



Centre for
Evidence
Based
Health
Care

Centre for Evidence-based Health Care

Annual Report 2016



UNIVERSITEIT
STELLENBOSCH
UNIVERSITY

FACULTY OF MEDICINE & HEALTH SCIENCES,
STELLENBOSCH UNIVERSITY, SOUTH AFRICA

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The Centre for Evidence-based Health Care (CEBHC) is a coordinating and directive institution for research and training of the Faculty of Medicine and Health Sciences, Stellenbosch University, in the field of evidence-based health care.



Vision

To be the centre of excellence in advancing evidence-informed health care in Africa and globally

Mission

- To conduct and support relevant systematic reviews and primary **research** related to evidence-informed health care
- To enhance evidence-informed health care knowledge, skills and practices through **training** of healthcare professionals and other stakeholders
- To promote the **uptake of current best evidence** in healthcare policy and practice
- To promote the optimal functioning and sustainable growth of the Centre for Evidence-based Health Care

Values and guiding principles

Excellence • Integrity • Credibility • Relevance • Collaboration

Chairperson's Foreword

It is a great pleasure to provide the foreword to the CEBHC Annual Report. For another year, the CEBHC exceeded expectations in terms of its outputs as measured against the strategic plan. The team is growing from strength to strength and this report reflects the dedicated work of the team in research, translation of research evidence to policy and practice, and teaching.



Professor Usuf Chikte
Chair Governing Board
Centre for Evidence-based Health Care

The portfolio of work of the CEBHC continues to impact health and development in the region. Some of the tangible impacts include research informing guideline development, registration of the new MSc Biostatistics and exceeding 100 graduates of the MSc Clinical Epidemiology, and the growing initiatives to enhance implementation science. The Centre has strong collaborative links nationally, regionally and internationally, and through collaboration avoid duplication of efforts and maximises the use of limited resources.

We are grateful for the support of our Governing Board, the Faculty of Medicine and Health Sciences, funders, collaborators and partners, among others, in the execution of our tasks.

Director's Message

With the work of the CEBHC increasingly recognized nationally, regionally and internationally, the Centre has increased its scope of activities, implemented and led new projects and fostered new collaborative engagements. In 2016, the team once again exceeded the research targets and, most of all, contributed to research which informed health policy. We also contributed to the registration of the new Cochrane Nutrition Field, which supports the conduct and use of Cochrane nutrition reviews to inform healthcare decision-making.

We actively engaged in building capacity in biostatistics and clinical epidemiology in the African region. Our new MSc in Biostatistics starts in 2017 and we had the great privilege in seeing our 100th MSc Clinical Epidemiology student graduate. The MSc Clinical Epidemiology offers rigorous methodological training for professionals with a background and experience in any health-related discipline, and draws students from various African countries. We are grateful to all the academic, administrative and support staff supporting these programmes.

An excellent team of full-time and part-time staff supports the work of the CEBHC, and we value the contribution of our honorary staff based in Canada, Ireland, South Africa and the United Kingdom. In 2016, we bid farewell to Charles Wiysonge who took up a new position at the South African Medical Research Council.

We wish to express our gratitude for the support from the head of Department, the Faculty of Medicine and Health Sciences, the CEBHC Governing Board, and our funders and collaborators.

My special thanks go to the team who work tirelessly towards the fulfilment of the CEBHC goals.



Prof Taryn Young
Director
Centre for Evidence-based Health Care

Governing Board

The work of the CEBHC is guided by the Constitution of the Centre. The Centre is managed by a Director and her Management Committee, while oversight is provided by a Governing Board.



GOVERNING BOARD

The governing body consists of the director of the Centre and five to six individuals including for instance the Dean, deputy-Dean for Research/Teaching/Community Service and -interaction Liaison, Head of the DIHS, a representative of one of the other departments within the Faculty, an external expert in the field of EBHC and a representative of the National or Provincial Department of Health. The governing body meets annually and provides strategic oversight and direction to the Centre.

Board members

- Dr Tania Brodovcky
- Prof Usuf Chikte (Chairperson)
- Dr Therese Fish
- Prof Paul Garner (Deputy Chairperson)
- Prof Wilhelm Steyn
- Dr Krish Vallabhjee
- Prof Jimmy Volmink
- Prof Taryn Young (Director)

MANAGEMENT COMMITTEE

The management committee consisting of the Director, head of DIHS and two to three staff members meets regularly to discuss management issues. Specific individuals are co-opted when necessary, based on the agenda of the specific management committee meeting.

CEBHC impacting health care on various fronts



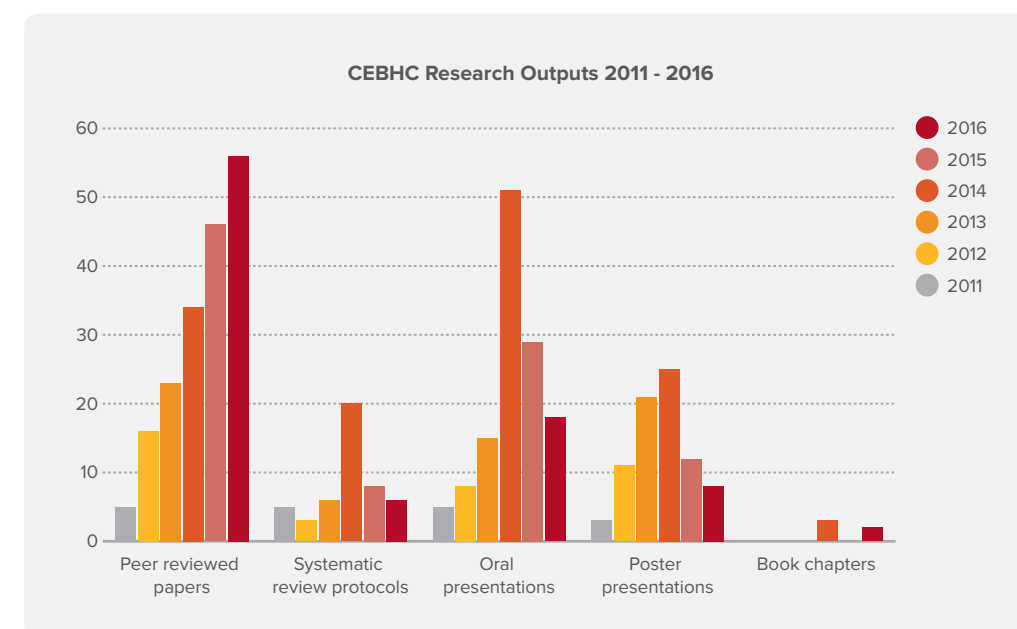
STRATEGIC GOAL

To conduct and support relevant systematic reviews and primary research related to evidence-informed health care

Research

The CEBHC conducts high-quality, up-to-date systematic reviews aimed at improving health outcomes in vulnerable groups; conducts relevant and rigorous primary research and evaluation of knowledge translation strategies, teaching evidence-based health care (EBHC), methodological issues and health care strategies; and collaborates with and supports research conducted by postgraduate students, healthcare professionals and researchers. Research outputs have grown over the past five years (Figure, below) with various high profile publications in high impact journals. Centre staff supervise and provide methodological mentorship and support to various postgraduate, including postdoctoral, students. Annex 1 provides details of all research outputs.

In collaboration with national and international partners, the CEBHC, funded by the UK Department of International Development (DFID), aims to increase evidence-informed decision making to improve health and health care for the poor in low- and middle-income countries (LMICs) via the **Effective Health Care Research Consortium (EHCRC)** (www.evidence4health.org). Together partners work towards preparing and updating Cochrane Reviews on the effects of health care interventions relevant to LMICs; and identifying approaches to ensure dissemination and use of the results of systematic reviews in decision making. The CEBHC leads this work in the African



region and provides project management to collaboration partners in Cameroon, Nigeria, and South Africa. Within South Africa, the CEBHC works closely with Cochrane South Africa at the South African Medical Research Council.

As research integrity in reporting health research is important, and there are very few empirical studies on research integrity from LMICs, Anke Rohwer led the assessment of existing literature on this topic. Our systematic review of 35 cross-sectional studies showed that reported rates of research misconduct in terms of guest authorship, ghost authorship, plagiarism, not declaring conflicts of interest and not disclosing funding sources were high. We then conducted a study is to understand LMIC health researchers' perceptions and experiences of good research reporting practices. Guest authorship emerged as an important topic across regions. The desire for power and academic status as well as increasing the number of publications for promotion appears to be an important driver of various types of misconduct. We are currently implementing and evaluating a workshop on research integrity that aims to introduce research integrity and its importance in health research and promote best practice in authorship attribution, conflict of interest and avoiding plagiarism.

Eleanor Ochodo was awarded a 3 year Wellcome trust fellowship in public health and tropical medicine (2016-2019) to explore methodologies used to measure the impact of TB diagnostic tests on health outcomes relevant to patients and public health programs. This evaluation involves conducting systematic reviews, qualitative research and modelling studies. From this evaluation, we will develop a framework that will guide researchers in designing appropriate studies to evaluate the impact diagnostic tests have on health outcomes. This guidance will also be useful to policy makers who rely on best evidence to recommend the uptake of appropriate tests. Eleanor is conducting this research in collaboration with experienced researchers in diagnostic testing from Birmingham University (United Kingdom), University of Amsterdam (The Netherlands) and University of Cape Town (South Africa).



STRATEGIC GOAL

To promote the use of best evidence in health care decision making and the uptake of current best evidence in health care policy and practice

Knowledge Translation

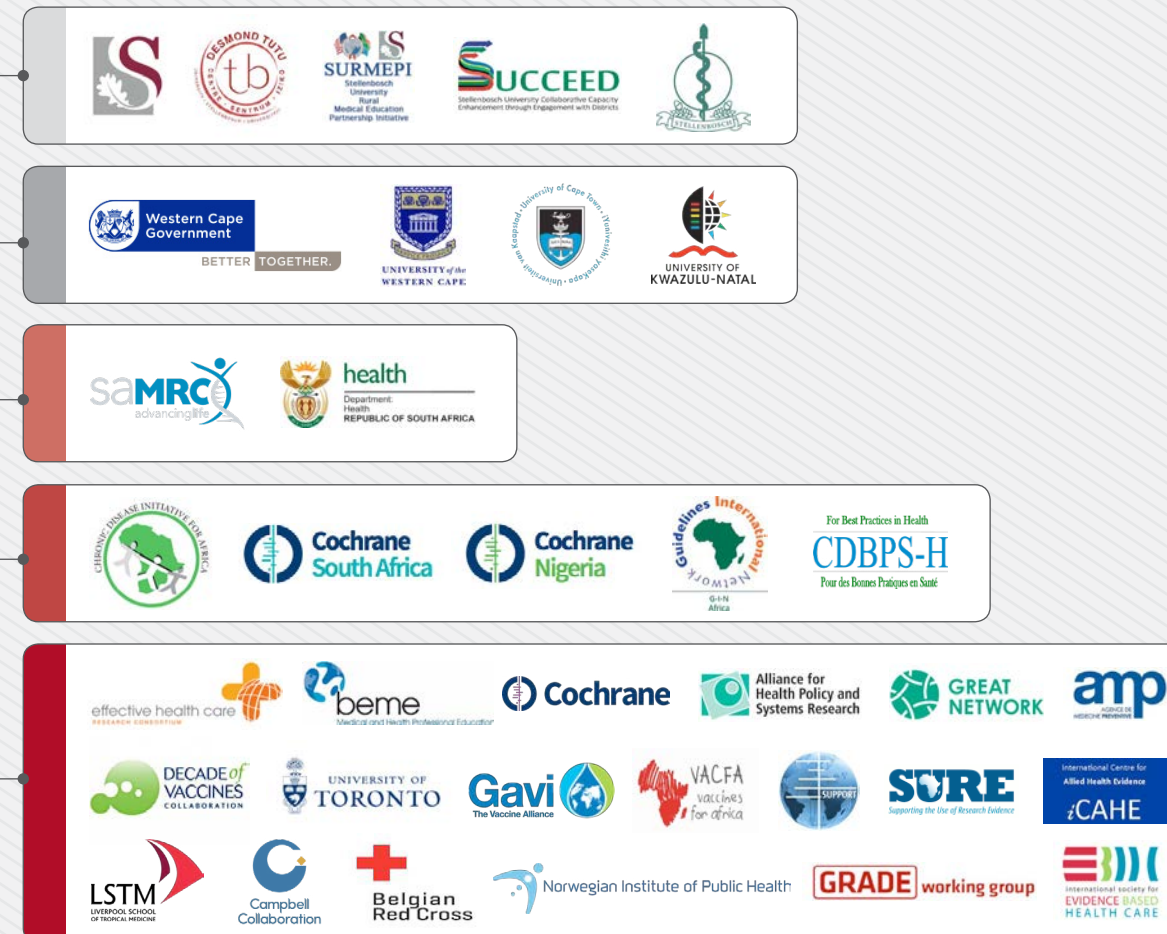
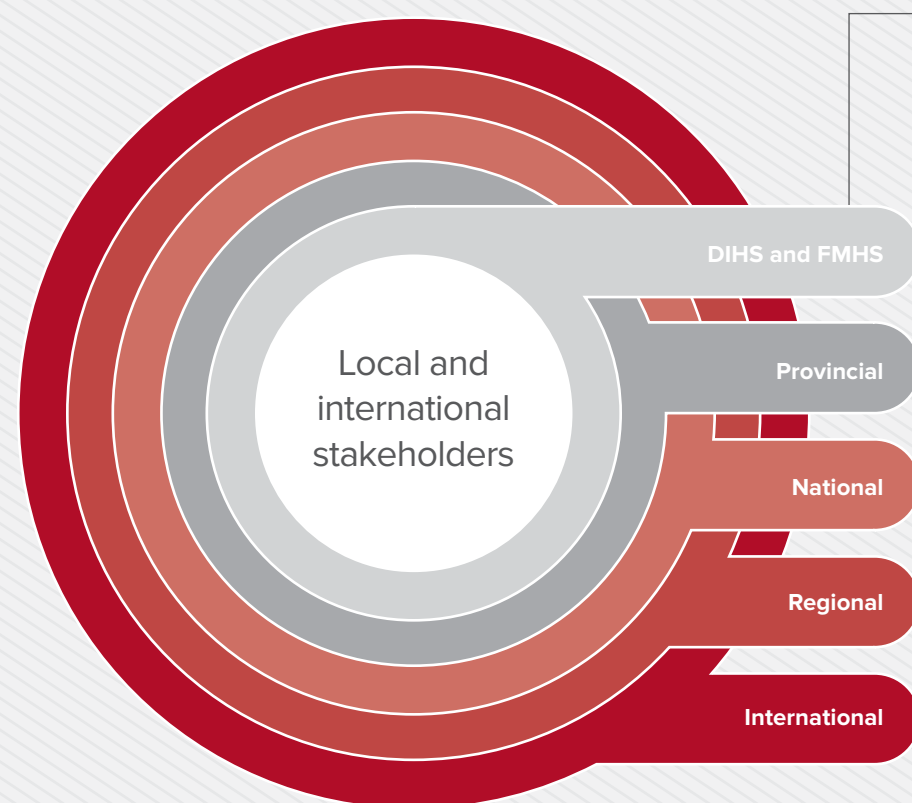
Core to the work of the CEBHC is the promotion of the uptake of best evidence in decision making. A key strategy is engagement with relevant stakeholders. The Centre works in collaboration with a number of local and international institutions, and staff serve on various committees (Annex 2). The key principles are to encourage dialogue, enhance EBHC activities and avoid duplication.

