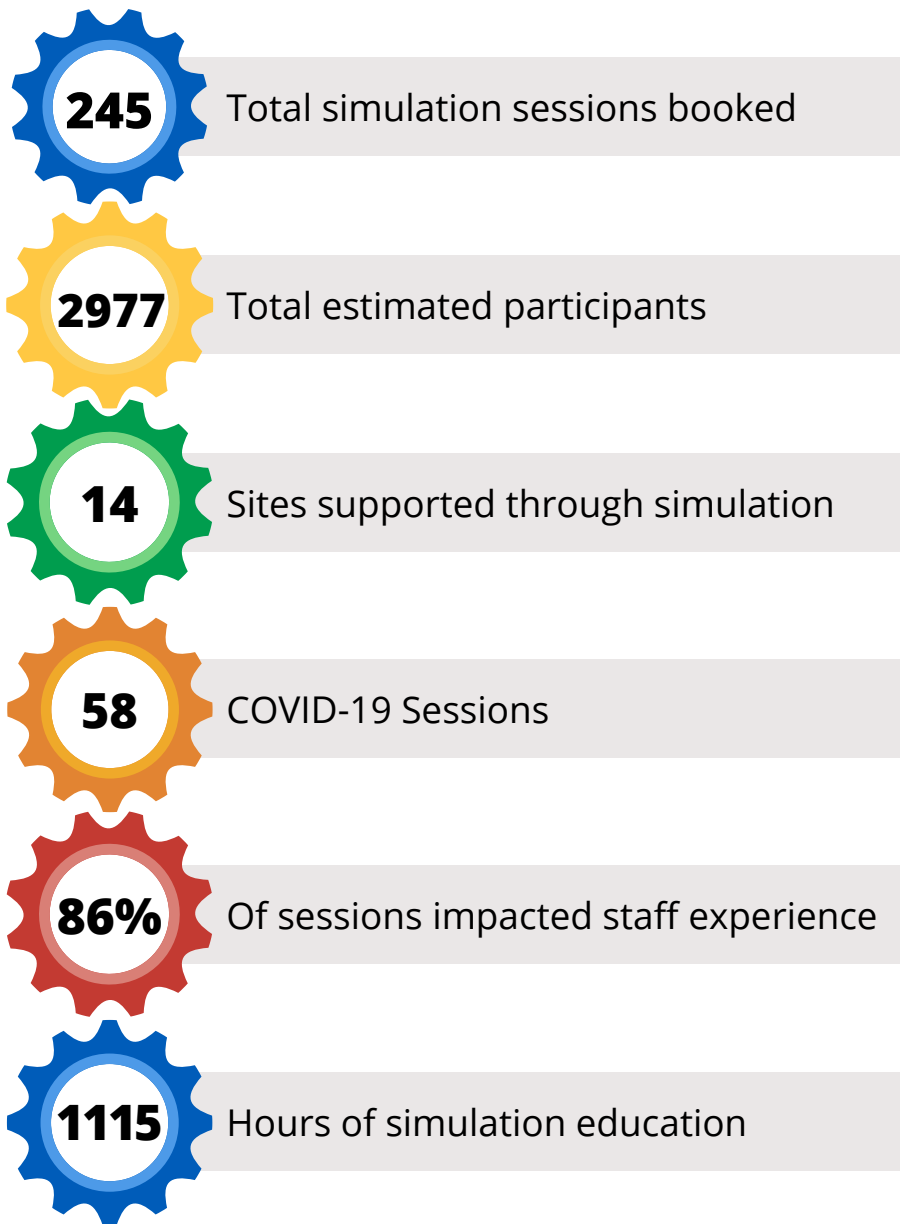


Increased competence with new processes

SOUTH ZONE SUMMARY



ZONE LEAD: SUE BARNES
ZONE CONSULTANTS: ANNAMARIA MUNDELL | ROB RITCHIE
ZONE TECHNICAL CONSULTANTS: DAN DUPERRON | DARREN STEIDL



“After the simulation, I now feel more comfortable taking care of COVID patients.”

Excellent, we need to use more simulation!

It was so good to practice, I learned so much.”

PROJECTS & SPOTLIGHTS



1. Rural Outreach: COVID-19 Preparedness

Utilizing a systems approach and virtually-facilitated simulation when applicable; rural CNE's and IP & C diligently educated front line Emergency and Acute Care staff on PPE guidelines, COVID-19 precautions, care of the critically ill COVID-19 patient and guidelines for transfer to tertiary centers.

Impact & Outcomes:

Empowered rural generalists to approach their areas with quality improvement ideology such as identification of latent safety threats, and make changes to their environment to improve care to rural communities.



Systems issues identified and mitigated



Improved patient safety



Potential latent safety threats identified & managed

2. Indigenous Themed Simulations: Rural Residency Program

These Cultural Competency Simulations focused on the care of the Indigenous patient presenting to the Emergency Department. Learners were taught communication techniques, Indigenous peoples determinants of health, and guided to identify personal bias and speaking up.

Impact & Outcomes:

Objectives focus on sharing tools to address themes of family centered care, holistic health, equity and communication specific to Indigenous Peoples.



Improved communication techniques



Improved patient & family centred care



Improved cultural competency

3. Mobile Overdose Prevention Site

eSIM provided support by developing and facilitating simulations for Primary Care Paramedics, Registered Nurses, and Addiction Counsellors on the opening of a new Mobile Bus to care for clients accessing care for Overdose Prevention Site.

Impact & Outcomes:

This Systems Integration Simulation approach identified latent safety threats. Process and tasks issues which were addressed prior to the deployment of the team into the community.



Latent safety threats identified & mitigated



Systems issues identified & mitigated



Increased access for patients & families

FORT SASKATCHEWAN COMMUNITY HOSPITAL

40

Simulation
Sessions



480

Simulation
Participants



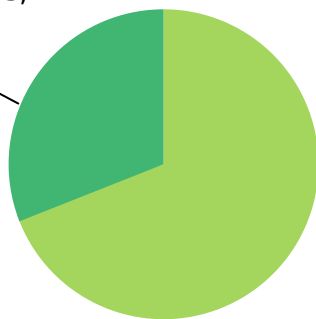
319

Hours of Sim
Training



Distribution of Simulation Activity

Courses (NRP, PALS,
ACLS, etc.)
(31%)



Frontline Simulation
(69%)

Imminent Birth, Neonatal Resuscitation and Postpartum Hemorrhage Support

Imminent birth with neonatal resuscitation and postpartum hemorrhage was identified as a learning need for staff in both the Labor and Delivery unit as well as the Operating Room. Interdisciplinary sessions were facilitated in both areas and systems issues were identified following the simulations and debriefing. The nursing educators implemented the teams suggested changes and a repeat Labor and Delivery simulation session has been planned. This repeat session will allow the staff to integrate the change in supplies, medication and workflow processes into their care routine.

