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
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Foreword by the Chairperson of the CEBHC Governing Board: Prof Usuf Chikte

It is a great pleasure to provide the foreword to the Centre for Evidence based Health Care (CEBHC) Annual Report. This year, the CEBHC exceeded expectations in terms of its outputs as measured against the strategic plan. Under the able and inspiring leadership of Taryn Young, team CEBHC is closer in the process of becoming a distinguished centre for evidence-informed health care in Africa and the world. The World Health Organisation recently conferred the status of a Regional Training Centre in Implementation Research.

The achievements of the CEBHC in research, translation of research evidence to policy and practice, and teaching are the fruits of diligent work by an extraordinary team. The impact of this is acknowledged in the province and reverberates nationally and continentally. One of the highlights for this year has been the prestigious training fellowship awarded by Wellcome Trust to Dr Eleanor Ochodo. I would like to take the opportunity to applaud the efforts of a dynamic team at the CEBHC. This annual report showcases the rich academic harvest the CEBHC has yielded through its dedication and commitment. The publications soared yet again.

We are grateful for the support of the Faculty of Medicine and Health Sciences, funders, local and international collaborators and partners, among others, in the execution of our tasks. The sound judgement through investment in the CEBHC has yielded dividends far beyond our expectations.

Professor Usuf Chikte
Chair Governing Board
Centre for Evidence-based Health Care
Message from the Director and Deputy-Director of the CEBHC: Profs Taryn Young and Charles Wiysonge

Through the CEBHC’s research, knowledge translation, and training activities our team shares the ideals of excellence, integrity, credibility, relevance and collaboration. These values determine our priorities and govern the way we work. 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. The team, who lives out the values of the CEBHC in everything they do, has worked hard at increasing, and promoting the use of, research outputs and has made great progress with the implementation of integrated teaching and learning of evidence-informed decision making.

The task of maintaining the CEBHC as a global centre of excellence in evidence-informed health care is huge. However, we are confident that the CEBHC will consolidate current achievements and make further progress. Our confidence lies in our team work, in the support from our institution, our partnerships and in our values – excellence, integrity, credibility, relevance and collaboration. The CEBHC has a good story to tell, but a better story is yet to come.

We wish to express our gratitude for the support from the head of Department of Interdisciplinary Health Sciences, the Faculty of Medicine and Health Sciences, the CEBHC Governing Board, and our funders and collaborators. Our special thanks go to our team who work tirelessly towards the realisation of the CEBHC goals.

Profs Taryn Young and Charles Wiysonge
Director and Deputy-Director
Centre for Evidence-based 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 on 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) with various high profile publications in high impact journals. Centre staff supervise and provide methodological mentorship and support to 33 postgraduate students. The CEBHC hosts three post-doctoral students and has secured funding for a fourth post-doctoral fellowship. 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). The foundation of the Consortium is a collaborative effort between five international partners based in Africa, East-Asia, China, Norway and the UK. Together partners work towards preparing and updating Cochrane Reviews on the effects of health care interventions relevant to low- and middle-income countries; and identifying approaches to ensure dissemination and use of the results of systematic reviews in decision making. This Consortium has performed well in generating products that have relevance to the health sector in LMICs. Since 2011, 30 of the Consortium’s Cochrane Reviews have been used to inform the development of global guidelines. 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.

The Stellenbosch University (SU) BEME International Collaboration Centre (BICC) was established in March 2014 and is jointly coordinated by the CEBHC and the Centre for Health Professions Education (CHPE). The lessons learnt and experience of the CEBHC in conducting research synthesis in health care are now being transferred to inform medical education systematic reviews. The Best Evidence Medical Education (BEME) collaboration is an international group of individuals, universities and professional organisations committed to the development of evidence informed education in the medical and health professions. The SU BICC’s involvement with BEME relates to contributing to the identification and conceptualisation of relevant topics for new systematic reviews; promoting the use of
systematic reviews to inform medical and health professions education; contributing to the editorial role and function of BEME review groups; providing mentorship and support for conducting new BEME reviews; and seeking funds to support the functions of the BICC and for conducting new systematic reviews. In 2015 we embarked on a project to identify, and describe, existing BEME systematic reviews and to assess their relevance to the African region. It is envisaged that this work will inform questions for new systematic reviews, as well as future initiatives to promote the use of BEME reviews. We also hosted a local and international workshop on accessing, assessing and interpreting BEME reviews. BiCC members actively participated in the 2015 BEME meetings at AMEE 2015.

Cochrane www.cochrane.org is a global independent network of researchers, professionals, patients, carers, and people interested in health. The focus is on conducting systematic reviews to inform healthcare decision making. The CEBHC conducts various Cochrane Reviews and in doing so works with many Cochrane review groups. The process starts with defining clear questions and then developing and publishing the protocol for the Cochrane Review. The review team then conducts the review and publishes the final peer reviewed product in the Cochrane Database for Systematic Reviews in the Cochrane Library (impact factor 6). In 2015 the CEBHC published 12 reviews in the Cochrane Library. In addition to conducting Cochrane Reviews, CEBHC staff also serve as peer reviewers, and are appointed as Cochrane editors or associate editors (Annex 2).