The Centre works collaboratively with various divisions and departments within the FMHS at Stellenbosch University. Within the Western Cape Province we partner with various policymakers. The Centre links with the Chronic Disease Initiative in Africa (CDIA) and key stakeholders from the Universities of the Western Cape (UWC), Cape Town (UCT), Witwatersrand (WITS) and KwaZulu-Natal (UKZN). At the national level the Centre collaborates with the Medical Research Council (MRC) specifically Cochrane South Africa to support the conduct of Cochrane Reviews and promote EBHC in the African region, African Evidence Network and also links to the Collaboration for Evidence-based Health Care in Africa (CEBHA). Internationally, the Centre collaborates with the EHCRC (funded by DFID), iCAHE in Australia and the Norwegian Knowledge Centre for the Health Services (Norway) to increase evidence-informed decisions in order to improve health and health care for the poor in low- and middle-income countries. The CEBHC also works with various Cochrane Review groups and links actively with the World Health Organisation (WHO) at national, regional and international levels.



The CEBHC is a collaborating partner of **Project SAGE** <http://www.mrc.ac.za/cochrane/sage.htm>, that aims to enhance the quality of primary health care by engaging in a stakeholder-driven process to improve the standards of local clinical guideline development, adaptation, contextualisation and, ultimately, implementation. Various research outputs are summarized in the box. Through the project we are supporting capacity development for clinical guidelines and also provide mentorship and support to postgraduate students conducting relevant research. A dedicated online guideline toolkit provides a repository of useful resources for guideline development, adaptation and implementation. Project SAGE is funded by a three-year (2014-2016) Flagship Grant from the South African Medical Research Council (SAMRC).

- Grimmer K, Dizon JM, Louw Q, Kredt T, Young T, Machingaidze S. **South African Guidelines Excellence (SAGE): Efficient, effective and unbiased clinical practice guideline teams.** *South African Medical Journal* 2016;106(5):440-1
- Dizon JM, Grimmer K, Louw Q, Kredt T, Young T, Machingaidze S. **South African Guidelines Excellence (SAGE): To adopt, to adapt, or to contextualise?** *South African Medical Journal* 2016;106(12):1177-8. DOI:10.7196/SAMJ.2016.v106i12.11374
- Machingaidze S, Zani B, Grimmer K et al. **Quality and Reporting Standards of Clinical Practice Guidelines in use in Primary Care in South Africa.** *Journal Clinical Epidemiology*. 2016. doi: 10.1016/j.jclinepi.2016.09.015
- Grimmer K, Machingaidze S, Dizon J, Kredt T, Louw Q, Young T (2016) **South African clinical practice guidelines quality measured with complex and rapid appraisal instruments.** *BMC Res Notes*;9:244. doi: 10.1186/s13104-016-2053-z.
- Dizon JMR, Grimmer K, Machingaidze S, McLaren P, Louw Q. (2016) **Mapping South African Allied Health Primary Care Clinical Guideline Activity: establishing a stakeholder reference sample.** *Health Research Policy and Systems*. (10;14(1):77.
- Dizon JMR, Machingaidze S, Grimmer K. **To adopt, to adapt, or to contextualise? The big question in Clinical Practice Guideline Development.** (2016) *BMC Research Notes*. Vol 9:442





Cochrane Nutrition was established under the leadership of the Centre for Evidence-based Health Care (CEBHC) at Stellenbosch University, and Cochrane South Africa at the South African Medical Research Council, along with international partners,

and was officially approved by Cochrane Central Executive in May 2016. Cochrane Nutrition represents the interests of evidence-based nutritional health. This Cochrane group coordinates activities related to nutrition systematic reviews in Cochrane to ensure that relevant and priority nutrition systematic reviews are conducted using rigorous methods, and, to promote the use of evidence from nutrition systematic reviews to inform healthcare decision-making. Celeste Naude (PhD) from the Centre for Evidence-based Health Care, and Solange Durão (MPH) from Cochrane South Africa, are the Co-Directors of Cochrane Nutrition, and work under the guidance of an Advisory Board, comprising representatives from partner organisations, as well as from various Cochrane groups. <http://nutrition.cochrane.org/>



During 2016, the CEBHC continued to partner with the Western Cape Government Department of Health (WCDoH) to support **WOW!**, a novel transversal and cross-sectoral partnering initiative to promote, activate, expand and maintain a healthy lifestyles movement across multiple settings, including: Worksite, Primary Healthcare Facility, School, Community and Public Space settings. The initiative aims to co-develop, test, evaluate and systematise (institutionalise) a healthy lifestyle initiative that is multi-sectoral ("all of government" and "all of society"), multi-modal (various methods), area-specific and that follows a person-centred life course approach (ultimately from pre-pregnancy to senior citizens). WoW! implements activities and interventions that address both individual health, behavioural, and social determinants of health in order to co-create enabling environments and prevent, reduce and better manage the burden of non-communicable diseases (including obesity) as the first focus. WoW! is being developed in alignment with international, national and provincial policies and strategies. The CEBHC provides support to WoW! by serving as member of the WCDoH Technical Reference Group for Healthy Eating. CEBHC promotes the use of best-available research evidence along with other important contextual factors (e.g. resources and infrastructure) to support evidence-informed decision-making that can benefit the broader community through better programmes for improved health. The WoW! Phase-1 was completed during 2015/16 across multiple settings, and showed encouraging results from the 315 volunteer participants who showed encouraging improvements in markers of health (health risk behaviours, proximal health outcomes, evaluative data and observational data).

<https://www.westerncape.gov.za/westerncape-on-wellness/>



STRATEGIC GOAL

To enhance EBHC knowledge, skills and practices through training health care professionals and other stakeholders

Training & Support

Promoting and enhancing the teaching and learning of EBHC is core to the work of the CEBHC. During 2016, various activities were offered at undergraduate, postgraduate and continuing professional development level (Annex 3).

Enhancing and expanding the programmatic offering of the MSc in Clinical Epidemiology

The MSc in Clinical Epidemiology (www.sun.ac.za/clinepi) offers rigorous methodological training for health professionals who wish to pursue careers in clinical research and/or evidence-based health care practice. The academic leadership for this programme is provided by the Director of the CEBHC. Programme intake has grown exponentially over the past few years and we are attracting students from a wide geographic area. It is a part-time programme that runs over two years and offers a blend of face-to-face contact sessions, e-learning and self-study. It has employed various innovations, including a mentorship component and a system of teaching assistantship that provides support to both the students and convenors of the programme. In 2016 we reached 106 graduates. The MSc in Clinical Epidemiology programme is inseparable from the work of the CEBHC as staff play key roles in enhancing and expanding the programmatic offering - staff convene various modules, facilitate sessions, provide teaching assistance and support, and are involved in the development and implementation of new structured modules.

GEOGRAPHICAL INFORMATION >

MSc Clinical Epidemiology Students at Stellenbosch University, Cape Town, South Africa



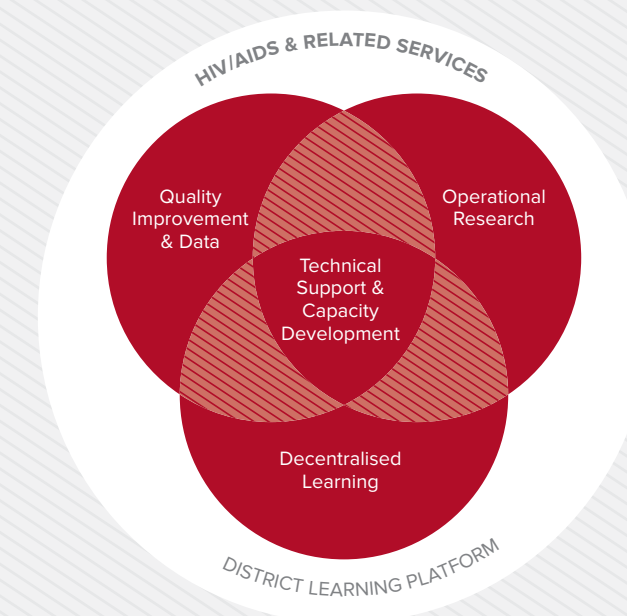
Strengthening Capacity for Implementation Research initiative

In 2016 the CEBHC was selected to serve as an Implementation Research Regional Training Center, as part of the Strengthening Capacity for Implementation Research (SCAIPR) initiative. The SCAIPR was introduced by the Alliance for Health Policy and Systems Research, in collaboration with the Special Programme for Research, Development and Research Training in Human Reproduction and the Special Programme for Research and Training in Tropical Diseases. The CEBHC was selected alongside five other institutions around the world through a competitive process in response to a request for proposals from the Alliance. The aim of the SCAIPR initiative is to develop the capacities of decision-makers and researchers to engage collaboratively in the conduct of implementation research that is embedded within programmes and systems. Implementers of health programmes in South Africa are the main target audience. Six out of 15 projects were selected for funding in November 2016. A list of the six projects selected for funding under the programme is provided below:

Study Title	
1	Promoting uptake of ART at CD4 counts greater than 500 – lessons from three facilities in Metro and Rural Sub-districts, Western Cape Province, South Africa
2	Addressing Failure to Initiate TB Treatment
3	Contextualised evidence-based stroke rehabilitation for South Africa
4	Describing end-user guidance needs of emergency care personnel and stakeholders for the successful implementation of the national South African emergency care clinical practice guidelines
5	The effect of adherence clubs on quality of clinic care for HIV+ patients on antiretroviral treatment in the Cape Winelands District
6	Optimising transition of care for HIV positive adolescents: closing the gaps



The Stellenbosch University Collaborative Capacity Enhancement through Engagement with Districts (**SUCCEED**) project, funded by the Centers for Disease Control and Prevention (CDC), under the USA President's Emergency Plan for AIDS Relief (PEPFAR) in April 2015, facilitates South African university-based technical assistance that aims to improve the quality of HIV/AIDS and related services in the Republic of South Africa. SUCCEED supports the goals of the National Strategic Plan, South African Government, and United States Government, for system strengthening, prevention, addressing vulnerable populations and health services innovation. The project aims to improve the quality of HIV/AIDS and related services through technical assistance and capacity development in decentralised learning, operational research, quality improvement and data. In addressing HIV/AIDS comprehensively, innovative prevention and treatment strategies need to be implemented with involvement of various health disciplines and sectors. As the growth in existing evidence is not translating to change on the ground realities and the challenges remain in the implementation of strategies, we are focusing on building capacity for operational research. Operational research helps to identify solutions to problems that limit program quality, efficiency and effectiveness, or to determine which alternative service delivery strategy would yield the best outcomes. Findings from operational research are used to inform programmatic decisions. Those involved with the conduct of operational research must be equipped to conduct research well, have the capacity to engage with programme officers to identify the problems to be solved and to disseminate findings with implementation strategies to stakeholders, thus working side by side throughout the research and implementation process. The CEBHC champions the operational research component of SUCCEED and does this through the development of relevant modules and workshops, conducting training in qualitative and quantitative research methods, mentoring, creating opportunities for experiential learning, knowledge translation, and conducting of systematic reviews.