100%

of sessions indicated that they had an impact on **staff experience**

60%

of sessions indicated that they had an impact on **patient safety**

60%

of sessions indicated that they had an impact on **patient & family centred care**

LOIS HOLE HOSPITAL FOR WOMEN

8

Simulation Sessions



95

Simulation Participants



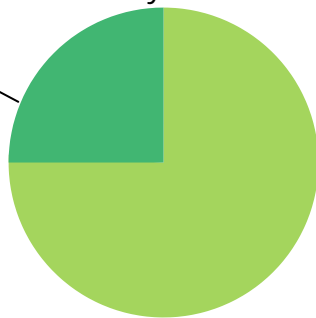
19

Hours of Sim Training



Departments Supported through Simulation Activity

Faculty of Medicine & Dentistry (25%)



Labour & Delivery (75%)

Introducing "Victoria"

This year the LHHW got a big boost to their simulation capabilities with the introduction of "Victoria." From early pregnancy complications, high-risk deliveries, and postpartum emergencies to non-gravid scenarios for general nursing care, Victoria simulates a full range of obstetrical events to facilitate teamwork and deepen critical thinking skills in learners of all levels. More than a childbirth simulator, Victoria is a complete simulation solution developed from decades of obstetrical experience. It is a comprehensive package of tools and support designed to help improve patient safety in women's health through education and training.

100%

of sessions indicated that **demonstration of medical knowledge, clinical judgement, and technical skills** was a primary learning objective

86%

of sessions indicated that **working effectively as a healthcare team** was a primary learning objective

100%

of sessions indicated that they had an impact on **staff experience**

ROYAL ALEXANDRA HOSPITAL

83

Simulation Sessions



829

Simulation Participants

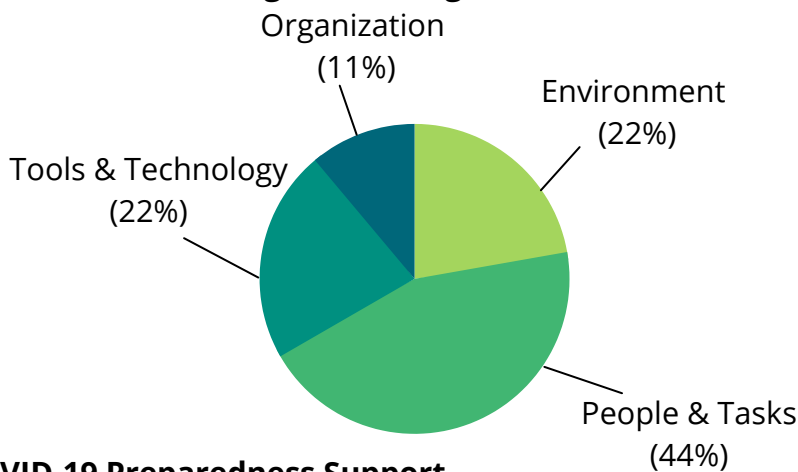


365

Hours of Sim Training



Distribution of Systems Issues Identified & Mitigated through Simulation



COVID-19 Preparedness Support

Simulation was heavily involved in the RAH preparedness for COVID-19, the highlight being scenarios run in the ED and OR around aerosol generating medical procedures (AGMP). eSIM was engaged by the leads of both departments to run a series of sessions to ensure that staff could manage AGMP procedures safely. Sessions were run in the OR and ED, where physicians, nurses, and respiratory therapists worked as interprofessional teams to manage various situations. After each session a debriefing was held, where improvements were discussed, a plan was made, and people were assigned to explore changes. Improvements were made in room layouts, team roles, procedures, and processes.

100%

of sessions indicated that **demonstration of medical knowledge, clinical judgement, and technical skills** was a primary learning objective

92%

of sessions indicated that they had an impact on **staff experience**

80%

of sessions indicated that they had an impact on **patient safety**

RED DEER REGIONAL HOSPITAL CENTRE

83

Simulation Sessions



829

Simulation Participants

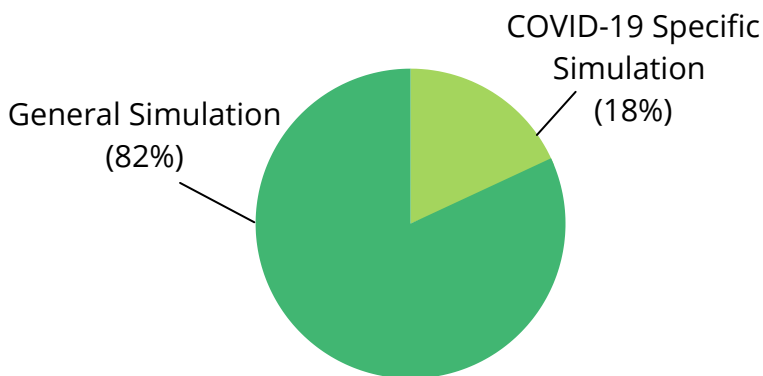


365

Hours of Sim Training

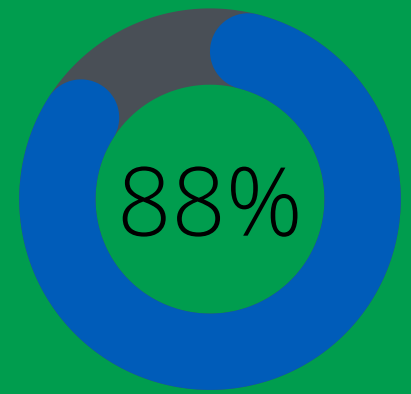


Distribution of Simulation Activity

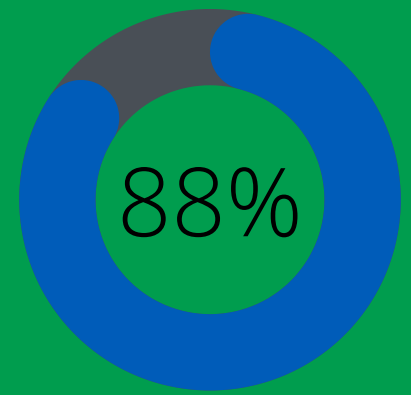


Supporting Change of Practice

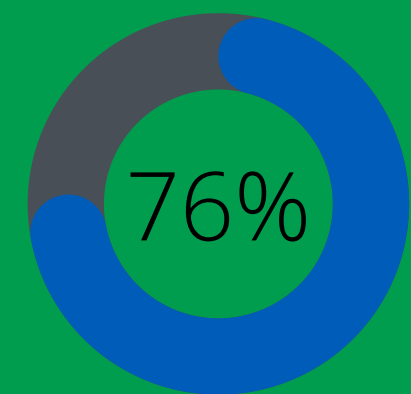
Collaborating with medical and surgical educators in Red Deer, simulation was offered with nursing teams to support the change of practice with RNs prescribing and administering of IM epinephrine in an emergency with suspected anaphylactic situation. The goal was to reinforce clinical knowledge, assessment and critical judgment skills in practice situations where epinephrine is used.