**CEBHC conducts Cochrane reviews with the following Cochrane review groups**

- Developmental, Psychosocial and Learning Problems Group
- Effective Practice and Organization of Care
- Hypertension
- Infectious Diseases
- Injuries
- Neonatal
- Neuromuscular
- Pregnancy and Childbirth
- Sexually Transmitted Infectious

Over the past 3 years we embarked on research on how the teaching and learning of EBHC can best be done in training of medical students to enhance student EBHC knowledge, attitude and skills. To start with, we took stock of existing systematic reviews assessing the effects of teaching EBHC. This overview identified 16 reviews covering undergraduate, postgraduate and continuing professional development. It showed that clinically integrated multifaceted strategies with assessment were more effective than single interventions or no interventions for enhancing knowledge, attitude and skills. To learn more about the implementation of clinically integrated EBHC teaching and learning we then conducted interviews with programme coordinators from around the world. As an overarching approach, there was consensus that learning of EBHC should start in the pre-clinical years through the use of real clinical scenarios and be consolidated with application to real patient settings and assessment within the clinical years. The EBHC curriculum content should cover the full spectrum of EBHC and not focus on just specific aspects such as critical appraisal or...
searching. By far the most common challenges were lack of space in the clinical setting, EBHC misconceptions, resistance of staff and lack of confidence of tutors, time, and negative role modelling. Critical success factors for programme implementation were pragmatism and nimbleness in responding to opportunities for engagement and including EBHC learning into the curriculum, patience, and a critical mass of the right teachers who have EBHC knowledge, attitudes and skills and are confident in facilitating learning. In addition, role modelling within the clinical setting and the overall institutional context were found to be important for success.

The CEBHC hosted a dedicated research day in 2015 to showcase and share research findings. The focus was on sharing methods for conducting rigorous research and effective knowledge translation.

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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 with different divisions within the Department of Interdisciplinary Health Sciences (DiHS) and other departments within the FMHS at Stellenbosch University. Within the Western Cape Province we partner with various policymakers. The Centre links with the Heart and Stroke Foundation (HSF), 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, and also links to the Collaboration for Evidence-based Health in Africa (CEBHA). Internationally, the Centre collaborates with the EHCRC (funded by DFID) as well as the Christian Medical College Vellore (India), Chongqing Medical University (China), Liverpool School of Tropical Medicine (UK), the GREAT Network, the Agence de Médecine Préventive (AMP), 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 the Global Alliance for Vaccines and Immunisation (GAVI), various Cochrane Review groups and links actively with the World Health Organisation (WHO) at national, regional and international levels.
In a specific tailored strategy, the Policy BUDDIES project http://www.cebhc.co.za/policy-buddies/, funded by the Alliance for Health Policy and Systems Research, WHO, draws on partners’ experience in working in knowledge translation. The project, conducted in South Africa and Cameroon, commenced with a situational analysis interviews to identify sub-national policy-makers’ capacity and enablers and barriers to demanding evidence during policy-making. The project then focused on strengthening relationships, engagement and networks, by linking sub-national policymakers and researchers in order to enhance their interaction and dialogue, create opportunities to learn more about each other’s worlds and identify areas of work related to evidence-informed decision making. An external evaluation, conducted in 2015, highlighted key lessons learnt (box).

Key lessons learned from Policy BUDDIES implementation

- Relationships open the door to mutual respect and learning. Researcher buddies benefited in learning about the policy-making world
- Individual champions must be located in a network
- Evidence-informed health policy (EIPH) faces opportunities – and barriers – in sub-national contexts
- Evidence plays an objective and neutralizing role beside powerful experts
- Organizational-level systems and processes could be improved to support EIPH
- Progress cannot be sustained without dedicated time and resources
- Policy BUDDIES is diffusing within South Africa, but its transfer to other countries will require consideration
The CEBHC is a collaborating partner of Project SAGE (South African Guidelines Excellence) 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. In 2015 key activities included conducting research to understand guideline development processes in South Africa, and taking stock of existing clinical practice guideline capacity development initiatives. The latter informed the development of dedicated capacity development packages which was implemented in workshops. A series of editorials in the South African Medical Journal on clinical guideline matters are co-authored by SAGE collaborators. Project SAGE is funded by a three-year (2014-2016) Flagship Grant from the South African Medical Research Council (SAMRC).

In August 2015 CEBHC staff participated in an international exploratory meeting in Cape Town to establish a Cochrane Nutrition Field (CNF). The meeting explored the level of support for establishing a CNF; discussed and further developed a draft proposal, and explored potential contributors, partners and funding sources. A CNF will support the production of high-quality reviews; implement knowledge translation activities to promote the use of evidence from Cochrane and other high-quality nutrition reviews among relevant stakeholders, as well as training stakeholders in the use of systematic reviews, and retrieval, summary and assessment of evidence, and contribute to strengthening the methodology for conducting systematic reviews in the field of nutrition addressing all forms of malnutrition.