Facilitating evidence-based health care teaching at an undergraduate level

The EBHC sub-project of SURMEPI, led by the CEBHC, conducted a comprehensive situational analysis to take stock of what was covered in the undergraduate curricula offered by the Faculty of Medicine and Health Sciences. These findings informed enhanced offering, which was approved by the undergraduate medical programme committee in 2013. The enhanced teaching and learning has been implemented from 2014. What worked well were the use of the situational analysis and further research to inform enhancements in the curriculum, joint planning with module convenors and clinicians, ensuring relevance, clearly defining learning outcomes, interactive small group sessions, using online tools and resources, practical application, using simple language to explain the concepts and avoiding jargon, providing feedback, integrating EBHC concepts in assessments and tasks, faculty development and having a dedicated team driving the implementation. The development and implementation of enhanced EBHC teaching and learning was made possible through dedicated funding by the SURMEPI project. Unfortunately, with project funding ending in August 2016 most of the innovations could not be sustained into 2017.



STRATEGIC GOAL

Promote the optimal functioning and sustainable growth of the CEBHC

Management

The work of the CEBHC is guided by the Constitution of the Centre. The CEBHC plays a key role in providing project leadership nationally, regionally, and internationally.

Effective Health Care Research Consortium

In collaboration with national and international partners, the CEBHC, funded by the UK DFID, aims to increase evidence-informed decision-making to improve the health and health care for the poor in low- and middle-income countries via the Effective Health Care Research Consortium (EHCRC) (www.evidence4health.org). The CEBHC leads this work in the African region and provides project management to partners in Cameroon (Centre for the Development of Best Practices in Health), Nigeria (Calabar Institute of Tropical Diseases and Prevention), and South Africa (Cochrane South Africa).

SUCCEED

Within a new FMHS project the CEBHC contributes to the management committee and coordinates the implementation of capacity development and technical support for implementation research.

Strengthening Capacity for Implementation Research Initiative

The CEBHC is an Implementation Research Regional Training Center, as part of the Strengthening Capacity for Implementation Research (SCAPIR) initiative. Through this initiative we manage and support the conduct of nationally relevant implementation research.

Cochrane African Network

Within the Cochrane African Network the CEBHC plays a key role in coordinating the Southern-Eastern Hub. Taryn Young also supports the overall coordination of the Cochrane African Network through collaboration with Cochrane South Africa.

The work of the CEBHC is supported by an excellent team of full-time and part-time staff as well as external staff appointed as extra-ordinary staff (Annex 4). Staff serve in various capacities on committees (Annex 2). All staff have performance agreements and personal development plans in place.

We work collaboratively with various partners. For funded projects, we submit annual activity and financial reports.

The CEBHC does not receive any funding from commercial sources, defined as any for-profit manufacturer or provider of health care, or any other for-profit source with a real or potential vested interest in the findings of specific research.

ANNEX 1: Research Outputs 2016

Publications in Peer-Reviewed Journals

1. Carney T, Myers BJ, Louw J, **Okwundu CI**. Brief school-based interventions and behavioural outcomes for substance-using adolescents. *Cochrane Database Syst Rev*. 2016 Jan 20;1:CD008969. doi: 10.1002/14651858.CD008969.pub3
2. **Ochodo E**, Garner P, Sinclair D. Achieving universal testing for malaria. *BMJ*. 2016 Feb 4;352:i10
3. **Grobler L**, Nagpal S, Sudarsanam TD, Sinclair D. Nutritional supplements for people being treated for active tuberculosis. *Cochrane Database of Systematic Reviews* 2016, Issue 6. Art. No.: CD006086. DOI: 10.1002/14651858.CD006086.pub4. DOI: 10.1002/14651858.CD006086.pub4/full
4. **Young T**, Garner P, Clarke M, **Volmink J**. Evidence-based Health Care and Policy in Africa: past, present and future. *J Clin Epidemiol*. 2016 Jun 24. pii: S0895-4356(16)30182-2. doi: 10.1016/j.jclinepi.2016.06.006.
5. Abdullahi LH, Kagina BM, Cassidy T, Adebayo EF, **Wiysonge CS**, Hussey GD. Knowledge, attitudes and practices on adolescent vaccination among parents, teachers and adolescents in Africa: a systematic review. *Vaccine*. 2016 Jun 8. pii: S0264-410X(16)30437-6. doi: 10.1016/j.vaccine.2016.06.023.
6. **Young T**, **Esterhuizen TM**, **Volmink J**, Clarke M. Attitude and confidence of undergraduate medical programme educators to practice and teach evidence-based healthcare: a cross-sectional survey. *International Journal of Evidence-Based Healthcare*: June 2016 - Volume 14 - Issue 2 - p 74-83. doi: 10.1097/XEB.0000000000000068
7. Oyo-Ita A, **Wiysonge CS**, Oringanje C, Nwachukwu CE, Oduwole O, Meremikwu MM. Interventions for improving coverage of childhood immunisation in low- and middle-income countries. *Cochrane Database of Systematic Reviews* 2016, Issue 7. Art. No.: CD008145. DOI: 10.1002/14651858.CD008145.pub3.
8. Sissolak G, Seftel M, Uldrick TS, **Esterhuizen TM**, Mohamed N, Kotze D. Burkitt's Lymphoma and B-Cell Lymphoma Unclassifiable With Features Intermediate Between Diffuse Large B-Cell Lymphoma and Burkitt's Lymphoma in Patients With HIV: Outcomes in a South African Public Hospital. *Journal of Global Oncology*. DOI: 10.1200/JGO.2015.002378. Published online on jgo.ascpubs.org on August 31, 2016.
9. **Wiysonge CS**, Abdullahi LH, **Ndze VN**, Hussey GD. Public stewardship of private for-profit healthcare providers in low- and middle-income countries. *Cochrane Database of Systematic Reviews* 2016, Issue 8. Art. No.: CD009855. DOI: 10.1002/14651858.CD009855.pub2.
10. Lawrence M, Wingrove K, **Naude CE** and Durao S. Evidence Synthesis and Translation for Nutrition Interventions to Combat Micronutrient Deficiencies with Particular Focus on Food Fortification. *Nutrients* 2016, 8, 555; doi:10.3390/nu8090555
11. Lawrence M, **Naude CE**, Armstrong R, Bero L, Covic N, Durao S, Ghera D, Macdonald G, Margetts B, Tovey D, **Volmink J**, **Young T**. A Call to Action to reshape evidence synthesis and use for nutrition policy. *Cochrane Library*, 21 November 2016 (Editorial) <http://www.cochranelibrary.com/editorial/10.1002/14651858.ED000118>
12. Chirima T, **Esterhuizen TM**. Inappropriate antibiotic prescribing: a cross-sectional study in Swaziland *S Afr Pharm J* 2016;83(2):44-9
13. Magodoro IM, **Esterhuizen TM** and **Chivese T**. A cross-sectional, facility based study of comorbid non-communicable diseases among adults living with HIV infection in Zimbabwe. *BMC Res Notes* (2016) 9:379 DOI 10.1186/s13104-016-2187-z
14. Langlois EV, Montekio VB, Young T, Song K, Alcalde-Rabanal J, Tran N. Enhancing evidence informed policymaking in complex health systems: lessons from multi-site collaborative approaches. *Health Research Policy and Systems*. 2016;14:20 doi:10.1186/s12961-016-0089-0
15. Rehfuess EA, Durao S, Kyamanywa P, Meerpohl JJ, **Young T**, **Rohwer A** on behalf of the CEBHA+ consortium. An approach for setting evidence-based and stakeholder-informed research priorities in low- and middle income countries. *Bulletin of the World Health Organization*. 2016
16. Werfalli M, Engel ME, **Musekiwa A**, Kengne AP, Levitt NS. The prevalence of type 2 diabetes among older people in Africa: a systematic review. www.thelancet.com/diabetes-endocrinology. Published online November 5, 2015. [http://dx.doi.org/10.1016/S2213-8587\(15\)00363-0](http://dx.doi.org/10.1016/S2213-8587(15)00363-0).
17. Naaktgeboren CA, **Ochodo EA**, Van Enst WA, de Groot JA, Hooft L, Leeflang MM, Bossuyt PM, Moons KG, Reitsma JB. Assessing variability in results in systematic reviews of diagnostic studies. *BMC Med Res Methodol*. 2016;16(1):6