of sessions indicated that **demonstration of medical knowledge, clinical judgement, and technical skills** was a primary learning objective



of sessions indicated that they had an impact on **staff experience**



of sessions indicated that they had an impact on **patient safety**

FOOTHILLS MEDICAL CENTRE

380

Simulation Sessions



3961

Simulation Participants

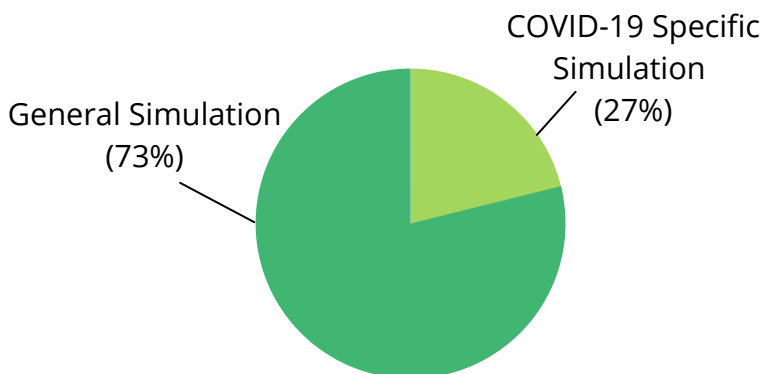


2032

Hours of Sim Training



Distribution of Simulation Activity

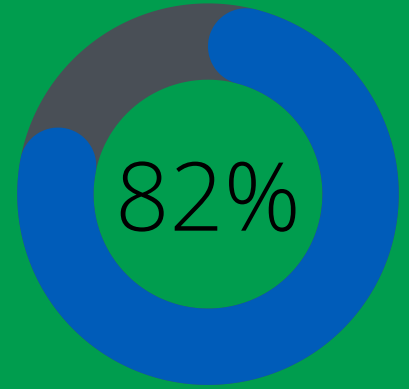


Transfusion Medicine Simulation - Patient Safety & Human Factors Collaboration

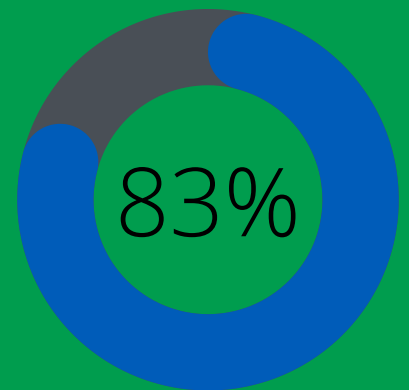
Simulations were used to inform high-risk blood transfusion provincial protocol revision in a medical-oncology unit and a lab environment. The simulations led to assessments of risk, identification of latent safety threats, and informing the policy working group. Significant environmental changes were made to improve protocol safety.

COVID-19 Preparedness

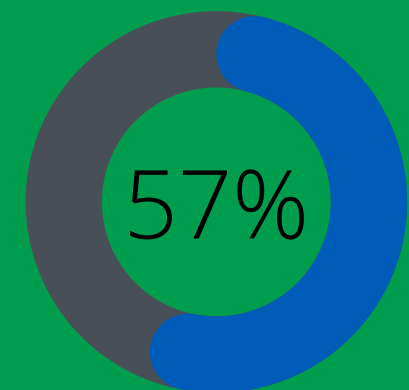
Rapid cycle and systems integration simulations were activated to help prepare staff for both Wave 1 and Wave 2 of the COVID-19 pandemic, identifying and mitigating multiple systems issues and latent safety threats.



of sessions indicated that **demonstration of medical knowledge, clinical judgement, and technical skills** was a primary learning objective



of sessions indicated that they had an impact on **staff experience**



of sessions indicated that they had an impact on **patient safety**

PETER LOUGHEED CENTRE

216

Simulation Sessions



2035

Simulation Participants

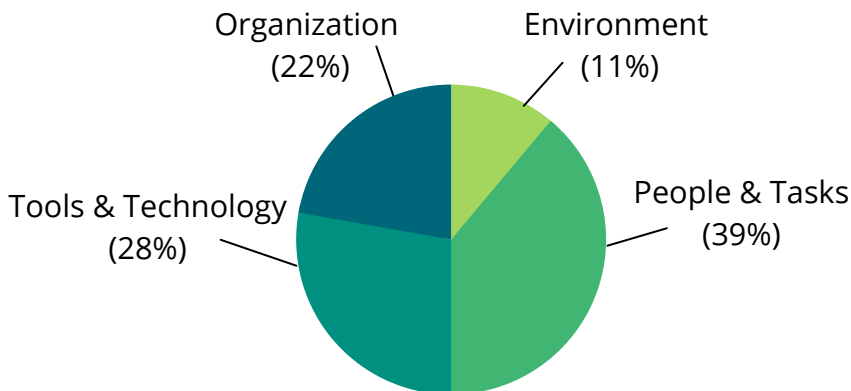


1356

Hours of Sim Training



Distribution of Systems Issues Identified & Mitigated through Simulation



Commissioning for the Pandemic Response Unit

The need to build a new care space, such as the Pandemic Response Unit (PRU) was largely based on COVID-19 modelling of anticipated numbers of patients requiring varied levels of care.

A temporary, newly built stand up hospital-based structure was approved for construction at PLC. Within 21 days, the space was constructed, equipped and commissioned. Both Human Factors and eSIM ran tabletop and commissioning exercises prior to opening spaces to identify any potential latent safety threats, and helping to inform optimal design, safety and training for staff and patients.