The CEBHC is part of the GREAT Network, http://greatnetworkglobal.org/, a World Health Organization (WHO)-affiliated collaboration funded by the Canadian Institutes of Health Research, which has designated collaborating centres in South Africa (the CEBHC), Kosovo, Thailand and Argentina. The network provides an infrastructure to support LMICs to adapt, implement, evaluate, and sustain the use of evidence-based WHO guidelines on maternal health. The network’s activities are guided by the Knowledge-to-Action process model and include provision of coaching, technical assistance, resource allocation (funding opportunities), and capacity-building workshops and trainings. While the GREAT Network currently focuses on maternal health, the unique, integrated knowledge translation (KT) process used is replicable in other settings and with other priority areas and guideline topics. Developing multi-stakeholder, cross-country collaborations is an opportunity to leverage existing tools and implementation expertise to provide low and middle-income country partners with in-kind (e.g., capacity-building, coaching) and financial resources (e.g., seed grant funding) to operationalize implementation initiatives to improve the use of evidence products such as guidelines. The GREAT Network has supported guideline implementation for over three years, funded five KT projects through seed grants (China, Ethiopia, Italy, Sri Lanka, and Uganda), completed planning workshops in five countries (Ethiopia, Kosovo, Myanmar, Sri Lanka, and Uganda), and conducted a two-year country-specific follow-up evaluation in one country (Kosovo). We believe the unique KT approach, global structure, success stories, and lessons learned are transferrable to other health systems research and implementation work.

The CEBHC has along with SU’s Department of Sports Science, partnered with the provincial government, in a health promotion initiative called Western Cape on Wellness (WoW), which is aimed at addressing the rising problem of obesity. The pilot of the initiative was launched in Cape Town on 31 March 2015 and CEBHC is involved both technically and with the implementation and the research component of WoW. The initiative consists of a range of interventions directed at promoting and enabling physical activity and healthy eating championed by teams from 13 Western Cape provincial government departments, 10 communities and 10 schools. Besides CEBHC, other partners in this initiative include the universities of Cape Town and the Western Cape, as well as the Biokinetics Association South Africa, the Heart and Stroke Foundation and a number of other private and parastatal companies.

CEBHC regularly engages with the media, which is a key stakeholder in knowledge translation activities. This engagement in 2015 has included various topics predominantly related to childhood immunisation, childhood nutrition and obesity. Media engagement is aimed at communicating best evidence and promoting its uptake in decision making, and in 2015 included print and digital media, as well as radio and television interviews.
Training and Support

Promoting and enhancing the teaching and learning of EBHC is core to the work of the CEBHC. During 2015, various sessions/workshops were offered at undergraduate, postgraduate and continuing professional development level (Annex 3).

Within the Stellenbosch University Rural Medical Education Partnership Initiative the CEBHC provides leadership for the EBHC subproject which aims to enhance teaching of EBHC at under- and postgraduate levels, as well as to health care professionals working in the field. To inform undergraduate level initiatives we conducted a comprehensive situational analysis to take stock of what was covered in the undergraduate curricula offered by the FMHS. These findings informed enhanced offering, which was approved by the undergraduate medical programme committee in 2013 and 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.

Enhancing and expanding the programmatic offering of the MSc in Clinical Epidemiology. The MSc in Clinical Epidemiology (www.sun.ac.za/clinepi), registered within the Division of Community Health, 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. From 2008-2015, 163 students have enrolled in the programme. Students come from various health care disciplines and various countries in the African region. Eighty (80) students graduated and 32 students published their research.
in peer reviewed journals including high impact factor journals such as the International Journal of Epidemiology, the Cochrane Database of Systematic Reviews and PLOS One. 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.

The CEBHC links with Cochrane South Africa to promote the use of Cochrane reviews and to support training and mentorship of Cochrane review authors. Cochrane South Africa, part of the international Cochrane collaboration, is one of 14 Cochrane Centres worldwide. CEBHC staff serve as mentors for novice Cochrane authors. In November 2015 we participated in a leadership development event in Cape Town which brought together senior Cochrane authors in the region and provided an opportunity to plan together to advance Cochrane in the region, and for participants to acquire or update their skills in facilitation, knowledge transfer, leadership and coaching, communications and fundraising.

In 2015, a course based on the successful ECRU Research Methods Course was offered at Stellenbosch University. Thirty participants from various African countries participated. Participants were equipped with knowledge, skills and mentorship to: Plan, conduct, analyze and publish a randomised clinical trial, follow ‘Good Clinical Practice’ guidelines; conduct a systematic review of randomised trials for publication in the Cochrane Library; and use Review Manager, Epi-info, Excel and WHO Reproductive Health Library software. We acknowledge funding received from the Regional Research Committee for the African and Eastern Mediterranean Regions, World Health Organisation.

▼ CEBHC staff at a leadership development event, Cape Town
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 Centre is managed by a Director, her deputy and Management Committee, while oversight is provided by a Governing Board (Annex 4). 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 provide 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).