18. van der Merwe LJ; van Zyl GJ; St Clair Gibson AD; Viljoen M; Iputo JE; Mammen M; Chitha W; Perez AM; Hartman N; Fonn S; Green-Thompson L; Ayo-Ysuf OA; Botha GC; Manning D; Botha SJ; Hift R; Retief P; van Heerden BB; **Volmink J**. South African medical schools: Current state of selection criteria and medical students' demographic profile. *S Afr Med J* 2016;106(1):76-81. DOI:10.7196/SAMJ.2016.v106i1.9913
19. Kredo T, Bernhardtsson S, Machingaidze S, **Young T**, Louw Q, **Ochodo EA**, Grimmer K. Guide to clinical practice guidelines: The current state of play. *International Journal for Quality in Health Care*, 2016, 1–7 doi: 10.1093/intqhc/mzv115
20. McEvoy MP, Crilly M, **Young T**, Farrelly J and Lewis LK (2016). How Comprehensively Is Evidence-Based Practice Represented in Australian Health Professional Accreditation Documents? A Systematic Audit, *Teaching and Learning in Medicine*, 28:1, 26-34, DOI: 10.1080/10401334.2015.1107490
21. Zhou DT, Nehumba D, Oktedalen O, Marange P, Kodogo V, Gomo ZA, **Esterhuizen TM** and Stray-PedersenB. Changes in Lipid Profiles of HIV+ Adults over Nine Months at a Harare HIV Clinic: A Longitudinal Study. *Biochemistry Research International*. Volume 2016, Article ID 3204818, 7 pages. <http://dx.doi.org/10.1155/2016/3204818>
22. Pfadenhauer LM, Burns J, **Rohwer A**, Rehfuess EA. Effectiveness of interventions to reduce exposure to lead through consumer products and drinking water: A systematic review. *Environmental Research* 2016; 147:525–536
23. Grimmer K, Machingaidze S, **Dizon JM**, Kredo T, Louw QA, Young T. South African Clinical Practice Guidelines Quality measured with Complex and Rapid Appraisal Instruments. *BMC Research Notes*. 2016;9:244 DOI: 10.1186/s13104-016-2053-z
24. Prakashchandra DR, **Esterhuizen TM**, Motala AA, Gathiram P, Nidoo DP. High prevalence of cardiovascular risk factors in Durban South African Indians: The Phoenix Lifestyle Project. *SAMJ* 2016; 106(3):284-289.
25. **Esterhuizen TM**, Thabane L. Con: Meta-analysis: some key limitations and potential solutions. *Nephrol Dial Transplant* (2016) 31: 882–885 doi: 10.1093/ndt/gfw092
26. Nachega, J. B., Skinner, D., Jennings, L., Magidson, J. F., Altice, F. L., Burke, J. G., Lester RT, **Uthman OA**, et al. (2016). Acceptability and feasibility of mHealth and community-based directly observed antiretroviral therapy to prevent mother-to-child HIV transmission in South African pregnant women under Option B+: an exploratory study. *Patient Preference and Adherence*, 10, 683–690. <http://doi.org/10.2147/PPA.S100002>
27. Claassen-weitz S, **Wiysonge CS**, Machingaidze S, Thabane L, Horsnell WG, Zar HJ, Nicol MP, Kaba M. Current knowledge and future research directions on fecal bacterial patterns and their association with asthma. *Front Microbiol* 2016;7:838. doi:10.3389/fmicb.2016.00838
28. **Wiysonge CS**, Waggie Z, Hawkrigde A, Schoub B, Madhi SA, Rees H, Hussey G. Advocating for efforts to protect African children, families, and communities from the threat of infectious diseases: report of the First International African Vaccinology Conference. *Pan African Medical Journal* 2016;23:53. doi:10.11604/pamj.2016.23.53.9097
29. Finlayson H, Smit L, **Esterhuizen TM**, Kruger M. The impact of a change in referral pathway on a paediatric short-stay ward in Cape Town, South Africa. *S Afr J Child Health* 2016;10(2):134-138. DOI:10.7196/SAJCH.2016.v10i2.1054
30. Kirigia JM, Ota MO, Senkubuge F, **Wiysonge CS**, Mayosi BM. Developing the African national health research systems barometer. *Health Research Policy and Systems* 2016;14:53. DOI: 10.1186/s12961-016-0121-4.
31. GBD 2015 HIV Collaborators (including **Wiysonge CS**). Estimates of global, regional, and national incidence, prevalence, and mortality of HIV, 1980 - 2015: the Global Burden of Disease Study 2015. *Lancet HIV* 2016; 3: e361-87
32. Matsaseng T, Kruger T, **Zunza M**. A simple method of extended 8 days course of clomiphene citrate versus 5 days course in an attempt to suppress premature luteinizing hormone surge in an assisted reproductive technology program: A randomized controlled trial. *IVF Lite* 2016;3:11-7. DOI: 10.4103/2348-2907.183440
33. **Rohwer A**, Pfadenhauer L, Burns J, Brereton L, Gerhardus A, Booth A, Oortwijn W, Rehfuess E. Logic models help make sense of complexity in systematic reviews and health technology assessments. *Journal of Clinical Epidemiology* (2016), doi: 10.1016/j.jclinepi.2016.06.012
34. Hird TR, Pirie FJ, **Esterhuizen TM**, O'Leary B, McCarthy MI, Young EH, et al. (2016) Burden of Diabetes and First Evidence for the Utility of HbA1c for Diagnosis and Detection of Diabetes in Urban Black South Africans: The Durban Diabetes Study. *PLoS ONE* 11(8): e0161966. doi:10.1371/journal.pone.0161966
35. Musengimana G, Mukinda FK, **Machekano R**, Mahomed H. Temperature Variability and Occurrence of Diarrhoea in Children under Five-Years-Old in Cape Town Metropolitan Sub-Districts. *Int. J. Environ. Res. Public Health* 2016, 13, 859; doi:10.3390/ijerph13090859
36. **Grobler L**, Mehtar S, Dheda K, Adams S, Babatunde S, van der Walt M, Osman M. The epidemiology of tuberculosis in health care workers in South Africa: a systematic review. *BMC Health Services Research*BMC series. 201616:416. DOI: 10.1186/s12913-016-1601-5
37. Tabana H, Dudley LD, Knight S, Cameron N, Mahomed H, Goliath C, Eggers R, **Wiysonge CS**. The acceptability of three vaccine injections given to infants during a single clinic visit in South Africa. *BMC Public Health* 2016;16:749. DOI: 10.1186/s12889-016-3324-2.
38. GBD 2015 Mortality and Causes of Death Collaborators, Wang H, Naghavi M, Allen C, Barber RM, Bhutta ZA, Carter A, **Wiysonge CS**, et al. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1459-544 DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31012-1](http://dx.doi.org/10.1016/S0140-6736(16)31012-1)
39. GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, Vos T, Allen C, Arora M, Barber RM, Bhutta ZA, Brown A, **Wiysonge CS**, et al. Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1545–602. DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31678-6](http://dx.doi.org/10.1016/S0140-6736(16)31678-6)
40. GBD 2015 DALYs and HALE Collaborators, Kassebaum NJ, Arora M, Barber RM, Bhutta ZA, Brown J, Carter A, **Wiysonge CS** et al. Global, regional, and national disability-adjusted life years (DALYs) for 315 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990]2015: a systematic analysis for the Global Burden of Diseases, Injuries, and Risk Factors (GBD) 2015 Study. *Lancet* 2016; 388: 1603-58. DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31460-X](http://dx.doi.org/10.1016/S0140-6736(16)31460-X)
41. GBD 2015 Risk Factors Collaborators, Forouzanfar MH, Afshin A, Alexander LT, Ross Anderson H, Bhutta ZA, Biryukov S, **Wiysonge CS**, et al. Global, regional and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 195 countries, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1659-724. DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31679-8](http://dx.doi.org/10.1016/S0140-6736(16)31679-8)
42. GBD Child Mortality Collaborators, Wang H, Bhutta ZA, Coates MM, Coggeshall M, Dandona L, Diallo K, **Wiysonge CS**, et al. Global, regional, national, and selected subnational levels of stillbirths, neonatal, infant, and under-5 mortality, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1725-74. DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31575-6](http://dx.doi.org/10.1016/S0140-6736(16)31575-6)
43. GBD 2015 Maternal Mortality Collaborators, Kassebaum NJ, Barber RM, Bhutta ZA, Dandona L, Gething PW, Hay SI, **Wiysonge CS**, et al. Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1775-812 DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31470-2](http://dx.doi.org/10.1016/S0140-6736(16)31470-2)
44. GBD 2015 SDG Collaborators, Lim SS, Allen K, Bhutta ZA, Dandona L, Forouzanfar MH, Fullman N, **Wiysonge CS**, et al. Measuring the health-related Sustainable Development Goals in 188 countries: a baseline analysis from the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1813-1850. DOI: [http://dx.doi.org/10.1016/S0140-6736\(16\)31467-2](http://dx.doi.org/10.1016/S0140-6736(16)31467-2)
45. Tatsilong HOP, Noubiab JJ, Nansseu JRN, Aminde LN, Bigna JJR, **Ndze VN**, Moyo RS. Hepatitis B infection awareness, vaccine perceptions and uptake, and serological profile of a group of health care workers in Yaounde, Cameroon. *BMC Public Health*. 2016 3;15:706. DOI 10.1186/s12889-016-3388-z
46. Hird TR, Young EH, Pirie FJ, Riha J, **Esterhuizen TM**, O'Leary B,McCarthy MI, Sandhu MS, Motala AA. Study profile: the Durban Diabetes Study (DDS): a platform for chronic disease research. *Global Health, Epidemiology and Genomics* (2016), 1, e2, page 1 of 8. doi:10.1017/gheg.2015.3.
47. Moosa MR, Maree JD, **Chirehwa MT**, Benatar SR (2016) Use of the 'Accountability for Reasonableness' Approach to Improve Fairness in Accessing Dialysis in a Middle-Income Country. *PLoS ONE* 11(10): e0164201. doi:10.1371/journal.pone.0164201
48. Laurence EC, **Volmink J**, **Esterhuizen TM**; Dalal S, Holmes MD. Risk of cardiovascular disease among teachers in Cape Town: Findings of the South African PaCT pilot study. *S Afr Med J* 2016;106(10):996-1001. DOI:10.7196/SAMJ.2016.v106i10.10869
49. Stewart BT, Tansley G, Gyedu A, Anthony, Ofosu A, Donkor P, Appiah-Denkyira E, Quansah R, Clarke DL, **Volmink J**, Mock C. Mapping Population-Level Spatial Access to Essential Surgical Care in Ghana Using Availability of Bellwether Procedures. *JAMA Surg*. 2016;151(8):e161239. doi:10.1001/jamasurg.2016.1239
50. Chiwanga FS, Njelekela MA, Diamond MB, Bajunirwe F, Guwatudde D, Nankya-Mutyoba J, Kalyesubula R, Adebamowo C, Ajayi IO, Reid TG, **Volmink J**, Laurence C, Adami HO, Holmes MD. Dalal S. Urban and rural prevalence of diabetes and pre-diabetes and risk factors associated with diabetes in Tanzania and Uganda. *Glob Health Action* 2016, 9: 31440 - <http://dx.doi.org/10.3402/gha.v9.31440>
51. **Hofmeyr GJ**, Qureshi Z. Preventing deaths due to haemorrhage. *Best Practice & Research Clinical Obstetrics and Gynaecology*. 2016;36: 68-82
52. Machingaidze S, Zani B, Abrams A, Durao S, Louw Q, Kredo T, Grimmer K, **Young T**. Quality and Reporting Standards of South African Primary Care Clinical Practice Guidelines. *Journal of Clinical Epidemiology* (2016), doi: 10.1016/j.jclinepi.2016.09.015
53. Rukasha I, Said HM, Omar SV, Koornhof H, Dreyer AW, **Musekiwa A**, Moultrie H, Hoosen AA, Kaplan G, Fallows D and Ismail N (2016) Correlation of rpoB Mutations with Minimal Inhibitory Concentration of Rifampin and Rifabutin in Mycobacterium tuberculosis in an HIV/AIDS Endemic Setting, South Africa. *Front. Microbiol*. 7:1947. doi:10.3389/fmicb.2016.01947
54. Smit DP, **Esterhuizen TM**, Meyer D. The Prevalence of Intraocular Tuberculosis in HIV-positive and HIV-negative Patients in South Africa Using a Revised Classification System, *Ocular Immunology and Inflammation*, DOI: 10.1080/09273948.2016.1263342
55. Rousseau-Jemwa E, **Hendricks L** & Rehse K. Counselling as an intervention strategy for men who use violence in their intimate relationships. *Graduate*

56. Bierstekera L, Dawesb A, **Hendricks L**, Tredoux C. QuarterlyCenter-based early childhood care and education program quality: A South African study. *Early Childhood Research Quarterly* 36 (2016) 334–344

Published Protocols

1. Kakia A, **Wiysonge CS**, **Ochodo EA**, Awotedu AA, Ristic AD, Mayosi BM. The efficacy and safety of complete pericardial drainage by means of intrapericardial fibrinolysis for the prevention of complications of pericardial effusion: a systematic review protocol. *BMJ Open*. 2016 Jan 5;6(1):e007842. doi: 10.1136/bmjopen-2015-007842.
2. Nglazi MD, Joubert JD, Stein DJ, Lund C, **Wiysonge CS**, Vos T, Pillay-van Wyk V, Roomaney RA, Muhwava LS, Bradshaw D. Epidemiology of major depressive disorder in South Africa (1997-2015): a systematic review protocol. *BMJ Open*. 2016 Jul 4;6(7):e011749. doi: 10.1136/bmjopen-2016-011749.
3. Thomsen SC, Skinner D, Toefy Y, **Esterhuizen T**, **McCaul M**, Petzold M, Diwan V. Voice-Message–Based mHealth Intervention to Reduce Postoperative Penetrative Sex in Recipients of Voluntary Medical Male Circumcision in the Western Cape, South Africa: Protocol of a Randomized Controlled Trial *JMIR Res Protoc* 2016;5(3):e155 URL: <http://www.researchprotocols.org/2016/3/e155/> doi:10.2196/resprot.5958
4. **Mbeye NM**, Kredo T, **Wiysonge CS**. The effects of shifting tasks from pharmacy to non-pharmacy personnel for providing antiretroviral therapy to people living with HIV: a systematic review protocol. *BMJ Open* 2016;6:e008195 doi:10.1136/bmjopen-2015-008195.
5. Moloi AH, Watkins D, Engel ME, **Mall S**, Zühlke L. Epidemiology, health systems and stakeholders in rheumatic heart disease in Africa: a systematic review protocol. *BMJ Open* 2016;6:e011266 doi:10.1136/bmjopen-2016-011266
6. Tomlinson M, Skeen S, Marlow M, Cluver L, Cooper P, Murray L, Mofokeng S, Morley N, Makhetha M, Gordon S, **Esterhuizen T** and Sherr L. Improving early childhood care and development, HIV-testing, treatment and support, and nutrition in Mokhotlong, Lesotho: study protocol for a cluster randomized controlled trial. *Trials* (2016) 17:538 DOI 10.1186/s13063-016-1658-9.

Scientific Letters, Editorials, Columns

1. **McCaul M**, Grimmer K. Pre-hospital Clinical Practice Guidelines - Where are we now? *African Federation Journal of Emergency Medicine* (2016) 6 (2), 61-63
2. **Wiysonge CS**, Waggie Z, Hawkrigde A, Schoub B, Madhi SA, Rees H, Hussey G. The Cape Town Declaration on Vaccines 2012: Unlocking the full potential of vaccines in Africa. *Vaccine*. 2016 Jul 19;34(33):3713-4. doi: 10.1016/j.vaccine.2016.05.072.
3. **Kredo T**, **Machingaidze S**, **Louw Q**, **Young T**, **Grimmer K**. South African Guideline Excellence (SAGE): What’s in a name? *South African Medical Journal* 2016;106(1):18-20. DOI:10.7196/SAMJ.2016.V106I1.10286
4. **Grimmer K**, Dizon JM, **Louw Q**, **Kredo T**, Young T, **Machingaidze S**. South African Guidelines Excellence (SAGE): Efficient, effective and unbiased clinical practice guideline teams. *South African Medical Journal* 2016;106(5):440-1
5. **Wiysonge CS**, Lutge E, Karumbi J, Shey MS, Mpunga J, Oliver S. Cochrane Column: Strategies for improving adherence to tuberculosis management. *International Journal of Epidemiology* 2016;45 (2): 321-326doi: 10.1093/ije/dyw081
6. **Esterhuizen TM**, Thabane L. Opponent’s comments. *Nephrol Dial Transplant* (2016) 31: 880–881 doi: 10.1093/ndt/gfw091a
7. **McCaul M**, Kredo T. Antifibrinolytic drugs for acute traumatic injury. *South African Medical Journal*, [S.l.], v. 106, n. 8, p. 777-778, jul. 2016. ISSN 2078-5135.
8. **Wiysonge CS**, Kamadjeu R, Tsague Landry. Systematic reviews in context: highlighting systematic reviews relevant to Africa in the Pan African Medical Journal. *Pan African Medical Journal*. 2016; 24:180 doi:10.11604/pamj.2016.24.180.10100.
9. **McCaul M**, de Waal B, Hodkinson P, & Grimmer K. (2016). South African pre-hospital guidelines: Report on progress and way forward. *African Journal of Emergency Medicine*. 6(3), 113–5. <https://doi.org/10.1016/j.afjem.2016.08.004>
10. Sena E, **Young T**, Kashangura R, Garner P. Authors’ Response to: Letters re MVA85A *International Journal of Epidemiology* 2016 45 (2): 584-585 doi: 10.1093/ije/dyw083
11. Lawrence M, **Naude CE**, Armstrong R, Bero L, Covic N, Durao S, Ghersi D, Macdonald G, Margetts B, Tovey D, **Volmink J**, **Young T**. A Call to Action to reshape evidence synthesis and use for nutrition policy. *Cochrane Library*, 21 November 2016 (Editorial) <http://www.cochranelibrary.com/editorial/10.1002/14651858.ED000118>
12. **Dizon JM**, Grimmer K, Louw Q, Kredo T, **Young T**, Machingaidze S. South African Guidelines Excellence (SAGE): Adopt, adapt, or contextualise? *S Afr Med J* 2016;106(12):1177-1178. DOI:10.7196/SAMJ.2016.v106i12.11374

