

SOUTHWEST ONTARIO REGIONAL BASE HOSPITAL PROGRAM

THE PATCHING POST

*An informative mini-series sharing the updates and activity
surrounding SWORBHP Centralized Patching*

Volume 1 | APRIL 1, 2021

CENTRALIZED PATCHING PILOT PROJECT

The Southwest Ontario Regional Base Hospital Program (SWORBHP) oversees the provision of online medical control 24 hours a day for paramedics in the SWORBHP Region. Over the past 4 months we have been trialing the use of a centralized patch model which largely consists of a small group of physicians with expertise and/or interest in prehospital and transport medicine. From this pool, one physician is “on call” to answer the patch phone for all paramedics within the SWORBHP Region between 07:00 and 23:00.

We have collected and wish to disseminate some data, lessons learned, improvements and changes that have been implemented from our "real world" experience and share some further information around centralized patching. We appreciate your support during this pilot project and continued support as we potentially move to this as our long-term patching model.

THE PURPOSE OF THIS PILOT:

- Determine feasibility and sustainability of centralized patching in the SWORBHP Region;
- Determine satisfaction amongst frontline paramedics utilizing this patching model;
- Troubleshoot IT issues and assess technical quality of patches in real world setting;
- Determine instances of patch failures and compare to the current patch model;
- Assess sustainability of this model from a human resource perspective;
- Obtain feedback from both paramedics and Base Hospital Physicians (BHPs) who are providing this service to assist with system improvements; and
- Prepare for future state where online medical control may have a larger role in prehospital care.

PATCH PILOT DATA

DECEMBER 1, 2020 –
FEBRUARY 28, 2021

TOTAL NUMBER OF
BHP PATCHES

428



265

Total number of patches answered by Primary BHPs

78

Total number of patches answered by Secondary BHPs

84

Total number of patches answered by LHSC BHPs between 23:00 - 07:00

32

Total number of times Secondary BHPs were utilized correctly



Total number of Primary BHP Patches

349

46

Total number of unsuccessful Primary BHP patches

36

Total number of times Secondary BHP incorrectly called instead of Primary BHP

1

Total number of times paramedics were unable to establish BHP contact

IDENTIFIED ISSUES WITH UNSUCCESSFUL PRIMARY BHP PATCHES:

ADMINISTRATIVE

- Calls not forwarded to appropriate BHP
- Cell phone preprogrammed number incorrect

TECHNOLOGY

- Issues with 23:00-07:00 ED patch phone
- Loss of/no cellular reception

LOGISTICS

- Unable to hear due to use of PPE
- Centralized BHP unable to answer phone call quick enough

ARE YOU USING THE CORRECT BHP NUMBERS?

As the pilot project enters its fourth month we have seen improvement in the patch calls being directed to the correct BHP. There still remains patches that are being directed to the Secondary BHPs instead of the Primary BHPs. We have identified the reason for this and require your assistance to ensure calls are being directed to the correct BHP.

Paramedic Service issued cell phones have all been updated with the correct numbers. However, we realize that many paramedics utilize their own personal cell phones and have the BHP numbers preprogrammed into their phone.

If you have not already done so, we ask that you please update the phone numbers within your personal cell phones to ensure that your calls are directed to the correct BHP.

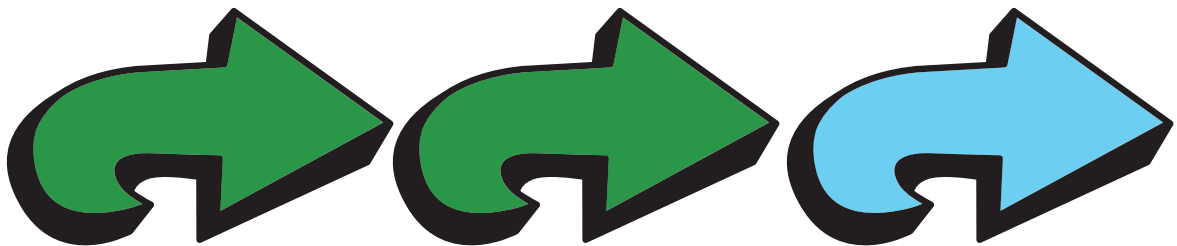
ATTENTION MEDAVIE EMS CHATHAM- KENT & THE COUNTY OF LAMBTON EMS

We have learned that there was an error with the Secondary BHP number that was provided in the November 27th and December 17th SWORBHP Memos. All service issued phones have been programmed with the correct number. If you are using your own personal cell phone for BHP patches, please ensure that you have the correct Secondary BHP number programmed into your phone.