84%

of sessions indicated that **demonstration of medical knowledge, clinical judgement, and technical skills** was a primary learning objective

58%

of sessions indicated that they had an impact on **staff experience**

58%

of sessions indicated that they had an impact on **patient safety**

ROCKYVIEW GENERAL HOSPITAL

171

Simulation Sessions



1925

Simulation Participants

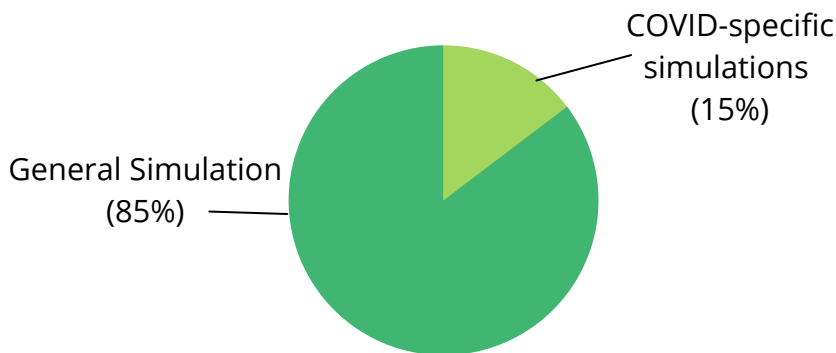


708

Hours of Sim Training

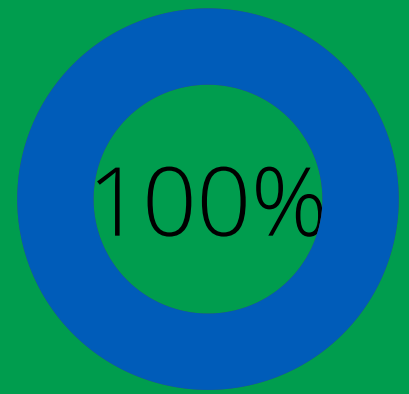


Distribution of Simulation Activity

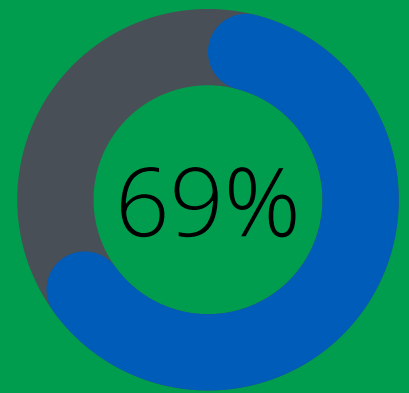


Obstetrics COVID-19 Simulations

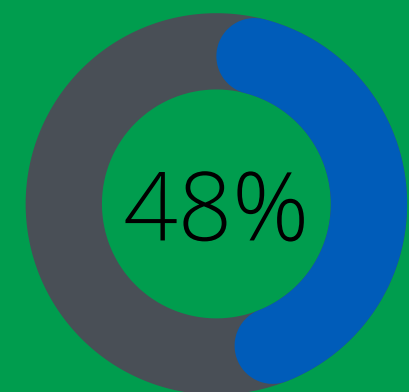
eSIM supported training for the process of a COVID-19 positive patient presenting to triage in active labor at the Rockyview General Hospital. Systems Integration Simulation and Rapid Cycle Debriefing focused on donning and doffing of PPE, evaluation of the process flow from triage to labor room and/or operating room, assessment of equipment, carts, and resources to best support staff while managing a COVID-19 positive patient, key roles and communication strategies during the care of a COVID-19 positive patient, and ensuring understanding of infection prevention and control considerations. The simulations resulted in an increase in participant reported confidence for all teamwork skills.



of sessions identified a learning objective to **recognize and demonstrate medical knowledge**



of sessions indicated that they had an impact on **staff experience**



of sessions indicated that they had an impact on **patient & family centred care**

SOUTH HEALTH CAMPUS

156

Simulation Sessions



1339

Simulation Participants

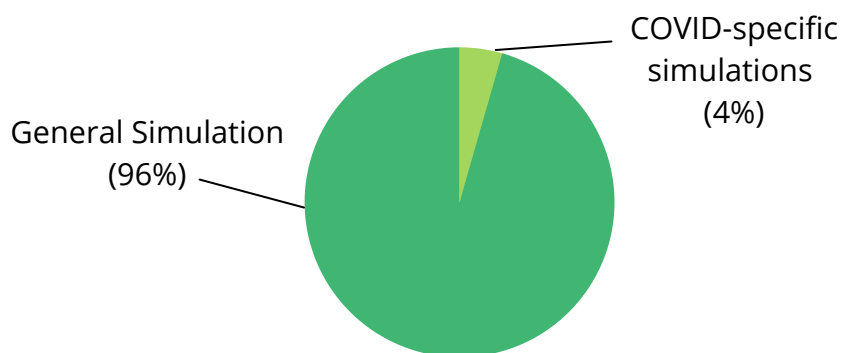


864

Hours of Sim Training



Distribution of Simulation Activity



OR-PACU Cognitive Aids for Role Delineation (CARDS)

The literature supports the fact that enhanced teamwork, resource management, and situational awareness during resuscitations in the OR and PACU contributes to improved patient outcomes. The implementation of the use of cognitive aids for role definition (CARDS) to improve interprofessional team crisis resource management has been shown to benefit code blue responses in the clinical setting. Through interdisciplinary simulations the process was tested and refined based on feedback from all key stakeholders.

100%

of sessions identified a learning objective to **work effectively as a healthcare team**

67%

of sessions indicated that they had an impact on **staff experience**

40%

of sessions indicated that they had an impact on **patient & family centred care**