Policy BUDDIES – Building demand for evidence in decision making through interaction and enhancing skills: The CEBHC provides leadership and project management for the Policy BUDDIES collaborative project. The CEBHC works with the Cochrane South Africa, the Health Systems and Services Research Unit at Stellenbosch University, the Centre for the Development of Best Practices in Health (Cameroon) and the Liverpool School of Tropical Medicine (UK). The project is funded by the World Health Organisation.

R3 for CDIA - Relevant and robust systematic reviews to support the chronic diseases initiatives in Africa: Cochrane South Africa, South African Medical Research Council and the CEBHC were awarded joint funding from the Cochrane Collaboration’s Global Evidence Synthesis Initiative (GESI) for this project through which these institutions will support CDIA by delivering systematic reviews of the effects of interventions that will help inform policies and strategies aimed at addressing the high burden of non-communicable diseases in Africa.

SURMEPI: Within the SURMEPI project the CEBHC leads the EBHC activities at under-, postgraduate and continuing professional development levels.

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.

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 5). Staff serve in various capacities on committees (Annex 2). All staff have performance agreements and personal development plans in place. Staff continue to be active in leading and contributing to funding proposals (Annex 6).
ANNEX 1: Research Outputs 2015

Publications in peer-reviewed journals


34. Lewis JM, Macpherson P, Adams ER, Ochodo E, Sands A, Taegtmeyer, M. Field accuracy of fourth-generation rapid diagnostic tests for acute HIV-1: a systematic review. AIDS. Volume 29(18), 28 November 2015, p 2465–2471


39. Adebayo EF, Uthman QA, Wiysonge CS, Stern EA, Lamont KT, Ataguba JE. A systematic review of factors that affect uptake of community-based health insurance in low-income and middle-income countries. BMC Health Services Research
Published Protocols


Scientific letters, editorials, columns


doctors to non-doctors for initiation and maintenance of antiretroviral therapy. South African Medical Journal, 105(8), 626. doi:10.7196/SAMJnew.8271 (editorial)


International Presentations


8. Kredo T, Durao S and Young T. Cochrane Training - facilitation skills: Creating a positive learning climate for effective learning. Cochrane Colloquium, Vienna, Austria, 2-6 October 2015 (workshop)


11. Odendaal W, Daniels K, Lewin S, Kredo T, Young T. Using priority setting to enhance the policy relevance of systematic reviews: a case study from the South African Initiative for Systematic Reviews on Health Policies and Systems. Cochrane Colloquium, Vienna, Austria, 2-6 October 2015 (oral presentation)

12. Rohwer AC, Motaze V, Rehfuess E, Young T. Informing Cochrane learning strategies: effectiveness of e-learning strategies to increase evidence-based health care (EBHC) competencies. Cochrane Colloquium, Vienna, Austria, 2-6 October 2015 (poster presentation)

13. Durao S, Oliver J, Young T, Kredo T. Providing time out through dedicated fellowships: strategy to improve Cochrane author support towards review completion. Cochrane Colloquium, Vienna, Austria, 2-6 October 2015 (poster presentation)


15. Young T, Rohwer A, v Schalkwyk S, Volmink J, Clarke M. Experiences and lessons learnt from the implementation of clinically integrated teaching and learning of evidence-based health care. AMEE, Glasgow, Scotland, 5-9 September 2015 (oral presentation)


17. Pantoja T, Opioy N, Ciaopponi A, Herrera CA, Lewin S, Oxman AD, Paulsen E, Rada G, Wiysonge CS. Strategies for improving health systems in low-income countries: lessons learnt from four overviews of systematic reviews of health systems interventions. 23rd Cochrane Colloquium. Vienna, Austria. 3-7 October 2015 (rapid oral presentation)


23. Schoonees A, van Schalkwyk S, Young T. Lay of the land of health professions education systematic reviews: scope and methodological quality of BEME systematic reviews. 7th International Conference for EBHC Teachers and Developers. Taormina, Italy, 30 October 2015 (oral presentation).

24. Orton K, Rohwer AC. Perceptions and self-perceived knowledge of evidence-based health care amongst registered nurses and midwives in rural areas of the Western Cape. 7th International Conference for EBHC Teachers and Developers, Taormina, Italy, 28-31 October 2015 (poster presentation).


National Presentations


4. Wiysonge CS. Cochrane South Africa. SAMRC Intra- and Extramural Unit Directors’ Meeting, Cape Town, South Africa., 8-9 October 2015 (oral presentation).

5. Naude CE, Schoonees A, Young T, Senekal M, Garner P, Volmink J. Lessons learnt from a planned, targeted dissemination of a systematic review on a controversial topic in the field of nutrition. CEBHC Research Day, Faculty of Medicine and Health Sciences, Stellenbosch University, 29 July 2015 (oral presentation)

6. Naude CE. Profits versus Health: the role of `big food` in shaping the environments that influence our diets. Continuing Nutrition Education Update, Stellenbosch University, 24 June 2015 (oral presentation)

7. Zunza M. Cotton M, Esser M. Infant feeding choices and effects on infants growth and morbidity in PMTCT programs transitioning to “Option B*” in Western Cape, South Africa. 6th FISSA Congress, Drakensberg, South Africa, 6-8 November 2015 (oral presentation).