CONNECTING TO THE PRIMARY BHP

If you are calling the Primary BHP and your call goes to voicemail after multiple rings, please attempt the Primary BHP line one more time. If you are unable to reach the Primary BHP after two attempts, please utilize the Secondary BHP.

Due to the use of multiple diverters and the current cellular provider being utilized, the Primary BHP has a very short period to answer the phone before voicemail kicks in (we hear far fewer rings than what you are hearing on your end). We are investigating ways to ensure that the Primary BHP has a longer period to answer the phone before voicemail kicks in and our solution is likely months out. As such, we request that two attempts be made to contact the Primary BHP.



Primary

Primary

Secondary

INFORMATION TO RELAY TO THE BHP

At the beginning of any patch to the BHP please provide the following information upfront:

- ✓ YOUR FULL NAME
 - ✓ YOUR SCOPE OF PRACTICE (PCP OR ACP)
 - ✓ YOUR SERVICE
 - ✓ RUN NUMBER
(WE UNDERSTAND IN CRITICAL SITUATIONS THIS MIGHT NOT BE AVAILABLE AT THE TIME OF THE CALL)
 - ✓ WHAT ORDER YOU ARE CALLING FOR
(THIS HELPS THE BHP SHAPE THE INFORMATION YOU ARE PROVIDING ABOUT THE DETAILS OF THE CASE)
-

NO RUN NUMBER - NO PROBLEM

We understand that during critical calls, you may not have the run number available at the time of the call. In these cases, please call the BHP back and provide the run number for the call. If you do not have the run number at the time of the patch and the call is not critical, we as the BHPs can stay on the line while you acquire this number.



EARLY NOTIFICATION

Please ensure that you provide an early notification to the receiving hospitals during critical patient transports (e.g. cardiac arrest patient whereby the BHP provides order for transport). This helps ensure that the Emergency Department (ED) team has adequate preparation time and thus allowing for a smoother transition of care.



WHO ARE THE SECONDARY BHPs?

The Secondary BHPs are ED Physicians working at the London Health Sciences Centre (LHSC) – Victoria Campus. They are the 24/7 Secondary BHPs. They have previous experience answering patches for both PCP and ACP Services.

WHO ARE THE 23-07 BHPs?

When utilizing the Primary BHP line between 23:00–07:00 you will be connecting to an ED Physician working at the LHSC University Hospital ED. They have previous experience answering patches for both PCP and ACP services.



WHO ARE THE PRIMARY BHPs?

The Primary BHPs are a small group of physicians who have expertise and in interest in prehospital care to provide online medical control.

THE PRIMARY BHPs:



DR. MATTHEW DAVIS

Dr. Matthew Davis joined SWORBHP in 2010 as the program's first EMS Medical Fellow. He held the position of Medical Director of Education and Medical Director of Lambton College and Fanshawe College Paramedic Programs from January 2013 – April 2017. Dr. Davis has also been the Local Medical Director for the Central Services (Elgin, Oneida, Oxford, Middlesex–London). As of April 2017, Dr. Davis transitioned into the role of Regional Medical Director. Dr. Davis graduated from Queen's University with a Bachelor of Nursing Science and a Master of Science in 2002. He graduated from medical school at

McMaster University in 2007, and completed his FRCPC Emergency Medicine residency training at Western University in 2012. He is currently an Emergency Physician at London Health Sciences Centre and an Associate Professor in the Division of Emergency Medicine at Western University. He is actively involved in multiple prehospital research projects and has presented his research at various international conferences. Dr. Davis has published research on topics including prehospital ECG utility, ACR utility for ED management of patients, morbidity and mortality associated with lift assists, and predictors of post-traumatic stress in paramedics. You can follow him on Twitter at [@emergmatt](#).