Chapters in Books

1. **Naude CE**, du Plessis LM, Hendricks M. Nutritional Management of HIV/AIDS, TB, and Other Infectious Diseases. In: Temple NJ, Steyn NP eds. *Community Nutrition for Developing Countries*. Athabasca University and University of South Africa, 2016: 177-205
2. du Plessis LM, **Naude CE**. Nutrition during the first 1000 days of life. In: Temple NJ, Steyn NP eds. *Community Nutrition for Developing Countries*. Athabasca University and University of South Africa, 2016: 65-82

International Presentations

1. **Zunza M**, Esser M, Cotton MF. Infant feeding choices and effects on infant morbidity in PMTCT programs transitioning to “option B+” in Western Cape, South Africa. 4th African Regional IEA conference, Lilongwe, Malawi, 14-15 April 2016 (oral presentation)
2. **Zunza M**, Gray DM, Young T, Cotton MF, Zar HJ. Isoniazid for preventing TB in HIV-infected children: Systematic review. 4th African regional IEA conference, Lilongwe, Malawi, 14-15 April 2016 (oral presentation)
3. **Naude CE**. Dietary patterns, health outcomes and food systems: making the link for preparing food-based dietary guidelines. Food and Agricultural Organization Technical Consultation on the preparation of National Food Based Dietary Guidelines and Nutrition Education for Promotion of Healthy Diets, Johannesburg, 9-12 May 2016 (oral presentation)
4. Boula Angeline, **Ndze V**, Njiki Kinkela Mina, Ngoh Rose, Kemajou grace, Ngoya Ebiguide Roger, Nkolo Mviena Gaston, Baonga ba Pouth, Nimpa Marcellin, Kobela Marie, Mwenda Jason M, Koki Ndombo Paul. Molecular characteristics of circulating rotavirus strains following the introduction of monovalent rotavirus vaccine in Cameroon: Preliminary data. 10th African Rotavirus Symposium, Bamako Mali, 2-3 June 2016 (poster presentation).
5. **Ndze V**, Paul Koki Ndombo, Taku Nadesh Ashukem, Angeline Boula, Diane Waku-Kouomou, Mina N. Kinkela , Corlins E. Ndose, Mathew D. Esona. Pre-vaccine circulating group A rotavirus strains in under 5 years children with acute diarrhea during 1999-2013 in Cameroon. 10th African Rotavirus Symposium, Bamako Mali, 2-3 June 2016 (poster presentation).
6. **Ndze V**, Mathew Diah Esona, Eric Akum Achidi, Marie Therese Obama-Abena, Krisztián Bányai. Stable backbone genes among representative rotavirus group A strains in Cameroon, 2010-2011. 10th African Rotavirus Symposium, Bamako Mali, 2-3 June 2016 (poster presentation).
7. **McCaul M**, de Waal B, Hodkinson P, Pigoga J, Young T, Wallis L. Developing clinical practice guidelines for South African emergency care: A methodological review. International Conference of

Emergency Medicine, ICC Cape Town, 11 August 2016 (oral presentation)

8. Matthews R, **McCaul M**, Smith W. A description of pharmacological analgesia administration by public sector advanced life support paramedics in the city of Cape Town. International Conference of Emergency Medicine, ICC Cape Town, 11 August 2016 (poster presentation)
9. **Young T**, **Rohwer A**, **Ochodo E**, **Schoonees A**. Enhancing evidence-based health care (EBHC) teaching and learning for undergraduate medical students at the faculty of Medicine and Health Sciences, Stellenbosch University: 2010-2015. MEPI/ NEPI 2016 Symposium, Nairobi, Kenya, 2-4 August 2016 (oral presentation)
10. **Wiysonge CS**. Vaccination programmes in Africa - Neonatal tetanus. 6th Infection Control Africa Network Congress. Indaba Hotel & Conference Centre, Fourways, Johannesburg, South Africa; 25-28 September 2016 (oral presentation).
11. **Rohwer A**, **Young T**, Wager E, Garner P. Integrity in reporting research: What do Cochrane authors from LMICs think? 24th Cochrane Colloquium, Seoul, Korea, 23-27 October 2016 (short oral presentation)
12. Durao S, **Naude C**, **Young T**, Kredo T, Lawrence M, Volmink J. Mapping priority topics for nutrition research. 24th Cochrane Colloquium, Seoul, South Korea. 23-27 October 2016 (oral)

National Presentations

1. **Naude CE**. Addressing the complex and challenging nutrition landscape and disease burden in South Africa. Mail & Guardian Thought leader dialogue on Healthcare, Johannesburg, 28 January 2016 (oral presentation)
2. **Wiysonge CS**. Financial arrangements for health systems in low-income countries: an overview of systematic reviews (Abstract #89). Health Systems Trust Conference 2016. Birchwood Hotel and OR Tambo Conference Centre, Boksburg, Johannesburg, South Africa; 4-6 May 2016 (oral presentation).
3. **Wiysonge CS**. Governance arrangements for health systems in low-income countries: An overview of systematic reviews (Abstract #92). Health Systems Trust Conference 2016. Birchwood Hotel and OR Tambo Conference Centre, Boksburg, Johannesburg, South Africa; 4-6 May 2016 (oral presentation).
4. Odendaal W, Daniels K, Lewin S, Kredo T, **Young T**. Priority-setting and capacity-building for systematic reviews: A South African case study. Health Systems Trust Conference, 4 - 6 May 2016, Johannesburg, South Africa.
5. **Wiysonge CS**. Implementation strategies for health systems in low-income countries: an overview of systematic reviews (Abstract #91). Health Systems Trust

Conference 2016. Birchwood Hotel and OR Tambo Conference Centre, Boksburg, Johannesburg, South Africa; 4-6 May 2016 (oral presentation).

6. **Rohwer A**, Engel M, Adeniyi F, **Schoonees A**, **Young T**. SURMEPI enhancing evidence-based health care (EBHC) knowledge and skills for medical student interns at Stellenbosch University's Rural Clinical (RCS) in Worcester. Rural Research Days, Worcester, 18-19 May 2016 (oral presentation)
7. **Eshun-Wilson I**, Akena DH, Siegfried N, Obuku E, Stein DJ, Joska J. Pre-international AIDS conference, Panel discussion - HEU workshop, Durban, South Africa, 17 July 2016 (panel member)
8. **Eshun-Wilson I**. Anti-depressants for treatment of depression in HIV-infected people: A Cochrane Systematic Review. Stellenbosch University; Tygerberg Campus; Annual Academic Year Day. August 11 2016. Abstract 1060 (oral presentation)
9. **Young T**, **Rohwer A**, **Ochodo E**, **Schoonees A**. Enhancing evidence-based health care (EBHC) teaching and learning for undergraduate medical students at the faculty of Medicine and Health Sciences, Stellenbosch University: 2010-2015. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University, 11 August 2016 (poster presentation)
10. **Rohwer A**, Engel M, Adeniyi F, **Schoonees A**, **Young T**. SURMEPI enhancing evidence-based health care (EBHC) knowledge and skills for medical student interns at Stellenbosch University's Rural Clinical (RCS) in Worcester. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University, 11 August 2016 (oral presentation)
11. Farebrother J, **Naude CE**, **Nicol L**, Andersson M, Zimmerman MB. Iodised salt and iodine supplements for prenatal and postnatal growth: a rapid scoping of existing systematic reviews. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University, 11 August 2016 (poster presentation)
12. **Naude CE**, **Schoonees A**, **Young T**, Senekal M, Garner P, **Volmink J**. Lessons learnt from planned, targeted dissemination of a systematic review on a controversial nutrition topic. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University, 11 August 2016 (oral presentation)
13. Tarumbwa CFC, **Naude CE**, du Plessis LM, Makura LS. Malnutrition-related morbidity and mortality in HIV-exposed infants of mothers enrolled in the PMTCT programme at a Namibian district hospital: the role of infant feeding practices. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University, 11 August 2016 (oral presentation)
14. **Naude CE**, Nicol L. Parenteral glutamine supplementation in critically ill adults: an approach to support evidence-informed decision-making by a National Essential Medicines List (EML) Expert Review Committee. Annual Academic Day, Faculty of Medicine and Health Sciences, Stellenbosch University,

11 August 2016 (oral presentation)

15. **Hendricks L**, Kramer S and Hassem, T. Psychologists speak up! Making meaning of diversity. Psychological Society of South Africa 22nd Annual Conference – Engaging the psychology of decolonisation, Johannesburg, South Africa, 20-23 September 2016. (interactive poster presentation)
16. **Zunza M**. Discussing Optimal measurement and comparison of feeding exposure in HIV exposed and unexposed infants, at the 2nd HIV Exposed Uninfected Infant & Child Workshop (adjacent to the International AIDS Conference), 17th July 2016, Durban, South Africa (panellist)
17. **Hendricks L**, Vickerman SA, Cupido J, Chen C, Andipatin M, Jackson K. African psychology moving into the cyber frontier. Psychological Society of South Africa 22nd Annual Conference – Engaging the psychology of decolonisation, Johannesburg, South Africa, 20-23 September 2016. (poster presentation)
18. **Hendricks L**. Beyond therapy: Career opportunities for emerging psychologists, Panel Discussion. Psychological Society of South Africa 22nd Annual Conference – Engaging the psychology of decolonisation, Johannesburg, South Africa, 20-23 September 2016. (panel member)
19. Matthews R, **McCaul M**, Smith W. A description of pharmacological analgesia administration by public sector advanced life support paramedics in the city of Cape Town. Emergency Care Society of South African Conference 2016. 22 September 2016 (oral presentation)
20. **McCaul M**, de Waal B, Hodkinson P, van Nugteren B. Clinical Practice Dilemmas: Roles and responsibilities (panel member). Emergency Care Society of South Africa Conference 2016. 22 September 2016 (panel discussion)
21. **Young T**. Systematic reviews. TED panel on Research as a key tool in evidence processes. UCT Graduate School of Development Policy and Practice/ Presidency course on Evidence-based policymaking and implementation. 25th October, Cape Town (Invited panellist)

Postgraduate Student Supervision

1. Alison Wiyeh, MSc Clinical Epidemiology, Stellenbosch University – graduated 2016. Topic: Trends in mortality and factors associated with mortality and morbidity amongst hospitalized low birth weight infants at a tertiary level hospital in Cameroon, 2001-2015. (Supervisor: **Tonya Esterhuizen**)
2. Gladys Dandira, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Trends in antimicrobial resistance of bacteria causing urinary tract infection between 2014 and 2016 in Harare, Zimbabwe. (Supervisor: **Tonya Esterhuizen**, **Riezzah Abrahams**, **Muchaneta Mugabe**)

3. Mfanufikile Nomvete, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: A comparative analysis between upper and lower gastrointestinal endoscopy in the evaluation of chronic diarrhoea in HIV infected individuals. (Supervisor: **Tonya Esterhuizen**, **Ernst Fredericks**)
4. Medard Beyanga, MSc Clinical Epidemiology, Stellenbosch University-completed. Topic: Prevalence of active pulmonary TB cases among confirmed TB positive household contacts in Mwanza Tanzania; A cross sectional study (Supervisor: **Eleanor Ochodo**)
5. Niel van Hoving, PhD, Stellenbosch University-ongoing. Topic: Abdominal ultrasound for diagnosing abdominal tuberculosis or disseminated tuberculosis with abdominal involvement in HIV-positive adults (Co-supervisor: **Eleanor Ochodo**)
6. Lisa Telford, MPH, University of Cape Town-ongoing. Topic: A Systematic Review of the Diagnostic Accuracy of Handheld Echocardiography Versus Standard Echocardiography for the Detection of Rheumatic Heart Disease in Populations of School-aged Children and Adolescents Worldwide (Co-supervisor: **Eleanor Ochodo**)
7. Lynn Hendricks, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Barriers and facilitators to linkage, adherence and retention among HIV positive patients: An overview of systematic reviews. (Supervisors: **Anke Rohwer**, **Taryn Young**)
8. Rhodine Hickman, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: A cross sectional study of the most prevalent clinical conditions, patient acuity factors and system distribution characteristics in a South African private emergency service database. (Supervisor: **Michael McCaul**)
9. Casper Tarumbwa, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: Morbidity and mortality from malnutrition in HIV-exposed infants enrolled in the prevention of mother-to-child transmission of HIV programme (PMTCT) at a district hospital in Namibia: the role of infant feeding practices (Supervisor: **Celeste Naude**)
10. Sheena Ruzive, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Identifying Gaps in Primary Nutrition Research from Cochrane Nutrition Reviews using the EPICOT+ Framework (Supervisor: **Celeste Naude**)
11. Victoria Ndarukwa, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Risk factors for mother-to-child transmission of HIV at 6 weeks postpartum in PMTCT programs in Harare, Zimbabwe. (Co-supervisor: **Moleen Zunza**)
12. Kuhlula Maluleke, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Determinants of adherence to ART among HIV-infected young adults attending the Letaba Hospital HIV clinic, Limpopo Province, South Africa. (Co-supervisor: **Moleen Zunza**)