CHINOOK REGIONAL HOSPITAL

48

Simulation Sessions



735

Simulation Participants

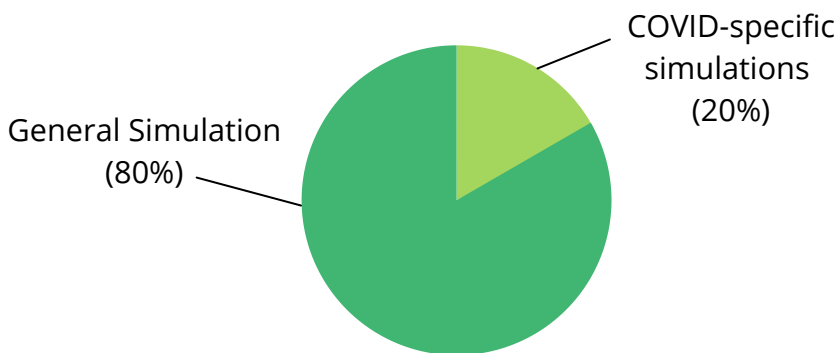


509

Hours of Sim Training

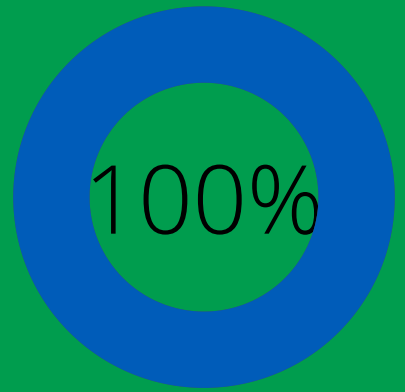


Distribution of Simulation Activity

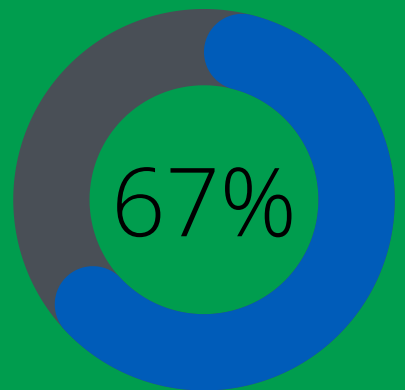


Surge Planning – Overflow ICU Simulations

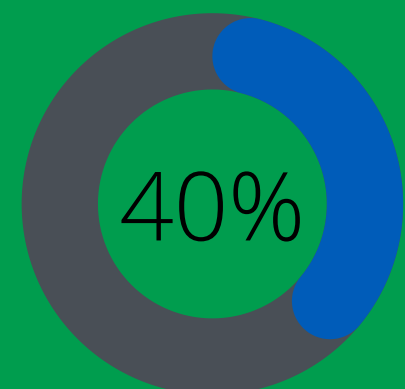
This systems integration simulation was a collaboration of Human Factors, site leadership, ZEOC members, inter-departmental site leadership, CNE's, frontline staff, and Infection Prevention & Control to test, adapt, and construct the Overflow ICU for potential COVID-19 surges in the South Zone. This previous Labour and Delivery space was converted to an on-site satellite ICU with innovative central monitoring, staffing structures, and code blue response. Simulations were used to identify and mitigate systems issues and latent safety threats.



of sessions identified a learning objective to **recognize and demonstrate medical knowledge**



of sessions identified a learning objective to **work effectively as a healthcare team**



of sessions identified a learning objective to **demonstrate effective communication skills**

MEDICINE HAT REGIONAL HOSPITAL

95

Simulation Sessions



1059

Simulation Participants

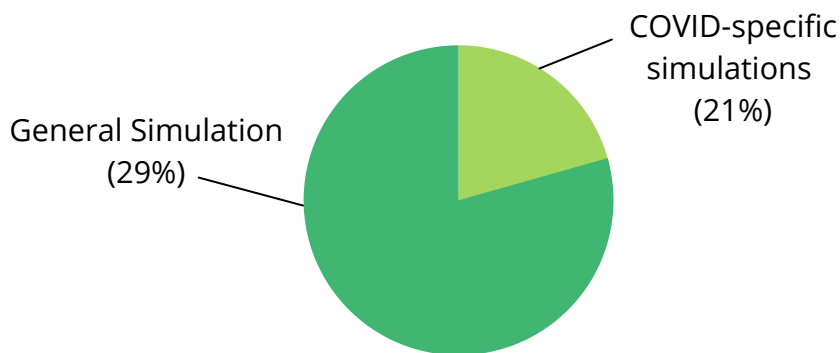


387

Hours of Sim Training



Distribution of Simulation Activity



New Simulation Lab

A new simulation lab at the Medicine Hat Regional Hospital officially opened for business in the fall of 2020. This space includes three patient areas for simulations, a dedicated debriefing space, and video capture and streaming recording systems so staff can review their work, as well as a perioperative simulation lab. The opening of the lab was made possible by the Medicine Hat & District Health Foundation.

100%

of sessions indicated that they had an impact on **patient safety**

100%

of sessions indicated that they had an impact on **staff experience**

80%

of sessions identified a learning objective to **work effectively as a healthcare team**

COVENANT HEALTH SUMMARY

PROGRAM LEAD: JILL SODERSTROM



61

Total simulation sessions booked



929

Total estimated participants



7

Sites supported through simulation



31

COVID-19 Sessions



92%

Of sessions impacted patient safety



205

Hours of simulation education

“Thank you for coming on such short notice to support our teams in this work. Your help is always immeasurably helpful!

Thank you for bringing up the need for clear communication and NOD, so important to remember.”

PROJECTS & SPOTLIGHTS

1. COVID-19 AGMP Simulations

Numerous intubation/aerosol generating medical procedure (AGMP) simulations were conducted across Covenant Health sites. Rapid cycle simulations allowed many healthcare workers the chance to simulate the process, team involvement, and recommendations from CDC.

Impact & Outcomes:

Identified and addressed systems issues and latent safety threats. Improved confidence and competence of correct PPE procedures.



Systems issues identified and mitigated



Improved patient & staff safety



Potential latent safety threats identified & managed

2. Rural COVID-19 Simulation Preparedness

Provided simulation to rural Covenant Health sites focused on COVID-19 precautions, care of the critically ill COVID-19 patient, and guidelines for transfer to tertiary centers.

Impact & Outcomes:

Identified and addressed systems issues and latent safety threats. Improved confidence and competence of correct PPE procedures. Sites included Bonnyville, Vegreville, Killam, and Castor.



Systems issues identified and mitigated



Improved patient & staff safety



Potential latent safety threats identified & managed

3. Women's Health Off-Unit Birth

Based on previous incidences of imminent births occurring outside of the Labour and Delivery units it was identified that a response plan is required to activate the most appropriate response teams in these situations. Simulations were conducted at both the Misericordia Community Hospital and the Grey Nuns Community Hospital to practice and test a complete systems response with NICU, L & D, ER, Security, Screening, Admitting and physicians

Impact & Outcomes:

This Systems Integration Simulation approach identified latent safety threats. Process and task issues were addressed.



Latent safety threats identified & mitigated



Systems issues identified & mitigated



Improved patient safety & outcomes



KIDSIM SUMMARY

PROGRAM LEAD: NICOLA PEIRIS

PROGRAM CONSULTANTS: HELEN CATENA | AMY CRIPPS | JENNY CHATFIELD



472 Total simulation sessions booked



3248 Total estimated participants



34 Sites supported through simulation



229 COVID-19 Sessions



98% Of sessions involve team training



1423 Hours of simulation education

“I was informed by the gold senior and unit staff that a nearly identical scenario to the one we rehearsed in sim this morning occurred on the ward. The team and nurses performed just as we rehearsed and the seizures were aborted after Fosphenytoin. That’s why we train!”



PROJECTS & SPOTLIGHTS

1. ImPACTS (Improving Pediatric Acute Care through Simulation)

The ImPACTS collaborative was created to ensure that ill and injured children receive the highest quality of emergency care whenever and wherever it is needed. Currently, there are disparities in pediatric emergency readiness, quality of care, and outcomes across emergency departments in Canada and the U.S. and the majority of children are cared for in non-pediatric hospitals who may lack the resources and personnel to effectively care for pediatric emergencies.

Impact & Outcomes:



Knowledge gaps identified and addressed



Improved patient & staff safety



Communication gaps identified and tools shared

2. COVID-19 Code Blue Simulations

The KidSIM Program provided invaluable support and training within the Alberta Children's Hospital during the COVID-19 pandemic. Simulation played a key role in designing and practicing new protocols in order to adapt to new safety measures and to minimize the risk of cross contamination.

Impact & Outcomes:

These simulations helped to standardize PPE processes and integrate PPE coaches throughout the hospital as well as patient care trauma spaces and screening processes for patients and families.