DR. SEAN DORAN

Dr. Doran recently joined SWORBHP in 2017 as the Local Medical Director. Dr. Doran completed a Royal College of Physicians and Surgeons Emergency Medicine Residency at the University of Western Ontario. He received his Medical Doctorate Degree from Western University. In addition to this he obtained a Bachelor of Education and a Bachelor of Science in Biology from Western University. He also holds a Bachelor of Arts in Law and Psychology at Carleton University. Dr. Doran is currently an Assistant Professor in the Division of Emergency Medicine at Western University and an Emergency Physician at London Health Sciences Centre.





DR. PAUL BRADFORD

Dr. Bradford has worked in the provincial Base Hospital program for 18 years and joined SWORBHP in October 2008 as a Local Medical Director. He is an Emergency Physician, Trauma Team Leader and Critical Care Assistant. He is a Medical Director of Trauma at the Ouellette Site of Windsor Regional Hospital. Dr. Bradford attended medical school at Queen's University, did his Family Medicine training in Sudbury, and his ER training at UWO; completing his Masters from RMC in Military Trauma System design. He has experience in Base Hospital and Trauma program

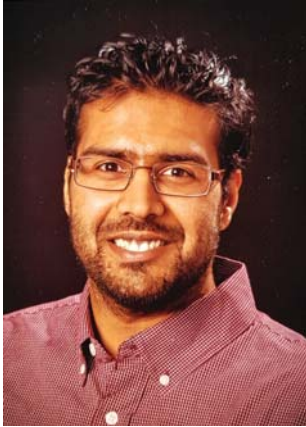
accreditation review teams and as a Medical Director and Chief of ER. He has taught ATLS, ACLS, PHTLS, ITLS, Tactical Combat Casualty Care, and currently teaches in Paramedic and Physician Assistant Programs. LCol (Ret) Bradford has a military background with over twenty six years of service, 2 tours of duty peacekeeping, and was the Commanding Officer of 23 Field Ambulance for 5 years. He has certification in Aeromedical Transport, and Aviation Medicine. He has served on the Federal Disaster Assistance Response team to Hurricane Mitch, and deployed to the Winnipeg flood, the Eastern Canada Ice Storm. He has training in CBRNE and disaster planning. He helped draft the auxiliary provincial medical directives and assists with the local Hazmat/CBRNE Provincial Response Team, and local disaster preparedness. He is the Senior Area Medical Officer for Veterans Affairs for Southwestern Ontario. His research interests include trauma, prehospital care and primary responder PTSD.

DR. LAUREN VALDIS

Dr. Valdis joined SWORBHP as the Medical Director of Education in April 2018. She completed her EMS fellowship training from 2015–2016 with the SWORBHP team. During which she had a special interest in training and education initiatives. Dr. Valdis completed her Royal College Emergency Medicine residency at Western University, graduating in 2017. Prior to this, she completed her medical training at the Windsor campus of the Schulich School of Medicine and Dentistry at Western and holds an undergraduate degree in Physiology and Health Sciences from Western University. Dr. Valdis is currently an Assistant



Professor in the Division of Emergency Medicine at Western University and an Emergency Physician at London Health Sciences Centre. She regularly participates in undergraduate and postgraduate teaching through the medical school. Although she is (again) working back in London, from summer of 2018 to spring 2020, Dr. Valdis practiced at Windsor Regional Hospital and was privileged to work alongside the outstanding professional prehospital colleagues in the South Region.



DR. SUNIL MEHTA

Dr. Mehta recently joined SWORBHP in 2020 in the new role of Local Medical Advisor and in 2021 became a Local Medical Director. Dr. Mehta completed his Bachelor of Science at University of Waterloo and then medical training at the Schulich School of Medicine and Dentistry at Western in 2006. He completed his Family Medicine residency at Western University with Emergency Medicine training. He currently works as an Emergency Physician at Grey Bruce Health Services – Owen Sound and has served as Chief of that department since 2015. He has also served as an investigating coroner in the region since 2016.