13. Sehlephi S. Kuhlase-Dlamini, MSc Clinical Epidemiology – ongoing. Topic: Tuberculosis (TB) drug resistance in HIV-infected adults who were on Isoniazid Preventive Therapy (IPT) regimen at Raleigh Fitkin Memorial Hospital in Manzini, Swaziland (Supervisor: **Ingrid Eshun-Wilson**)
14. Jeremy Stockhall, MSc Clinical Epidemiology – ongoing. Topic: South African Physiotherapists' Confidence in Evidence-Based Practice: a Cross – Sectional Study (Supervisor: **Taryn Young**)
15. Anke Rohwer, PhD, Stellenbosch University – ongoing. Topic: Research integrity in reporting research: Perceptions and experiences around plagiarism, conflict of interest and authorship criteria in low and middle income countries (Supervisor: **Taryn Young**, **Paul Garner**)
16. Michael McCaul, PhD, Stellenbosch University – ongoing. Topic: Strengthening pre-hospital clinical practice guideline development and implementation for South Africa (Supervisor: **Taryn Young**, **Mike Clarke**)
17. Heather Henry, PhD, Stellenbosch University – ongoing. Topic: Treatment for Paroxysmal Atrial Fibrillation. (Supervisor: **Taryn Young**)
18. Adedapo Awotidebe, MSc Clinical Epidemiology – graduated 2016. Topic: Low-Level Laser Therapy and Exercise for Patients with Shoulder Disorders In Physiotherapy Practice (Supervisor: **Taryn Young**)
19. Esperance Manwana, MSc Clinical Epidemiology – graduated 2016. Topic: Epidemiology of orthopedic injuries in Botswana: Analysis of in-patient data at Princess Marina Hospital (Supervisor: **Taryn Young**)

Supporting Graduates to Publish Their Research Projects

1. Itai Magodoro, MSc Clinical Epidemiology, Stellenbosch University – graduated 2015. Topic: A cross-sectional, facility based study of comorbid non-communicable diseases among adults living with HIV infection in Zimbabwe. (Supervisor: **Tonya Esterhuizen**).
2. Tapiwa Chirima, MSc Clinical Epidemiology, Stellenbosch University – graduated 2014. Topic: Inappropriate antibiotic prescribing: a cross-sectional study in Swaziland. (Supervisor: **Tonya Esterhuizen**).
3. Supporting 8 Nursing (Honour's) students to complete scoping reviews: (**Anke Rohwer**)

ANNEX 2: Intellectual Input

Taryn Young

1. Member, Cochrane Knowledge translation strategy working group, 2016 – date
2. Member, Best Evidence Medical Education (BEME) Board, 2015 – date
3. Advisory Group Member, DFID BCURE project at University Johannesburg, 2014 - date
4. Member, Faculty Postgraduate committee, 2016 –
5. Member, Cochrane author forum, 2013-ongoing
6. Member, Curriculum committee, International Society on Evidence-based Health Care, 2013-ongoing
7. Editor, Cochrane Sexually Transmitted Diseases Review Group. July 2008 - ongoing
8. Chair of the Masters in Clinical Epidemiology programme, selection and bursary committees 2008 - ongoing
9. Member of EHCRC Executive Committee, 2011- ongoing
10. South African Epidemiology Association (SACEA) executive committee member, 2013 – ongoing
11. Invited member of the Chronic Disease Initiative for Africa, April 2014 – ongoing

Charles Wiysonge

1. Strategic Advisory Group of Experts on Immunisation (SAGE);
2. SAGE Working Group on BCG vaccine;
3. SAGE Working Group on Ebola Vaccines and Vaccination;
4. SAGE Working Group on Maternal and Neonatal Tetanus Elimination;
5. Independent Review Committee of the Global Alliance for Vaccines and Immunisation (Gavi);
6. GREAT (Guideline-driven, Research priorities, Evidence synthesis, Application of evidence, and Transfer of knowledge) Network;
7. Global Burden of Disease (GBD) Expert Group; GRADE Working Group;
8. Advisory Committee on Immunization Practices (ACIP) Evidence Based Recommendations Work Group;
9. WHO African Regional Immunisation Technical Advisory Group;
10. WHO African Advisory Committee on Health Research and Development; and
11. WHO Antenatal care Guideline Panel.
12. Review of NRF flagship project (Mar-Apr 2016)
13. Manuscript reviews: Lancet Global Health (Feb 2016), Systematic Reviews (Feb 2016), International Journal of Epidemiology (Mar 2016), BMC Medicine (Mar 2016), BMC Public Health (Mar 2016), BMC Health Services Research (Apr 2016), Vaccine (Mar 2016), Vaccine (May 2016), & EPOC (Jun 2016).
14. Editorial board memberships: BMC Health Services Research; Cochrane Infectious Diseases Group; Human Vaccines & Immunotherapeutics; & Cochrane Column, International Journal of Epidemiology.
15. Membership of scientific committee of conferences: 2nd African Conference on Emerging Infectious Disease and Biosecurity (27-29 July 2016, Lagos, Nigeria); Making Health Systems Work for Africa: A Regional Forum on Strengthening Health Systems for the Sustainable Development Goals and Universal Health Coverage (8-13 December 2016, Windhoek, Namibia)

Celeste Naude

1. South African Epidemiology Association (SACEA) executive committee member, 2013 – ongoing
2. Technical Reference Group on Healthy Eating. Western Cape Government Health. July 2014 – ongoing
3. Invited member of the Chronic Disease Initiative for Africa, April 2014 – ongoing
4. Member of the Cochrane Fields Executive Committee, 2015 - ongoing
5. Co-director: Cochrane Nutrition, 2016 - ongoing
6. Associate Editor, Cochrane Effective Practice and Organisation of Care Group, 2015 – ongoing
7. Member of the Cochrane Council (Fields representative), 2016 – ongoing
8. Cochrane African Network mentor, 2016 - ongoing
9. Member of the Ministerial Committee on Mortality and Morbidity in Children (CoMMiC), National Department of Health; Directorate: Child & Youth Health; 2015 – ongoing
10. Member of Teaching, Research, Evaluation Consortium (TIREC) of the Western Cape Government's Western Cape on Wellness (WoW!) initiative, 2016 – ongoing
11. Member of the Editorial Board of the South African Journal of Clinical Nutrition, 2016 – ongoing
12. Contributor at United Nations Food and Agricultural Organization's Technical Consultation on the Preparation

of National Food Based Dietary Guidelines and Nutrition Education for Promoting of Healthy Diets for 11 African countries in Johannesburg, May 2016

13. Member of a United Nations Food and Agricultural Organization's Working Group to develop resource documents to guide countries, especially low and middle income countries, on implementation of national food-based dietary guidelines, 2016 - ongoing
14. Peer reviewer. Cancer Control, , April 2016
15. Peer reviewer. British Journal of Sports Medicine, July 2016
16. Member of Scientific Committee for the 18th International Congress of Dietetics (ICDA), 15-19 September 2020, Cape Town, 2016 - ongoing

Anke Rohwer

1. Peer reviewer: Medical Education (June 2016)
2. Editorial Assistant (Methods Advisor) Cochrane Public Health Group, October 2014 – ongoing

Eleanor Ochodo

1. Extended member of STARD group (Standards for the reporting of Diagnostic Accuracy)

Moleen Zunza

1. Executive member; South African Epidemiology Association (SACEA) 2013 – ongoing
2. Member; International Epidemiology Association (IEA) 2014 – ongoing
3. Internal examiner of Master's thesis; Master of Nursing Science, Stellenbosch University; 03 February 2015
4. External examiner of Master of Medicine thesis (Mumtaz Abbas) - Development, implementation and impact of Phlebotomy training on blood sample rejection and Phlebotomy knowledge of primary health care staff at selected primary health care facilities in Cape Town: A quasi-experimental study design; Master of Medicine in Family Medicine, University of Cape Town; 21 April 2016
5. 2013 – present: Founding member and executive member of the Southern African Clinical Epidemiology Association
6. 2014 – present: International of Epidemiology Association member
7. Reviewer: Journal of international AIDS society – 2016 to present

Anel Schoonees

1. Peer Reviewer: BEME. January 2016.
2. Peer Reviewer: Journal of Disease and Global Health. May 2016.
3. Peer Reviewer: Cochrane Infectious Diseases Group. September 2016.

Tonya Esterhuizen

1. Executive member; South African Epidemiology Association (SACEA) 2013 – ongoing
2. Peer Reviewer: Cochrane Infectious Diseases Group 2012-ongoing
3. Peer Reviewer: Cochrane Diagnostic Test Accuracy Group 2013-ongoing
4. Member of the Masters in Clinical Epidemiology programme, selection and bursary committees 2012 –ongoing

Tawanda Chivese

1. Member; International Epidemiology Association (IEA) 2014 – ongoing
2. Reviewer: BMJ Open since 2016
3. Reviewer: Plos One since 2015
4. Reviewer: International Journal of HIV and STIs since 2016

Maxwell Chirehwa

1. Graduate Statistician member, Royal Statistical Society-UK (RSS-UK), 2015- ongoing
2. Member of the Masters in Biostatistics programme, selection committee, 2016 –ongoing

Lynn Hendricks

1. Member, South African Monitoring and Evaluation Association, 2015 - ongoing
2. Executive Member, Division of Research and Methodology, Psychological Society of South Africa, 2014 - ongoing
3. Member, American Psychological Society, 2012 - ongoing
4. Member, Psychological Society of South Africa, 2010 - ongoing
5. Member, International Society for the Study of Behavioural Development, 2010 – ongoing

Ingrid Eshun-Wilson

1. Editor, Cochrane Infectious Diseases Group

ANNEX 3:

Teaching Sessions / Lectures / Workshops

Undergraduate

MB,CHB (SU)

Year	Sessions
1	<ul style="list-style-type: none">Principles of clinical epidemiology and value of research in health carePrinciples of EBHC and Phrasing research questionsApproach to searching the literatureOverview of different types of studiesBias, error and confoundingStudies about risk factors: Case-control studiesStudies about diagnostic accuracyStudies about effects of interventions: RCTEvidence-informed decision making and role of systematic reviews for choice of drug treatmentsDescriptive statisticsHypothesis testingMeasures of occurrenceDiagnostic accuracyMeasures of associationMeasures of effectConfidence intervals
2	<ul style="list-style-type: none">Diagnostic test accuracy
Middle phase	<ul style="list-style-type: none">Reading a paper on risk factor
5	<ul style="list-style-type: none">Principles and application of EBHCPhrasing questionsFinding the EvidenceCritical appraisal of randomised controlled trials
Late phase	<ul style="list-style-type: none">Reading a systematic review on treatment
6	<ul style="list-style-type: none">Revision of EBHC principles. Tutorial for student interns at RCSFormulating different types of questions using PICO. Tutorial for student interns at RCS.Principles of searching and hands-on searching (treatment, diagnostic, guideline). Tutorial for student interns at RCS.How to read a RCT and a SR. Tutorial for student interns at RCS.How to read a cohort study. Tutorial for student interns at RCS.How to read a Diagnostic Test Accuracy (DTA) study. Tutorial for student interns at RCS.How to read a guideline. Tutorial for student interns at RCS.Evaluation of EBHC project presentations by student interns at RCS.