Postgraduate student supervision

1. **Jeremy Stockhall**, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: South African Physiotherapists’ Confidence in Evidence-Based Practice: a Cross Sectional Study. (Supervisor: **Taryn Young**)

2. **Nicholas Mangeya**, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: Detection of human immunodeficiency virus (HIV) type-1 antibodies in saliva, as an alternative method of HIV diagnosis: a diagnostic accuracy study and a preliminary assessment for home-based HIV testing in South Africa. (Supervisor: **Tonya Esterhuizen**)

3. **Ogunjale Adeniyi**, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: Rilpivirine versus Efavirenz as initial therapy in treatment-naive, HIV-1-infected patients. A systematic review. (Supervisor: **Charles Okwundu**)

4. **Casper Tarumbuwa**, 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**)

5. **Benjamin Kagina**, Postdoc, University of Cape Town - ongoing. Topic: Strengthening immunisation programmes in Africa through evidence-based medicine. (Supervisor: **Charles Wysonge**)

6. **Charles Okwundu**, PhD, Stellenbosch University - ongoing. Topic: Screening for risk of severe hyperbilirubinemia in South African newborns. (Supervisor: **Charles Wysonge**)

7. **Olatunbosun Olawale**, MSc, Stellenbosch University - ongoing. Topic: Knowledge, attitudes and practices of diabetics in Pretoria, South Africa regarding seasonal influenza and influenza vaccination. (Supervisor: **Charles Wysonge**)

8. **Shingai Machingaidze**, PhD, University of Munich - ongoing. Topic: Reaching the unvaccinated and under-vaccinated children of Africa. (Supervisor: **Charles Wysonge**)

9. **Leila Abdullahi**, PhD, Stellenbosch University - ongoing. Topic: Adolescent immunisation in Africa in the decade of vaccines. (Supervisor: **Charles Wysonge**)

10. **Arthemon Ngweneza**, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: The impact of mass media interventions on immunisation coverage: a systematic review (Supervisor: **Charles Wysonge**)


12. **Judy Gatei**, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Barriers and facilitators to exclusive breastfeeding practices among HIV infected women and their uninfected infants in South Africa and Nigeria. (Co-supervisor: **Moleen Zunza**)


14. **Kuhula 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**)

15. **Adedapo Awotibe**, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Low-Level Laser Therapy and Exercise for Patients with Shoulder Disorders in Physiotherapy Practice (Supervisor: **Taryn Young**)

16. **Ley Muyaya**, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Predictors of Mortality during Tuberculosis Treatment in TB-HIV co-infected Patients in Botswana: Differences between Subjects Naive to and previously started on HAART (Supervisor: **Taryn Young**)

17. **Esperance Manwana**, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Epidemiology of orthopedic injuries in Botswana: Analysis of inpatient data at Princess Marina Hospital (Supervisor: **Taryn Young**)

18. **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**)

19. **Pierre Smit**, MPhil Emergency Medicine, University of Cape Town – ongoing. Topic: Rapid review of ketamine as pre-hospital induction agent for head injury patients (Supervisor: **Michael McCaul**)

20. **Itai Magodoro**, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: A cross-sectional, facility based study of comorbid non-communicable diseases among adults living with HIV infection in Zimbabwe. (Supervisor: **Tonya Esterhuizen**
21. Brian Moyo, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Prevalence of unsuppressed viraemia in HIV positive female sex workers on the daily single dose TDF/3TC/EFV tablet for 6 months: PSI-Zimbabwe sex worker cohort (Supervisor: Tonya Esterhuizen)

22. Taiwo Sogunle, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: CHRONIC DISEASE AND COMPLEMENTARY AND ALTERNATIVE MEDICINE IN ADULTS ATTENDING A PRIMARY CARE CLINIC IN WESTERN NIGERIA. (Supervisor: Tonya Esterhuizen)

23. Dumisani Majombozi, MBChB-5, Stellenbosch University: Student elective in EBHC (Supervisor: Charles Wiysonge).

24. Lungeni A. Lukusa, MSc Clinical Epidemiology, Stellenbosch University – ongoing. Topic: Systematic review of the effects of interventions to inform or educate caregivers about childhood vaccination in low and middle-income countries (Supervisor: Charles Wiysonge).

25. Martel Chachou, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: Effectiveness of Electronic and postal reminders for improving immunisation coverage in children - systematic review (Supervisor: Charles Wiysonge).

26. Olatunbosun Olawale, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: Knowledge, attitudes and practices of diabetics in Pretoria, South Africa regarding seasonal influenza and influenza vaccination (Supervisor: Charles Wiysonge).

27. Arlette Mouako Leufak, MSc Clinical Epidemiology, Stellenbosch University - ongoing. Topic: Peer reviewed research publications in South Africa for the last 30 years (Supervisor: Charles Wiysonge).


