



THE SCOTT CORLEW LAB @ PGSSC: SADC UNITAR and GSF Economic assessment of cleft surgery AI for assessment of VPI in Cleft Palate

DR. SCOTT CORLEW

I am a surgeon, trained in general surgery and plastic surgery. My background includes several years as Chief Medical Officer for Resurge International, and a brief stint in hospital administration in addition to years in private practice. I direct the PGSSC SADC team as well as a few other projects as described. I have done some work in economic modeling (a field that always needs improvement!) and in workforce assessment. I also am always open to any good ideas that anyone has that might answer questions that could further the provision of surgical care in LMICs.

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Current PGSSC Fellows:

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PROJECTS

Team SADC:

The Southern African Development Community is comprised of 16 member states, and works within itself on a number of initiatives. SADC committed as a region to the development of NSOAPs in 2018; this resolution, of course, is being implemented faster in some countries than others, and the Covid pandemic has not been kind. The PGSSC SADC team works specifically with the SADC Technical Experts Working Group (TEWG), headed by Prof. Emmanuel Makasa of Zambia and of Wits University in South Africa in order to be of assistance as we can to countries in their NSOAP development.

Zambia NSOAP assessment. Zambia developed one of the first NSOAPs under the forward thinking of Professor Emmanuel Makasa. Five years later, we are working with him on an assessment of what has occurred through that NSOAP – what has happened, what has not, what has worked and what did not. This is through his chairmanship of the global surgery institute at the University of Witwatersrand.

Namibia recently rekindled its NSOAP development and is now in the process of assembling the information gathered and writing what will be Ministerial policy. Dr. Hassan Ali Daoud has been the PGSSC representative in this effort, and he is returning to his work in Somaliland full-time in July.

Examining barriers to NSOAP development in SADC. This is a mixed methods study under the supervision of Dr. Jen Hon and in conjunction with Dr. Makasa. We are trying to discern why NSOAP development is significantly more difficult for some SADC countries than others.

Possible project: A Malawi NSOAP. Our relationship with Malawi is growing; a recent document was developed that addressed emergency care quite well but stopped short of surgical care. It is possible that this mantle may be picked up.

University of Cape Town:

UCT has just completed a comprehensive course in global surgery for policy makers, with which we were instrumental developing. It is anticipated that this course will be offered again next year, with us again being an integral part.

We also are hoping for funding for a surgical intervention/

evaluation project to assist in management of smaller acute burn injuries. This is intended to be a proof of concept, with much broader scope in subsequent iterations. This is planned for two smaller hospitals in the eastern Cape region with whom UCT faculty (Drs. Salome Maswime, Graham Fieggen, Rowan Duys, and others) have relationships.

UNITAR/GSF

We work with UNITAR and the Global Surgical Foundation through Dr. Geoff Ibbotson. In addition to the general global health those entities do, we have been more specifically involved in two projects: Expansion of availability of proper surgical care for cervical cancer. Working with teams in Rwanda and Zambia to develop fellowships to train gynecologic oncologists, and to train gynecologists in more basic oncology techniques for earlier stage cx CA. This project is also listed under the lab of Dr. Adeline Boatin, as she is the PGSSC faculty integrally involved in the specifics.

We hope to be working toward development of an NSOAP in Nepal. We had a very productive mtg with the Nepal MoHP and the Nick Simons Foundation, and hope to have that work progress.

Other:

Examining what constitutes Basic and Essential Surgery by revealed preference methods

Using Artificial Intelligence/Machine Learning to be instrumental in the assessment of velopharyngeal insufficiency in children with cleft palate. This is being done in conjunction with an AI/Machine Learning group at MIT. This project was essentially stopped at the height of the Covid pandemic, but has resumed. Jen Hon is the PGSSC Fellow heading this, and it is being done with Dr. Meara, Dr. Danny Balkin, Liza Catalozzi and Roseanne Clark (Speech Language Pathologists at BCH), and Laura Nuzzi, Research Coordinator.

Economic assessment of the effect of surgical care is key to making the argument for funding and resources to be devoted to health systems that include surgical care. This project is an effort to provide such an economic assessment of the care funded by the NGO The Smile Train, a NY-based entity that funds care of facial clefts within LMICs. It is hoped that we will be able to develop a much-improved model over what we have used previously, with better economic credibility. This project is just getting underway. This project will require quantitative skills and interest in the topic.

Pandemic preparedness:

This study aims to validate an evaluation tool that can assess the pandemic preparedness of a surgical department to maintain minimal activity to address essential and emergency surgical needs during an active pandemic. It is being done through Dr. Patricia Shinondo, a pediatric surgeon in Lusaka, and her colleagues, and is a qualitative study looking at hospitals in Zambia and how they have fared during the pandemic. It was conceived and has been conducted by Dr. Manon Pigeolet, who is returning to Belgium to continue her orthopedic career.