DR. DON EBY

Dr. Eby worked as a SWORBHP Medical Director for 24 years until 2020. Don is currently an emergency physician at Grey Bruce Health Services, Owen Sound. Helping advance the scope of paramedic practice has been one of his proudest achievements.



DR. DON LEVY

Dr. Don Levy has been involved as a Base Hospital Physician since 2003 in Windsor–Essex and involved with continuing education with EMS in this role. He has a keen interest in pre-hospital emergency medicine care and in the past served as the Medical Director of EMS in the Southwestern Region in New Brunswick. He served as Chief of Emergency Medicine from 2010 to 2019 at Windsor Regional.



DR. KARALYN CHURCH

Dr. Church is a graduate of the Royal College of Physicians and Surgeons Emergency Medicine Residency at Western University. Prior to that, she completed both her Undergraduate and Medical degrees at the University of Vermont, in Burlington Vermont. While in Vermont, Dr Church worked as both a volunteer EMT and served on the Colchester Technical Rescue Squad for regional based search and rescue. Following a decade of work at LHSC, she has jumped the 401 and can now be found at St Thomas Elgin General Hospital where she is a consultant Emergency Physician and

Adjunct Professor at Western University. Dr Church has a specific interest in emergency services in rural and underserved areas and continues to practice at many different hospital sites across the province via a provincial locum physician project.

DR. TONY MERIANO

Dr. Meriano is an Emergency Physician at Windsor Regional Hospital with 21+ years of practice. He has experience with trauma team and critical care as well as with the Canadian Forces.



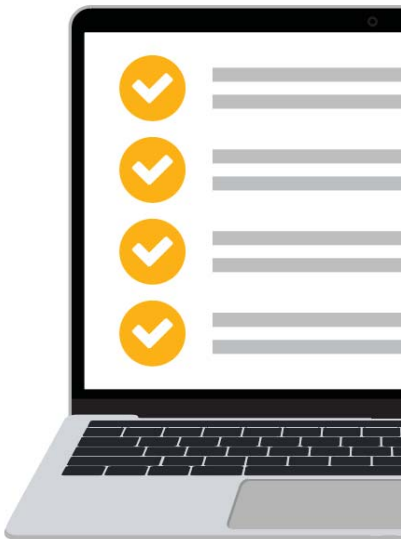
DR. MARY FOTHERINGHAM

Mary Fotheringham, MD, MSc, FRCP completed her medical degree at Dalhousie University in 2009 and residency in Emergency Medicine at the University of Toronto in 2014. Since 2015 she has practiced Emergency Medicine at London Health Sciences Centre. She is an Assistant Professor and Clinician Teacher at Western University and is the Director of Simulation for the Division of Emergency Medicine. Her passions include medical simulation, prehospital Event Medicine, and Star Trek.

YOUR FEEDBACK MATTERS

Based on paramedics' utilization of the SWORBHP Communication Line to inform us about difficulties that BHPs were having in hearing them, we brought this to the attention of the Central Ambulance Communications Centre (CACC). As a result of CACC's investigation, it was found that the University Hospital patch phone was the culprit and not functioning as it should. Once identified, the University Hospital patch phone was replaced with a new phone and is now operational. This is a great example of how your feedback has led to change and without you sharing this information with SWORBHP, this issue would likely have taken much longer to identify.

FEEDBACK SURVEY



For those of you that have utilized the Centralized Patch System during the months of January and February, please keep an eye out for a feedback survey to learn about your experience. We are open to hearing what worked well, what didn't and constructive feedback that you may have. We understand that multiple issues were identified in the first month, and have worked to rectify those issues. You can always provide feedback on centralized patching 24/7 via the SWORBHP communication line.

MOVING FORWARD

Given the success of the first 3 months, we are extending our Centralized Patching Pilot Project until April 30, 2021.



WHAT'S NEXT...

- Resolving issue of short ring time prior to voicemail activation for our Primary BHPs.
- Extending our “on-call” Primary BHPs coverage into the 23-07 time period.
- Automation of phone line switchover. This will help reduce the human factors errors that have occurred during our pilot and thus ensuring that patches are detected to the appropriate BHP.