EXTENDED DEGREE PROGRAMME II STUDENTS (HEALTH IN CONTEXT)

Sessions

- Introduction to Evidence based health care
- Practicing phrasing clear questions
- Populations and sampling
- Overview of observational study designs
- Randomised controlled trials
- Reading a systematic review
- Searching for evidence and review

BSC DIETETICS (3RD YEAR)

Session	Topic
1	Introduction to biostatistics and variation
2	Introduction to MS Excel – capturing data and management of data
3	Types of variables and measurement scales
4	Summarising numerical data – measures of central tendency and dispersion, graphical display of numerical data
5	Summarising categorical data, including graphical presentation
6	MS Excel – calculating summary statistics
7	The Normal Distribution
8	MS Excel – graphical data presentation
9	Measures of association
10	Confidence Intervals
11	MS Excel – frequency tables, pivot tables
12	Hypothesis testing and p-values
13	MS Excel – calculating measures of association and confidence intervals
14	The t—distribution
15	The z-test and the t-test for a single mean
16	The t-test for 2 independent groups
17	The t-test for paired data
20	Non-parametric methods
21	MS Excel – t-tests and non-parametric tests
22	Dealing with bias and confounding in medical research
23	ANOVA (postponed)
25	ANOVA, Correlation and simple linear regression – COMPULSORY LECTURE
27	ANOVA, correlation and regression in Excel
28	Chi squared test
29	Logistic regression

Postgraduate

MSC IN CLINICAL EPIDEMIOLOGY (SU)

MSc in Clinical Epidemiology: Co-conveners of modules

- Fundamentals of Epidemiology (Taryn Young)
- Systematic Reviews and Meta-Analysis (Taryn Young and Michael McCaul)
- Writing and Reviewing Scientific papers (Taryn Young, Charles Wiysonge, Anel Schoonees)
- Diagnosis and Screening (Charles Okwundu)
- Biostatistics I (Tonya Esterhuizen and Moleen Zunza)
- Biostatistics II (Tonya Esterhuizen and Moleen Zunza)
- Research Proposal Writing and Grantmanship (Tonya Esterhuizen and Tawanda Chivese)
- Teaching EBHC (Taryn Young, Anke Rohwer)
- Clinical Practice Guidelines (Michael McCaul)
- Randomised Controlled Trials (Michael McCaul)

MSc in Clinical Epidemiology: Teaching sessions offered

Module	Session
Biostatistics I	<ul style="list-style-type: none">• Esterhuizen T. Lecture: Introduction and describing data. 3 February 2016• Esterhuizen T. Exercise: Describing data. 3 February 2016• Esterhuizen T and Zunza M. Practical: Introduction to Stats and describing data. 3 February 2016• Esterhuizen T. Lecture: Estimation I. 4 February 2016• Esterhuizen T. Exercise: Estimation I. 4 February 2016• Esterhuizen T and Zunza M. Practical: Estimation I. 4 February 2016• Esterhuizen T. Lecture: Estimation II. 5 February 2016• Esterhuizen T. Exercise: Estimation II. 5 February 2016• Esterhuizen T and Zunza M. Practical: Estimation II. 5 February 2016• Esterhuizen T. Lecture: T-tests. 13 April 2016• Esterhuizen T. Exercise: T-tests. 13 April 2016• Esterhuizen T and Zunza M. Practical: T-tests. 13 April 2016• Esterhuizen T. Lecture: Nonparametric tests. 14 April 2016• Esterhuizen T. Exercise: Nonparametric tests. 14 April 2016• Esterhuizen T and Zunza M. Practical: Nonparametric tests. 14 April 2016• Esterhuizen T. Lecture: Categorical data. 15 April 2016• Esterhuizen T. Exercise: Categorical data. 15 April 2016• Esterhuizen T and Zunza M. Practical: Categorical data. 15 April 2016• McCaul M. Biostatistics 1 practical. 15 April 2016• McCaul M. Introduction to SUNLearn. 18 July 2016• McCaul M. Confounding and effect modification. 6 September 2016
Fundamentals of Epidemiology	<ul style="list-style-type: none">• Eshun-Wilson I. Measures of Disease Frequency.5 September 2016• Eshun-Wilson I. Study designs: Observational studies. 18 July 2016• Chivese T. Linking exposure and disease - measures of effect/association. 5 September 2016• McCaul M. The challenge of confounding and effect modification. 5 September 2016• Okwundu C. Early detection: Screening. 6 September 2016
Research proposal writing and grantmanship	<ul style="list-style-type: none">• Esterhuizen T. Overview: Module in perspective. 19 July 2016• Esterhuizen T. Biostatistical applications: Sample size and power calculations – Theory & Practice. 18 August 2016• Esterhuizen T. Sampling techniques. 18 August 2016• Esterhuizen T. Questionnaire design. 19 August 2016• Esterhuizen T. Data Analysis Plan. 19 August 2016• Esterhuizen T. Data management. 07 September 2016• Esterhuizen T. Data Analysis (I) and (II). 07 September 2016

Writing and reviewing scientific papers	<ul style="list-style-type: none">• Young T. Recap on approach to EBHC.• Rohwer A. Critical appraisal of a case-control study – online discussion. 21 April 2016
Systematic reviews	<ul style="list-style-type: none">• Young T. Introduction to research synthesis. 18 July 2016• Young T. Zooming in on systematic reviews: what are they and where can we find them? 18 July 2016• McCaul M. Planning and preparing a systematic review. 18 July 2016• McCaul M. Introduction to RevMan. 18 July 2016• McCaul M, Oliver J. Developing search methods for identifying relevant studies. 18 July 2016• McCaul M, Oliver J. Hands on searching for relevant studies. 18 July 2016• Young T. Analysing data and undertaking meta-analysis. 16 August 2016
Biostatistics II	<ul style="list-style-type: none">• Esterhuizen T. Analysis of variance (ANOVA). 03 August 2016• Esterhuizen T. Correlation and simple regression. 04 August 2016• Esterhuizen T. Multiple linear regression. 05 August 2016• Esterhuizen T and Zunza M. Logistic regression. 01 September 2016• Esterhuizen T and Zunza M. Survival analysis. 02 September 2016• Esterhuizen T and Zunza M. Revision. 07 October 2016
Randomised control trials	<ul style="list-style-type: none">• McCaul M. Minimization in RCTs. 29 August 2016• McCaul M. Sample size calculation for trials (STATA Tutorial)
Diagnosis and Screening	<ul style="list-style-type: none">• Smieja M. The Basics. 09 March 2016• Smieja M. Advanced Concepts. 09 March 2016• Okwundu C. Study Design. 10 March 2016• Okwundu C. Design of diagnostic studies. 10 March 2016• Ochodo E. Introduction to diagnostic test accuracy reviews. 22 April 2016• Ochodo E. Appraising DTA studies. 05 May 2016
Teaching EBHC	<ul style="list-style-type: none">• Rohwer A. Facilitating learning of evidence-based health care. 12 September 2016• Rohwer A, Young T. Assessment of individual presentations. 15 September 2016
Clinical Practice Guidelines	<ul style="list-style-type: none">• McCaul M. Searching for clinical practice guidelines• McCaul M. Louw Q. Appraising clinical practical guidelines (practical)

NURSING (HONOURS PROGRAMME)

- Young T. Overview of evidence-based practice. 22 February 2016
- Rohwer A. Overview of types of research. 22 February 2016
- Dizon J. Phrasing questions. 22 February 2016
- Rohwer A. Finding the evidence. 22 February 2016
- Rohwer A, Dizon J. Practical Session: Searching for evidence. 22 February 2016
- Rohwer A, Dizon J. Approach to critical appraisal of the literature and interpreting results. 23 February 2016
- Rohwer A, Dizon J. Reading a systematic review. 23 February 2016
- Rohwer A. Components of a scoping review. 24 February 2016
- Rohwer A. Practical session on scoping reviews. 24 February 2016
- Rohwer A. Search strategy for scoping reviews. 31 May 2016
- Rohwer A. Practical session: Search strategies for scoping reviews. 31 May 2016
- Rohwer A. Revision: Scoping reviews. 1 June 2016
- Rohwer A. Practical session: Scoping reviews. 2 June 2016

POSTGRADUATE CERTIFICATE IN HEALTH TECHNOLOGY ASSESSMENT (ONLINE COURSE)

- Schoonees A, Rohwer A. Session 1: Introduction to evidence-based health care (EBHC). Online presentation for students doing the postgraduate certificate in health technology assessment. August 2016.
- Esterhuizen T. Session 1: Basic Biostatistics. August 2016.
- Schoonees A, Rohwer A. Session 2: Questions and study designs. Online presentation for students doing the postgraduate certificate in health technology assessment. August 2016.
- Schoonees A, Rohwer A. Session3: Overview of the steps of EBHC. Online presentation for students doing the postgraduate certificate in health technology assessment. August 2016.

PRE-DOCTORAL SHORT COURSE PROGRAMME

- Esterhuizen T. Statistical design of quantitative research. Sample size and power. 16th February 2016
- Esterhuizen T. Sampling strategies. 16th February 2016

POSTGRADUATE NUTRITION AND DIETETICS STUDENTS AT THE UNIVERSITY OF CAPE TOWN

- Schoonees, A. Overviews of systematic reviews. 3 hour session on 5 May 2016.

FAMILY MEDICINE MASTERS

- Esterhuizen T. Introduction to statistical concepts. 2th February 2016
- Esterhuizen T. Introductory data management. 9th February 2016

Continuing Professional Development: Presentations, Seminars & Workshops

Lectures and presentations

- Rohwer A. Evidence-based Health Care (EBHC): The what, the why and the how. UCT. Date: 27 July 2016
- Rohwer A. Phrasing clear questions. UCT. Date: 27 July 2016
- Rohwer A. Bias and critical appraisal of studies. UCT. Date: 29 July 2016
- Rohwer A. Case-control studies: Design and critical appraisal. Lecture to: Post-graduate students and clinicians doing the short course in clinical research skills. Faculty of Medicine and Health Sciences, Stellenbosch University. Date: 6 June 2016
- Rohwer A. Finding the Evidence: Principles of searching. MMed Surgery students. 14 September 2016
- Naude CE. Addressing the complex and challenging nutrition landscape and disease burden in South Africa. Mail & Guardian Thought leader dialogue on Healthcare, Johannesburg, 28 January 2016
- Naude CE. Navigating nutrition: sound science versus beliefs. SAAFoST symposium, 28 June 2016, Stellenbosch
- Zunza M. Short course in clinical research skills targeting Master of Medicine students and other inexperienced clinical researchers and postgraduate students in the Faculty. Organized by Research Development and Support, Stellenbosch University (presenter): Topic: Cross-sectional study – Design and critical appraisal (30 May 2016)
- Ochodo E. Development and critical appraisal of Systematic Reviews: Diagnostic Test Accuracy. Lecture to Master of Public Health students, University of Cape Town. Date: 25 Aug 2016
- Esterhuizen T. Short course in clinical research skills. Data collection. 18th July 2016
- Esterhuizen T. Short course in clinical research skills. Questionnaire design. 18th July 2016
- Esterhuizen T. Short course in clinical research skills. Sampling. 25th July 2016
- Esterhuizen T. Short course in clinical research skills. Biostatistical concepts. 25th July 2016
- Meta-analysis: Interpreting the results and drawing conclusions. SA MRC (Michael McCaul)

Workshops

- Young T, Rohwer A, McCaul M. Primer in Systematic Reviews & Research Synthesis. Western Cape Department of Health. 16, 22, 26 September 2016
- Young T, Rohwer A, McCaul M. Primer in Systematic Reviews. Online course facilitation. August-September 2016
- Hendricks L, Esterhuizen T and Chivese T. SUCCEED Operational Research – Protocol development and literature review. Walter Sisulu University delegates. Mthatha, Eastern Cape. Date: 15-16 March 2016.
- Young T and Hendricks L. SUCCEED Operational Research – Value of operational research. Ceres Hospital and District staff. Ceres, Western Cape. Date: 23 September 2016.
- Hendricks L. SUCCEED Operational Research - Qualitative data analysis. Eastern Cape Department of Health and Walter Sisulu University delegates. East London, Eastern Cape. Date: 6-7 October 2016
- Naude CE. Dietary patterns, health outcomes and food systems: making the link for preparing food-based dietary guidelines. United Nations Food and Agricultural Organization Technical Consultation on the preparation of National Food Based Dietary Guidelines and Nutrition Education for Promotion of Healthy Diets, Johannesburg, 9-12 May 2016
- Naude CE (co-facilitator). Applying systematic reviews in evidence-informed public health nutrition guideline development. World Public Health Nutrition Association Congress, 31 August 2016, Cape Town
- Naude CE, Rohwer A. Evidence-informed nutrition: getting the evidence right. National Nutrition Congress, 5 Sept 2016, Cape Town
- Naude CE (co-facilitator). Helping Ministers and senior officials access and communicate Cochrane evidence. Cochrane Colloquium 2016, Seoul, 23-28 October 2016

Biostats: Data Management and exploratory data analysis using STATA		
Date	Topic	Facilitator
8 March 2016	Data Management	Tonya Esterhuizen
8 March 2016	Data Capture and coding	Tawanda Chivese
8 March 2016	Introduction to Stata	Michael McCaul
8 March 2016	Manipulating data in Stata (1)	Maxwell Chirewa
9 March 2016	Manipulating data in Stata (2)	Tonya Esterhuizen
9 March 2016	Exploratory data analysis (1)	Moleen Zunza
9 March 2016	Exploratory data analysis (2)	Michael McCaul

Biostats: Data analysis using STATA		
Date	Topic	Facilitator
26 July 2016	Introduction to STATA software	Michael McCaul
26 July 2016	Descriptive analysis and graphing of categorical and continuous data	Alfred Musekiwa
26 July 2016	Estimation and hypothesis testing	Tonya Esterhuizen
26 July 2016	Categorical data and 2 by 2 tables	Alfred Musekiwa
27 July 2016	Parametric tests for continuous data – t-tests and ANOVA	Tonya Esterhuizen
27 July 2016	Non parametric tests for continuous data – Mann Whitney, Wilcoxon rank sum, and Kruskal-Wallis	Tawanda Chivese
27 July 2016	Correlation and simple linear regression	Moleen Zunza

ANNEX 5: Staff



Prof Taryn Young

Taryn, MBChB, FCPHM, MMED, PHD. Director of the Centre for Evidence-based Health Care and consultant to the Cochrane South Africa, is an epidemiologist with a specialist degree in public health and considerable expertise in the field of evidence-based health care. She coordinates international collaborative projects which facilitate the use of best evidence in healthcare policy and practice, and has conducted many systematic reviews and provided intensive training, mentorship and editorial support to authors of Cochrane and other systematic reviews. Integral to her work is the co-ordination and evaluation of training programmes for under- and postgraduate students in public health and epidemiology, evidence-based healthcare and research synthesis nationally and in the African region.