29. Villyen Motaze, PhD, Stellenbosch University - ongoing. Topic: Disease burden and cost of congenital rubella syndrome in South Africa. (Supervisor: Charles Wiysonge).

30. Chinwe Iwu, PhD, Stellenbosch University - ongoing. (Open to change): Immunisation supply chain in South Africa. (Supervisor: Charles Wiysonge).


32. Abdou Adamu, PhD, Stellenbosch University - ongoing. Topic (open to change): Bacterial infections and vaccination in sickle cell disease (Supervisor: Charles Wiysonge).

33. Valantine Ndze, Postdoc, Stellenbosch University - ongoing. Topic: Overview of systematic reviews on interventions for improving vaccination coverage (Supervisor: Charles Wiysonge).

Supporting graduates to publish their research projects


3. Eunice Turawa, MSc Clinical Epidemiology, Stellenbosch University – Graduated 2014. Interventions for preventing and treating postpartum constipation. (Supervisors: Alfred Musekiwa and Anke Rohwer).
ANNEX 2: Intellectual Input

Taryn Young
1. Member, Cochrane author forum, 2013 – ongoing
3. Member, Scientific committee, 7th International Conference for EBHC Teachers and Developers (2015)
4. Member, International Advisory Board, 23rd Cochrane Colloquium (2015)
5. Associate Editor Systematic reviews
7. Chair of the Masters in Clinical Epidemiology programme, selection and bursary committees 2008 – ongoing
8. Member of EHCRC Executive Committee, 2011 – ongoing
10. Invited member of the Chronic Disease Initiative for Africa, April 2014 – ongoing

Charles Wiysonge
1. Associate Editor: BMC Health Services Research; 2014 – ongoing.
11. Peer reviewer, Social Science & Medicine, June 2015.
13. Member, PhD Evaluation Committee, Stellenbosch University. July – August 2015

WHO Global; 2015 – ongoing.
21. Member, Scientific and Organising Committee, 9th International Conference on Typhoid Fever and Other Invasive Salmonelloses, April 2014 to May 2015

Celeste Naude
1. South African Epidemiology Association (SACEA) executive committee member, 2013 – ongoing
4. Invited member of the Chronic Disease Initiative for Africa, April 2014 – ongoing
5. Member of the Cochrane Fields Executive Committee, 2015 – ongoing
6. Associate Editor, Cochrane Effective Practice and Organisation of Care Group, 2015 – ongoing
7. Member of the Ministerial Committee on Mortality and Morbidity in Children (CoMMC), National Department of Health; Directorate: Child & Youth Health; 2015 – ongoing
8. PRICELESS SA (Priority Cost Effective Lessons for System Strengthening South Africa) initiative, Wits University School of Public Health: Sugar-sweetened beverages in South Africa, March 2015
9. Nutrition Directorate, National Department of Health: Evidence on options for policies and actions to address obesity. February 2015; Implementation framework for national obesity strategy, July 2015; Evidence on diet for preventing obesity and diet for treating obesity, August 2015


17. Member of the Workgroup for the Revised Food-Based Dietary Guidelines (FBDG) for South Africa, National Department of Health; Directorate: Nutrition; 2011 – 2014

Anke Rohwer
1. Peer reviewer, Systematic Reviews (August 2015)

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

Anel Schoonees

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

Michael McCaul
1. Vice-president, Emergency Care Society of South Africa (ECSSA) 2014 – ongoing

2. Editor, Sanguine, Professional Society magazine of ECSSA 2014 – ongoing

3. Executive Committee Member of the ECSSA 2014 – ongoing

4. ECSSA 2016 Conference Advisory Board member 2016

5. Cape Peninsula University of Technology (CPUT) Department of Emergency Medical Sciences Advisory Committee member 2015 – ongoing

6. Emergency Medicine Departmental Research Committee member (UCT and Stellenbosch), 2015 – ongoing

ANNEX 3: Teaching Sessions/Lectures/Workshops

Undergraduate

MB,ChB (SU)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sessions</th>
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</table>
| 1    | • Principles of clinical epidemiology and value of research in health care  
• Principles of EBHC and Phrasing research questions  
• Approach to searching the literature  
• Overview of different types of studies  
• Bias, error and confounding  
• Studies about risk factors: Case-control studies  
• Studies about diagnostic accuracy  
• Studies about effects of interventions: RCT  
• Evidence-informed decision making and role of systematic reviews for choice of drug treatments  
• Descriptive statistics  
• Measures of occurrence  
• Diagnostic accuracy  
• Measures of association  
• Measures of effect  
• Confidence intervals |
| 2    | • Diagnostic test accuracy |
| Middle phase | • Reading a paper on risk factor |
| 5    | • Principles and application of EBM  
• Finding the Evidence  
• Critical appraisal of systematic reviews |
| Late phase | • Reading a systematic review on treatment |
| 6    | Lecture to: Student interns at RCS  
• Formulating clear questions  
• Finding the evidence: How to search electronic databases  
• How to read a paper about diagnostic tests  
• How to read a paper on therapy (RCT)  
• How to read a systematic review of a risk factor question  
• EBHC project presentations |