Improved standardized processes



Improved patient and family centred care



Potential latent safety threats identified & managed

3. Family Centered Care: Simulation in Educational Centers

Challenges in integrating children with complex health care needs into the educational system (preschool, daycare, kindergarten and schools) have been identified. Simulation has been used regularly to help the educational centers have a better understanding of the child and their needs, and to practice the specialized emergency care that child may require.

Impact & Outcomes:

These sessions occur in the educational centre, providing education and simulation for all staff involved in the child's care.



Improved process for emergency care planning



Improved access of education



Improved performance of skills by family/caregivers

UNIVERSITY OF ALBERTA

FACULTY OF MEDICINE AND DENTISTRY

SUMMARY

PROGRAM CONSULTANT: ANDREW REID



68

Total simulation sessions booked



635

Total estimated participants



100%

Of sessions identified demonstration of medical knowledge and clinical judgement as a primary learning objective



96%

Of sessions identified working effectively as a healthcare team as a primary learning objective



92%

Of sessions impacted patient safety



350

Hours of simulation education

“Simulation allows our residents to participate in crisis scenarios under controlled conditions, complete with post-scenario video review and debriefing. Our residents complete their residency training having experienced firsthand almost all anesthesia crises imaginable; which ultimately results in better patient care and safety in the future.”

-U of A Department of Anesthesiology

PROJECTS & SPOTLIGHTS

1. Intubation Box for Management of COVID-19 Patients

eSIM supported a randomized controlled trial of an “intubation box” device for protection of healthcare workers during an aerosol generating medical procedure in the management of COVID-19 patients, the results of which were published in the Canadian Journal of Anesthesia.

Impact & Outcomes:

Measured time to intubate as well as number of intubation attempts, optimization maneuvers, and PPE breaches.



Processes evaluated for improvement



Innovation for future improvements



Improved staff safety

2. Development of Low-Cost Ultrasound Simulation

While simulation training for ultrasound is beneficial, the cost of the equipment required is often significant. eSIM staff developed, prototyped, and deployed a low-cost system for simulation of ultrasound-guided central venous catheterization.

Impact & Outcomes:



Financial sustainability



Optimized staff experience



Innovation for future improvements

3. Ongoing Training for Medical Students and Residents

As part of eSIM's partnership with the University of Alberta Faculty of Medicine, simulation training is facilitated on an ongoing basis in various clinical and lab-based settings to support training for medical students and resident physicians.

Impact & Outcomes:

This Systems Integration Simulation approach identified latent safety threats. Process and task issues were addressed.



Latent safety threats identified & mitigated



Improved healthcare team training



Improved clinical knowledge and skills

APPENDIX A: RESEARCH, PRESENTATIONS, & RECOGNITION

Publications

- **Dubé, M.**, Posner, G., Stone, K. White, M., **Kaba, A.**, Bajaj, K., Cheng, A., **Grant, V.**, Huang S., & Reid J. Building impactful systems-focused simulations: integrating change and project management frameworks into the pre-work phase. *Adv Simul* 6, 16 (2021) ([Link](#))
- **Dubé, M., Laberge, J.**, Sigalet, E., et al. Evaluations for New Healthcare Environment Commissioning and Operational Decision Making using Simulation and Human Factors: A Case Study of an Interventional Trauma Operating Room. *HERD*. March 2021 ([Link](#))
- Reece, S., **Johnson, M., Simard, K., Mundell, A., Terpstra, N., Cronin, T., Dubé, M., Kaba, A., Grant, V.** Use of virtually-facilitated simulation to improve COVID-19 preparedness in rural and remote Canada. *Clin Simul Nurs*. Feb 2021- in press. ([Link](#))
- Fong, S., Li, E., Violato, E., **Reid, A.**, & Gu, Y. Impact of aerosol box on intubation during COVID-19: a simulation study of normal and difficult airways. *Can J Anesth*. 68, 496–504 (2020). ([Link](#))
- Santorino D., **Dubé, M.**, et al. Feasibility of an Inter-professional, Simulation-based Curriculum to Improve Teamwork Skills, Clinical Skills and Knowledge of Undergraduate Medical and Nursing Students in Uganda: A Cohort Study. *Simul Healthc*. Nov (2020). ([Link](#))
- Fraser KL., Charania I., Hecker KG., Donahue M., **Kaba A.**, Veale P., Coderre S., McLaughlin K. Summative Assessment of Interprofessional "Collaborative Practice" Skills in Graduating Medical Students: A Validity Argument. *Acad Med*. 2020 Nov;95(11):1763-1769. ([Link](#))
- Lin Y., Hecker K., Cheng A., **Grant VJ.**, Currie G. Cost-effectiveness analysis of workplace-based distributed cardiopulmonary resuscitation training versus conventional annual basic life support training. *BMJ STEL* 2020;0:1–7. ([Link](#))
- **Dubé, M., Kaba, A., Cronin, T., Barnes, S., Fuselli, T., & Grant, V.** COVID-19 pandemic preparation: using simulation for systems-based learning to prepare the largest healthcare workforce and system in Canada. *Adv Simul*. 5, 22 (2020). ([Link](#))
- Cheng A., Kolbe M., **Grant V.**, Eller S., Hales R., Symon B., Griswold S., Eppich W. A practical guide to virtual debriefing: communities of inquiry perspective. *Adv Simul*. 2020 Aug;5:18. ([Link](#))
- Robinson, T., Santorino, D., **Dubé, M.**, et al. Sim for Life Foundations. A Simulation Educator Training Course to Improve Debriefing Quality in a Low-Resource Setting: A Pilot Study. *Simul Healthc*. 2020;15(5):326-334. ([Link](#))
- **Dubé, M.**, Kessler, D., Huang, L., et al. Considerations for Psychological Safety with system-focused debriefings. *BMJ STEL*. 2020;6:132-134. ([Link](#))

APPENDIX A: RESEARCH, PRESENTATIONS, & RECOGNITION

Publications

- Kolbe M., Eppich W., Rudolph J., Meguerdichian M., Catena H., Cripps A., **Grant V.**, Cheng A. Managing psychological safety in debriefings: a dynamic balancing act. *BMJ STEL* 2020 May;6:164-171. ([Link](#))
- **Dubé, M.**, Jones, B., **Kaba, A.**, et al. (2020). Preventing harm: Testing and implementing health care protocols using systems integration and learner-focused simulations: A case study of a new postcardiac surgery, cardiac arrest protocol. *Clin Simul Nurs.* 44, 3–11. ([Link](#))
- Cheng A., Eppich W., Kolbe M., Meguerdichian M., Bajaj K., **Grant V.** A Conceptual Framework for the Development of Debriefing Skills: A Journey of Discovery, Growth, and Maturity. *Simul Healthc.* 2020 Feb;15(1):55-60. ([Link](#))