Prof Charles Shey Wiysonge

Charles was the Deputy Director of the CEBHC until late 2016. He now heads up Cochrane South Africa and still supports the work of the CEBHC through an extraordinary appointment. Charles obtained a PhD from the University of Cape Town, an MPhil from the University of Cambridge (UK) and an MD from the University of Yaoundé I (Cameroon), and is a Member of the Academy of Science of South Africa. Recently, his research work has focused on evidence synthesis for childhood immunisation and health system strengthening. Charles is a member of the Strategic Advisory Group of Experts on Immunisation; the African Advisory Committee on Health Research and Development; the Independent Review Committee of The Global Alliance for Vaccines and Immunisation; the Grading of Recommendations Assessment Development and Evaluation (GRADE) Working Group, and other international scientific advisory committees.



Dr Celeste Naude

Celeste is a registered dietician and senior researcher. She holds a master's degree in Nutrition (2007) and a PhD (Nutritional Sciences) (2012) from Stellenbosch University. Her roles include research, knowledge translation, project management and teaching and her primary interests are public health nutrition and evidence-informed decision-making. Celeste is a member of the technical author team for systematic reviews and evidence summaries, an investigator for primary research projects and is involved in African and international research networks via the ECHRC and Cochrane. She is currently involved in a number of activities promoting evidence-informed decision-making with provincial and national stakeholders. She serves on a number of international and national scientific and technical committees, is a peer-reviewer for national and international journals, and a supervisor and examiner for postgraduate students.



Dr Mweete Nglazi

Mweete joined the Centre of Evidence Based Health Care in December 2016 as a Researcher. She is involved in the SUCCEED and SCAPIR projects. Her current research interests are in HIV and TB, as well as non-communicable diseases. She obtained a BSc in Microbiology at the University of Zambia and MPH from the University of Cape Town. Her skills and expertise include operational research and quantitative research methodologies. Previously, she was a Senior Scientist at the MRC Burden of Disease Research Unit. Prior to this, she was a Senior Operational Research Fellow at the International Union against Tuberculosis and Lung Disease, and a Research Data Manager at the Desmond Tutu HIV Foundation, where she produced various first-authored publications.



Ms Anel Schoonees

Anel is a researcher with undergraduate training in Food Science (2006). She also holds a master's degree in Nutrition (2011) and a master's degree in Clinical Epidemiology (2012) from SU. Anel's roles at the CEBHC include research, teaching and knowledge translation. She is the author and co-author of a number of systematic reviews and other research, and has disseminated research findings at international and national conferences. She is also involved in peer-reviewing systematic reviews and examining postgraduate students. She teaches systematic reviews and EBHC to health care professionals, undergraduate and postgraduate students, and provides guidance to new systematic review authors. On the knowledge translation front she writes summaries of systematic reviews, edits Wikipedia to refer to systematic reviews and interacts with stakeholders.



Mr Tawanda Chivese

Tawanda is a researcher who graduated with a Masters in Clinical Epidemiology Degree from the Stellenbosch University in 2014. He also holds an honours Bachelor of Science Degree from the University of Zimbabwe. He joined the Centre for Evidence Based Health Care in November 2015 and helps with biostatistical consulting, research, and teaching. He is currently studying towards his PhD in Medicine (focussing on the prevention of type 2 diabetes after gestational diabetes) with the University Of Cape Town. He is interested in health systems strengthening, non-communicable disease epidemiology and prevention. He recently published his paper on Crohn's Disease phenotype and cigarette smoking. He has also co-authored a number of papers in peer reviewed international journals and presented research finding at International conferences.



Dr Eleanor Ochodo

Eleanor is a senior researcher and Wellcome Trust research fellow at the CEBHC. She qualified as a medical doctor from the University of Nairobi, Kenya (MBChB). She also holds a postgraduate certificate in Infectious Diseases from the University of Edinburgh (UK), an MSc in International Health from the Free University of Amsterdam (Vrije Universiteit) and a PhD in Clinical Epidemiology from the University of Amsterdam, The Netherlands. Her research revolves around evidence-based medicine with a focus on diagnostic tests and markers, specifically their accuracy, impact and how their results can be translated to policy and practice.



Dr Liesl Anne Nicol

Liesl is currently a part-time senior researcher. Her responsibilities at the Centre for Evidence-based Health Care include project management, research and knowledge translation. She obtained her PhD in Exercise Physiology at the University of Cape Town in 2003. She has experience in conducting and support of Cochrane Reviews, and facilitating the learning of evidence-based health care. Recent project include: Evidence to Inform South African TB policies: EVISAT Project (project manager); informing WHO guidelines around providing supplementary food to undernourished children; evidence for the effectiveness of nutritional supplementation to TB patients on active TB treatment; effectiveness of providing parenteral glutamine supplementation to critically ill patients.



Ms Anke Rohwer

Anke is a researcher at the CEBHC. She has a background in midwifery (BCur), has completed her Masters in Clinical Epidemiology in 2010 and is a registered PhD student at Stellenbosch University. As part of her PhD studies, she is leading a project on research integrity in low- and middle-income countries. Her other research activities include systematic reviews and research related to teaching evidence-based health care (EBHC). In addition to doing research, Anke is involved with teaching activities that include teaching EBHC principles to healthcare professionals at undergraduate, postgraduate and continuing medical education level, supervising Master's students and mentoring novice authors of systematic reviews. She currently acts as a methods advisor for the Cochrane Public Health Group, peer-reviews articles for international journals and has presented her work at national and international conferences.



Dr Charles Okwundu

Charles was trained a medical doctor at the University of Lagos, Nigeria, and completed a master's in Public Health at the University of Cape Town. He is currently working as a researcher. Charles has been involved with the Cochrane Collaboration since 2006 as a review author and has been involved in a number of Cochrane systematic reviews. His particular interests are in evidence-based health care and paediatrics. He is currently involved in a number of activities aimed at promoting the practice of EBHC within the African region and also increasing the involvement of Cochrane authors from the African region.



Prof Rhoderick Machekano

Rhoderick holds a PhD in Biostatistics and a MPH in Epidemiology and Biostatistics. He is currently the Head of the Biostatistics Unit where he leads the development of biostatistics capacity building at Stellenbosch FMHS. His duties include managing the Unit, teaching, biostatistical consulting, research collaboration, and mentoring of postgraduate students. He has worked in public health for over 20 years, focusing on designing and evaluating HIV/AIDS/STIs interventions in both developed and developing countries. Over the course of his professional career, he has acquired valuable skills in translating research into policy, exercising his ability to transform data into knowledge. He has published modestly in reputable scientific journals.



Mr Michael McCaul

Michael is a registered emergency care practitioner and is passionate about pre-hospital emergency care and research, having worked as an operational paramedic locally (Cape Town and Durban) and internationally. He is currently the vice-president of the Emergency Care Society of South Africa (ECSSA) and is actively involved in developing emergency care research in South Africa. Michael holds a BHS in Emergency Medical Care (DUT) and an MSc in Clinical Epidemiology at Stellenbosch University. He is currently undertaking his PhD in epidemiology focusing on guideline development methods in emergency care. He is currently working as a researcher at the Biostatistics unit, much of his work involves undergraduate and postgraduate teaching, biostatistics consultation, knowledge translation including guideline development and research.

ANNEX 5: Staff ...continued



Ms Lynn Hendricks

Lynn is a registered Research Psychologist who holds a BSc from Freed-Hardeman University, United States and a dual MA Research Psychology degree from the University of the Western Cape and Oslo University. She has experience in undergraduate and postgraduate research lecturing and supervision, policy writing, monitoring and evaluation, mixed methods primary research and data analysis. She has authored and co-authored papers in peer-reviewed journals, disseminated research findings at international and national congresses as well as symposiums, and workshops. Other activities include executive committee membership for the Division of Research and Methodology, Psychological Society of South Africa. Her responsibilities at the Centre for Evidence-based Health Care include project management and training facilitation to build operational research capacity.



Mr Maxwell Chirehwa

Maxwell has an honours degree in applied mathematics and an MSc in statistics (specialising in biostatistics) from Hasselt University, Belgium. He is registered with the Royal Statistical Society (RSS), UK as a graduate statistician. He currently provides statistical consulting services to students and staff in the faculty of medicine and health sciences. His main interest is on the application of nonlinear-mixed effects models to optimize treatment success and describe variability in drug exposure.



Ms Tonya Esterhuizen

Tonya has an honours degree in biochemistry and immunology and an MSc in Epidemiology from the London School of Hygiene and Tropical Medicine. She provides biostatistical consulting, participates in collaborative research, and teaches on both under- and postgraduate level. She works with local and international Cochrane Review authors and groups, assisting in the preparation of statistical methods in review protocols and meta-analysis of data. She is a statistical reviewer for the Cochrane Infectious Diseases group. Tonya has many collaborative publications in applied biostatistics and epidemiology, in various health disciplines.



Dr Janine Margarita R. Dizon

Janine, PhD, MSPT, PTRP, is from the Philippines and is a research fellow at CEBHC working on the South African Guidelines Evaluation (SAGE) project and is involved in teaching EBHC to medical, nursing and allied health students at Stellenbosch University. She is a physiotherapist by training and holds a doctoral degree in Health Sciences from the University of South Australia (President's Scholar). Janine's work is focused on developing and evaluating tailored EBHC teaching programs for health professionals in different countries (Philippines, Hong Kong, Australia and South Africa). Her work on EBHC has evolved into quality improvement in health care such as clinical guideline development, implementation, monitoring and evaluation in practice.



Dr Valentine Ndze

Valentine is a postdoc research fellow at the CEBHC. He has a background in clinical laboratory sciences and holds a PhD in Infectious diseases from the University of Yaoundé I, Cameroon. His previous research has been on the epidemiology, diagnosis, and genomics of viruses (rotavirus, bocavirus, measles, rubella, hepatitis B & C) and bacteria in humans and animals. He has a special interest in pediatric vaccine preventable infectious diseases, evidence base health care and vaccinology. He is presently involve in various activities including, conducting and supporting methodologically sound systematic reviews on priority topics relevant to the Sustainable Development Goals.



Dr Anelisa Jaca

Anelisa completed a Doctoral degree in Anatomical Pathology at the University of Cape Town in August 2016. Her field of study encompassed investigating the role of biological pathways in the development and progression of colorectal cancer. She is currently registered as a Post-Doctoral Fellow at the Centre for Evidence-Based Health Care at Stellenbosch University. Upon receiving the opportunity to further her career in this field, she undertook a short course in Fundamentals of Epidemiology. Having developed a strong interest in this area of expertise, she now aspires to pursue MSc Clinical Epidemiology. Her interest and passion lie in applying Evidence-Based Medicine (EBM) and writing Systematic Reviews of interventions for health threatening diseases.



Dr Moleen Zunza

Moleen qualified as a nurse in 2004 at the University of Zimbabwe and received a master's degree in Clinical Epidemiology (2011), honours in Applied Statistics (2016) and PhD (2016), at Stellenbosch University. Her main interests are in Maternal and Child Health and HIV/AIDS research and Biostatistics. Her work involves conducting primary and secondary research, teaching, statistical consultations and supervision of postgraduate students.



Dr Gillian Balbir Singh

Gillian holds a medical degree (MbChB) from the University of Auckland, New Zealand and is a trained nephrologist and Fellow of the Royal Australasian College of Physicians (FRACP). She has a Masters in Public Health from the University of Auckland. She has recently been on a research fellowship at Ulsan University Hospital, South Korea focusing on data analysis and interpretation in the field of interventional cardiology. She currently works for the South African Renal Registry and is a nephrologist at Tygerberg Hospital. She works part-time at the CEBHC and is currently working on a scoping review on the prevalence of chronic kidney disease in Africa. She is also involved in undergraduate clinical medicine and evidence based medicine teaching.



Dr Ingrid Eshun-Wilson

Ingrid is a clinician and epidemiologist. She has several years of clinical experience working with people living with HIV in low and middle income countries in both public health and clinical research settings. She completed a Masters in Epidemiology in 2009 and primarily works as an editor with Cochrane Infectious Diseases Group. She collaborates with local and international authors with the focus of producing relevant evidence synthesis in the HIV field. She is also involved in teaching on the Masters of Clinical Epidemiology program at Stellenbosch University.



Mrs Traci Naidoo

Traci is the project manager at the Centre for Evidence-based Health Care. She is responsible for coordinating the day-to-day running of the Centre as well as organising various workshops and seminars. She also does the marketing of the Centre, including updating the Facebook page, Twitter feed and website.



Ms Liesel Esterhuizen

Liesel is the project manager for the Biostatistics Unit. She is responsible for the day-to-day running of the Biostatistics Unit and also for all the logistics regarding the Biostatistics Unit and their activities.



Mrs Esther Rodrigues

Esther is an Administrative Officer for CEBHC and is responsible for the daily admin duties in the department as well as the logistics of workshops and travel of the team.

Extraordinary staff appointments

The work of the CEBHC is also supported by the following extraordinary staff:

- Prof Mike Clarke, Northern Ireland Network for Trials Methodology Research, Queen's University Belfast, Belfast, Northern Ireland
- Prof Paul Garner, Liverpool School of Tropical Medicine, United Kingdom
- Mr Alfred Musekiwa, South Africa
- Prof Marek Smieja, McMaster University, Canada
- Prof Lehana Thabane, McMaster University, Canada
- Prof Pat Yudin, Oxford University, United Kingdom



The achievements of the CEBHC are
made possible by the excellent team.



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