Dietetics (SU)  
Naude CE. Nutrigenomics module (part of Therapeutic Nutrition 378).  
Lecture to: 3rd year undergraduate; BSc Dietetics students. Date: 23-24 October 2014
Postgraduate

MSc in Clinical Epidemiology (SU)

MSc in Clinical Epidemiology: Co-conveners of modules
- Fundamentals of Epidemiology (Taryn Young, Mark Engel)
- Systematic Reviews and Meta-Analysis (Taryn Young, Anel Schoonees)
- Diagnosis and Screening (Charles Okwundu, Megan Rensburg)
- Biostatistics I (Tonya Esterhuizen)
- Biostatistics II (Tonya Esterhuizen)
- Research Proposal Writing and Grantmanship (Tonya Esterhuizen)
- Teaching EBHC (Taryn Young, Susan van Schalkwyk)

MSc in Clinical Epidemiology: Teaching assistants of modules
- Biostats I & II – Moleen Zunza
- Systematic Reviews – Michael McCaul
- Randomised controlled trials – Michael McCaul
- Clinical practice guidelines – Michael McCaul

MSc in Clinical Epidemiology: Teaching sessions offered

<table>
<thead>
<tr>
<th>Module</th>
<th>Session</th>
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<tbody>
<tr>
<td><strong>Biostatistics</strong></td>
<td>• Esterhuizen T. Lecture: Introduction and describing data. Date: 3 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Exercise: Describing data. Date: 3 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T and Zunza M. Practical: Introduction to Stats and describing data. Date: 3 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Lecture: Estimation I. Date: 4 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Exercise: Estimation I. Date: 4 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T and Zunza M. Practical: Estimation I. Date: 4 February 2015</td>
</tr>
<tr>
<td></td>
<td>• Esterhuizen T. Lecture: Estimation II. Date: 5 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Exercise: Estimation II. Date: 5 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T and Zunza M. Practical: Estimation II. Date: 5 February 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Lecture: T-tests. Date: 15 April 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Exercise: T-tests. Date: 15 April 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T and Zunza M. Practical: T-tests. Date: 15 April 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Lecture: Nonparametric tests. Date: 16 April 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Exercise: Nonparametric tests. Date: 16 April 2015</td>
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<td></td>
<td>• Esterhuizen T and Zunza M. Practical: Nonparametric tests. Date: 16 April 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Lecture: Categorical data. Date: 17 April 2015</td>
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<tr>
<td></td>
<td>• Esterhuizen T. Exercise: Categorical data. Date: 17 April 2015</td>
</tr>
<tr>
<td></td>
<td>• Esterhuizen T and Zunza M. Practical: Categorical data. Date: 17 April 2015</td>
</tr>
<tr>
<td><strong>Fundamentals of Epidemiology</strong></td>
<td>• Engel M. Introduction to Fundamentals of epidemiology. Date: 3 February 2015</td>
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<tr>
<td></td>
<td>• Engel M. Study designs: Experimental studies. Date: 3 February 2015</td>
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<tr>
<td></td>
<td>• Engel M. Study designs: Observational studies. Date: 3 February 2015</td>
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<td></td>
<td>• Engel M. Linking exposure and disease - measures of effect/association. Date: 13 April 2015</td>
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<td></td>
<td>• Engel M. The problem of random and systematic error. Date: 13 April 2015</td>
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<tr>
<td></td>
<td>• Engel M and Balogun T. The challenge of confounding and effect modification. Date: 14 April 2015</td>
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<tr>
<td></td>
<td>• Engel M. Early detection: screening. Date: 14 April 2015</td>
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<td></td>
<td>• Engel M. Association and causation. Date: 14 April 2015</td>
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<tr>
<td></td>
<td>• Engel M and Balogun T. Introduction to Fundamentals of epidemiology. Date: 20 July 2015</td>
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<tr>
<td></td>
<td>• Engel M. Study designs: Observational studies. Date: 20 July 2015</td>
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<td></td>
<td>• Engel M. Linking exposure and disease - measures of effect/association. Date: 7 September 2015</td>
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<td></td>
<td>• Engel M. The problem of random and systematic error. Date: 7 September 2015</td>
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<tr>
<td></td>
<td>• Engel M. The challenge of confounding and effect modification. Date: 8 September 2015</td>
</tr>
<tr>
<td></td>
<td>• Engel M. Early detection: screening. Date: 8 September 2015</td>
</tr>
<tr>
<td></td>
<td>• Engel M. Association and causation. Date: 8 September 2015</td>
</tr>
</tbody>
</table>
Research proposal writing and grantmanship

- Young T. Study design review and practical exercises. Date: 21 July 2015
- Esterhuizen T. Overview: Module in perspective. Date: 22 July 2015
- Esterhuizen T. Biostatistical applications: Sample size and power calculations – Theory & Practice. Date: 20 August 2015
- Esterhuizen T. Sampling techniques. Date: 20 August 2015
- Esterhuizen T. Questionnaire design. Date: 21 August 2015
- Esterhuizen T. Data Analysis Plan. Date: 21 August 2015
- Esterhuizen T. Data management. Date: 09 September 2015
- Esterhuizen T. Data Analysis (I) and (II). Date: 10 September 2015