Presentations

- "Rural Simulation Based Education" - Virtual University of Calgary Distributed Learning Rural Initiatives (DLRI) Rural Connect 2021. Edmonton/Grande Prairie/Wetaskawin, AB/Fayetteville, AR - March 2021. **Johnson, M., Simard, K.,** & Reese, S.
- "Use of virtually-facilitated simulation to improve COVID-19 preparedness in rural and remote Canada" - Virtual ESCN QI and Innovation Forum, Edmonton/Grande Prairie/Wetaskawin, AB/Fayetteville, AR. - February 2021. **Johnson, M., Simard, K.,** Reece, S., Ward, S.
- "Just-In-Time Simulation to Enhance Quality & Patient Safety" - Neonatal Grand Rounds, Cumming School of Medicine, University of Calgary, Calgary, AB - November 2020. **Grant, V.**
- "The Pandemic Pivot: A Story of Innovation from Rural and Remote Canada" - i4 Quality Summit 2020 - October 2020. **Johnson, M., Simard, K.,** Reece, S.
- "Facilitating Experiential Learning – Simulation Canada Micro Course: Briefing, Facilitation & Debriefing Virtual" - Simulation Canada Live Webinar. Edmonton/Grande Prairie/Pincher Creek, Alberta. - September 2020. **Johnson, M., Mundell, A., & Terpstra, N.**
- "Simulation Based Education: A Modality of Learning" - GPRC Live Webinar Edmonton/Grande Prairie, Alberta. - August 2020. **Johnson, M. & Simard, K.**
- "Virtually-Facilitated Simulations for Rural and Remote Communities: Innovation in the COVID-19" - AHS live Webinar. Edmonton/Grande Prairie, Alberta. Philadelphia, PA. May 2020. **Johnson, M., Simard, K.,** & Reece, S.
- "Psychological Safety: Key Facilitator Skills" - International Meeting on Simulation in Healthcare, San Diego, CA - January 2020. **Grant, V.**

APPENDIX A: RESEARCH, PRESENTATIONS, & RECOGNITION

Books/Chapters

- **Grant VJ.**, Catena H., Peiris N. Simulation Operations: An Overview. In: Seropian MA, Keeler GR, Naik VN, editors. Comprehensive Healthcare Simulation: Program & Center Development. Cham: Springer; 2020.

Awards & Distinctions

- eSIM Consultants **Kristin Simard** and **Monika Johnson** were winners of the College and Association of Registered Nurses of Alberta (CARNA) Nursing Awards of Excellence for the Collaboration category. The CARNA Awards of Nursing Excellence honour the outstanding work of registered nurses and nurse practitioners in Alberta.

APPENDIX B: FUNDING

Research



UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE
Distributed Learning and Rural Initiatives
<http://cumming.ucalgary.ca/ruralmedicine>

Hospitals



MEDICINE HAT & DISTRICT
HEALTH FOUNDATION

APPENDIX C: eSIM TEAM MEMBERS



Dr. Vincent Grant
Medical Director

Vince has been the Provincial Medical Director of the eSIM Program for Alberta Health Services since 2019. He is an Emergency Physician at the Alberta Children's Hospital and a Professor of Pediatrics and Emergency Medicine at the Cumming School of Medicine at the University of Calgary. Vince was the Founding Medical Director for KidSIM, the internationally-recognized Simulation Program at the Alberta Children's Hospital from 2005-2020, as well as the Founding Medical Director for the Advanced Technical Skills and Simulation Laboratory at the University of Calgary. He has been an integral part of the growth of simulation-based education locally and has developed a national and international reputation for his work in this area. His main academic interests include simulation faculty development, debriefing and feedback methods, interprofessional simulation education, rural mobile outreach simulation, and innovation in medical education technologies.



Jason Laberge
Director

Jason is the Director of Human Factors and eSIM with Alberta Health Services. He is the operational leader of the eSIM team and is responsible and accountable for the budget and human resources. He obtained his M.Sc. in Cognitive Ergonomics from the University of Calgary in 2003. As part of his human factors work, Jason has used simulation to examine how healthcare staff and patients use equipment, tools, and work spaces.



Ken Brisbin
Simulation Lead, North

Ken is the Simulation Lead for the North Team (North, Edmonton, & Central zones). He is a Primary Care Paramedic and has been with the simulation program since 2008. Ken has a diverse background, not only in healthcare but also as a former member of the Canadian Armed Forces, where he served as an Armoured Crewman as well as a Firefighter. Ken's simulation experience comes from 25+ years of leading, coaching, instructing, mentoring and running simulation for all of these groups.



Sue Barnes
Simulation Lead, South

Sue has been with the eSIM team since 2010, first as a Simulation Consultant, with a recent transition into the Simulation Lead role for the South Team (Calgary & South zones) in 2018. Her passion lies in seeing the growth of the simulation program over the province, mentoring new team members and the building a strong foundation for the future of simulation based education in Alberta Health Services.



Dr. Alyshah Kaba
Scientific Lead, South

Dr. Alyshah Kaba, PhD is the is currently the Provincial Scientific Lead for eSIM Provincial Simulation Program. Alyshah's role includes leading the Research Scholarship activities and Program Evaluation & Outcomes portfolio for the for the Provincial Simulation program. Alyshah is accountable to combining exemplary scientific expertise in simulation based education and leadership to shape the research and program evaluation agenda for eSIM. As a mix method researcher, Alyshah is also actively involved as an Adjunct Assistant Professor and holds a number of committee and leadership roles in the Cumming School of Medicine at the University of Calgary.



Theresa Cronin
Education Coordinator

Theresa started with eSIM in 2015 as the Education Coordinator for the province. Within her role, she coordinates resource logistics for all simulation sessions, data collection and outcomes analysis, and communications and dissemination of eSIM related news and information.

APPENDIX C: eSIM TEAM MEMBERS



Andrea Faid

Simulation Consultant

Andrea has been an eSIM Consultant based out of FMC for the past two years. Together with site partner, Mirette Dube, she has support numerous learner and systems integration simulation projects with COVID taking up most of their time this past year. It is a privilege to work together with the high-performing inter-professional teams at this site to collaboratively promote a culture of staff and patient safety.



Andrew Reid

Simulation Consultant

Andrew is the Simulation Consultant responsible for the University of Alberta Faculty of Medicine and Dentistry. He has been working full-time in simulation since 2004, with Capital Health Authority and then Alberta Health Services. He has a background in nursing and education.



Annamaria Mundell

Simulation Consultant

Annamaria has been a part of the eSIM Provincial Simulation Team since 2016 serving as the site lead for Chinook Regional Hospital. She is responsible for the outreach simulation program extending to six rural hospitals in the surrounding area of Southern Alberta. Current work includes VFS (Virtually Facilitated Simulations), Indigenous Themed Cultural Simulations, and partnering with FMC NICU to support outreach simulations.



Cherie Serieska

Simulation Consultant

Cherie has been a member of Provincial Simulation for over 7 years as a Simulation Consultant for the Rockyview General Hospital. Cherie's nursing career has spanned 23 years with 14 years + dedicated in emergency nursing. Frontline nursing is still a passion for Cherie as she continues casual work in the Rockyview Emergency. Cherie has also been integral in the coordination and development of eSIM's Faculty Development program.



Christina Eichorst

Simulation Consultant

Christina is a registered nurse that has spent the majority of her career as a staff educator in Cardiovascular ICU. She has been with eSIM as a Consultant since January 2018. Her portfolio covers Community, Homecare and Addictions centers as well as the surrounding hospitals within the Edmonton Zone.



Dan Duperron

Technical Consultant

Dan's diverse role includes supporting simulation in Calgary and across the South zone. He is responsible for clinical and simulation equipment management, planning, procuring and training. He assists in planning and developing new simulation labs and centers. Along with this work, Dan also helps to manage our fleet vehicles.

APPENDIX C: eSIM TEAM MEMBERS



Darren Steidl

Technical Consultant

Darren's role is integral in supporting simulation education in Calgary and South zones. Possessing a broad spectrum of knowledge and experience, the Simulation Technical Consultant plays an integral role in the supporting, planning, development, management, and implementation of a wide variety of technologies and simulation spaces.



Erica Meunier

Simulation Consultant

Erica joined the eSIM team in 2018 as Simulation Consultant at Rockyview General Hospital. Erica is passionate about creating a positive and supportive learning environment for simulation participants and enjoys the mentorship opportunities in this role. Erica is a graduate from the University of Calgary and has 17 years of Emergency, Acute Care, and Urgent Care experience (including 8 years as Clinical Nurse Educator in the Rockyview Emergency Department).



Erin Randle

Simulation Consultant

Erin is one of the newest members of the eSIM team. The majority of her clinical background has been in Emergency Nursing at the QELL in Grande Prairie. She is located in Grande Prairie, AB and responsible for simulation in AHS's North Zone.



Jennifer Semaka

Simulation Consultant

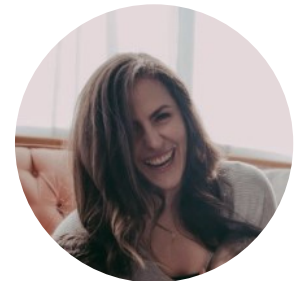
Jennifer joined the eSIM team in 2015-2017 as a Simulation Consultant in a temporary position. During this time she assisted with mentoring both South Health Campus and Rockyview General Hospital Simulation facilitators. Jennifer spent 13 years in the Emergency Department both at Rockyview General Hospital and South Health Campus fulfilling various roles including bedside RN, delivering educational material and PCIS lead. eSIM was thrilled to have her rejoin the team in 2018 as the Simulation Consultant for South Health Campus.



Kristin Simard

Simulation Consultant

Kristin has been an eSIM Consultant for over 5 years. Within her role, Kristin provides simulation support to many rural and remote communities in the North Zone of the province and has been key in implementing the virtually-facilitated simulation program.



Megan Rolleman

Simulation Consultant

Megan joined the eSIM team in March 2021 as a Simulation Consultant for the Stollery Children's Hospital program. Megan transitions into this role from her Pediatric Clinical Instructor role in the Stollery Respiratory Therapy Program. In addition to Megan's clinical education background, she also brings experience as a Simulation and Pediatric Research Coordinator to this new role.

APPENDIX C: eSIM TEAM MEMBERS



Mirette Dubé
Simulation Consultant

Mirette Dubé (RRT, MSc) is a Simulation Consultant with eSIM serving as the site lead for the Foothills Medical Center and has over 25 years experience in healthcare. She is passionate about patient safety, human factors, quality improvement and the role of simulation to improve healthcare systems. She's taken on multiple roles in her career including simulation project manager, Provincial COVID-19 simulation response team lead, the Director of Quality and Patient safety education, and project leader for simulation-based global health research in East Africa.



Monika Johnson
Simulation Consultant

Monika is a registered nurse who spent the majority of her front line nursing career in Obstetrics and Woman's Health. Prior to becoming a Simulation Consultant with the Provincial Simulation Program in 2016, she worked as an education consultant with Quality and Patient Safety Education. She is located in Grande Prairie, AB responsible for all rural and remote simulation-based education in the northwest zone of Alberta.



Nadine Fata
Consultant Assistant

Nadine started with eSIM in 2007 as assistant to the Director. In 2008 she became a Consultant Assistant. Her background is in theatre arts which she uses in coordinating our cadre of actors that we use as embedded participants during simulations. She also works with educators operating simulation equipment to help facilitate simulations.



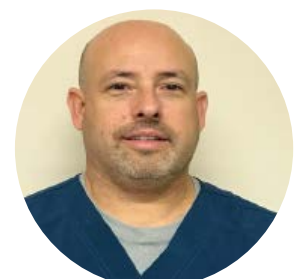
Nadine Terpstra
Simulation Consultant

Nadine is a Simulation Consultant for Red Deer and Central zone where she leads simulation education for Red Deer Regional Hospital Centre as well as rural sites in the Central zone. She is involved with facilitating both interprofessional and uniprofessional simulation with healthcare teams, as well as mentorship of simulation facilitators.



Nicholle Oomen
Simulation Consultant

Nicholle is trained as a registered nurse. She joined the eSIM team in March 2021 as a Simulation Consultant and is excited have the opportunity to assist in the development of a formal simulation program at the Stollery Children's Hospital.



Rob Ritchie
Simulation Consultant

Rob has been with eSIM since March 2016 as Simulation Consultant for Medicine Hat Regional Hospital and the Southeast portion of the province. In addition, Rob provides rural support to South zone such as Bassano, Brooks, Oyen, Brooks, Taber and Crowsnest Pass.

APPENDIX C: eSIM TEAM MEMBERS



Sheneel Lal

Technical Consultant

Sheneel is the Technical Consultant for the North, Edmonton, and Central zones. He is responsible for clinical and simulation equipment management, planning, procuring, and training. He is also involved in planning and develop new simulation labs and centers.



Tara Fuselli

Simulation Consultant

Tara Fuselli joined the eSIM team as a Simulation Consultant over 2 years ago. She is a Registered Nurse, previously specializing in Inpatient Surgery and as Clinical Nurse Educator. She has been an strong advocate for communication and teamwork throughout her 24-year nursing career, currently focusing her passions on work to improve cultural safety and diversity though simulation.



Jill Soderstrom

Simulation Lead, Covenant Health

Jill has been involved in adult education for more than 20 years. The last 10 years her focus has been on simulation as a educational tool for frontline staff. She was with the AHS eSIM team for 8 years as a Simulation Consultant and has spent the last 2 years as Covenant Health Simulation lead.