Writing and reviewing scientific papers

- Young T. How to critically appraise a clinical trial. Date: 02 March 2015
- Young T. How to critically appraise a case-control study. Date: 02 March 2015
- Young T and Wysoonge C. How to critically appraise a systematic review and meta-analysis. Date: 02 March 2015
- Young T. How to critically appraise a paper about diagnostic tests. Date: 03 March 2015
- Young T. How to critically appraise a cross-sectional study. Date: 03 March 2015
- Young T. How to critically appraise a cohort study. Date: 03 March 2015

Systematic reviews

- Young T. Introduction to research synthesis. Date: 20 July 2015
- Young T. Zooming in on systematic reviews: what are they and where can we find them? Date: 20 July 2015
- Kredo T. Planning & preparing for a systematic review. Defining the systematic review question & developing criteria for selecting studies. Date: 20 July 2015
- Schoonees A and McCaul M. Revision of Block 1s content and Quiz. Date 17 August 2015
- Schoonees A and Durao S. Assessing risk of bias in included studies Date 17 August 2015
- Schoonees A and Durao S. Assessing risk of bias in included studies Exercises on RevMan. Date 17 August 2015
- McCaul M. Review: data types, measures of disease occurrence and association. Date: 17 August 2015
- McCaul M and Musekiwa A. Analysing data and undertaking meta-analysis. Date 18 August 2015
- McCaul M and Musekiwa A. Analysing data and undertaking meta-analysis Exercises on RevMan. Date 18 August 2015
- McCaul M. GRADEing the evidence - theory. Date 18 August 2015
- McCaul M. GRADE in practice: poster exercise. Date 18 August 2015
- McCaul M. Using GRADEPro Software for GRADEing evidence. Date: 19 August 2015
- Volmink J. Presenting results and Summary of Findings table. Date 19 August 2015
- Musekiwa A. Interpreting results and drawing conclusions. Date 19 August 2015
- Wysoonge C. Evidence into policy and practice: incorporating systematic reviews into decision-making. Date: 19 August 2015

Biostatistics II

- Esterhuizen T. Analysis of variance (ANOVA). Date: 05 August 2015
- Esterhuizen T. Correlation and simple regression. Date: 06 August 2015
- Esterhuizen T. Multiple linear regression. Date: 07 August 2015
- Esterhuizen T and Zunza M. Logistic regression. Date: 3 September 2015
- Esterhuizen T and Zunza M. Survival analysis. Date: 4 September 2015
- Esterhuizen T and Zunza M. Revision. Date: 9 October 2015

Randomised control trials

- McCaul M. Minimization in RCTs. Date: 31 August 2015
- Mahomed H. Sample size calculations applied to students planned protocols. Date: 31 August 2015
- Esterhuizen T. Data / statistical analysis. Date: 01 September 2015
- Geldenhuys M. Good Clinical Practice. Date: 02 September 2015

Diagnosis and Screening

- Smieja M. The Basics. Date: 04 March 2015
- Smieja M. Advanced Concepts. Date: 04 March 2015
- Erasmus R. Critical Appraisal. Date 05 March 2015
- Erasmus R. Bias in Diagnostic Studies. Date: 05 March 2015
- Okwundu C. Study Design. Date: 06 March 2015
- Okwundu C. Design of diagnostic studies. Date: 06 March 2015
- Rensburg M. Principles of Screening. Date: 24 April 2015
- Ochodo E. Introduction to diagnostic test accuracy reviews. Date: 24 April 2015
Nursing (Honours programme)

• Schoonees A. Evidence-based health care & research synthesis the what, why and how? Lecture to Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 22 May 2015

• Dizon J. Phrasing the right question and setting the eligibility criteria. Lecture to Nursing students (honours programme). 22 May 2015

• Rohwer A. Finding systematic reviews to include in a scoping review. Lecture to Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 22 May 2015

• Rohwer A, Schoonees A, Dizon J. Phrasing a question for the scoping review. Practical session with Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 22 May 2015

• Schoonees A. How to start after the search? Selecting studies and data extraction. Lecture to Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 28 May 2015

• Dizon J. Steps of a scoping review: Mapping the results of studies in table format. Lecture to Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 28 May 2015

• Rohwer A, Schoonees A, Dizon J. Finding systematic reviews to include in the scoping review. Practical session with Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 28 May 2015

• Schoonees A. Critical appraisal of included systematic reviews using AMSTAR. Lecture to Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. 28 May 2015

• Schoonees A. Finalising the protocol. Practical session with Nursing students (honours programme). Faculty of Medicine and Health Sciences, Stellenbosch University. June 2015

Postgraduate diploma in Healthcare Management

• Rohwer A, Schoonees A. Phrasing questions. Lecture and practical session with students doing the postgraduate diploma in Healthcare Management. Faculty of Medicine and Health Sciences, Stellenbosch University. 16 November 2015

• Rohwer A, Schoonees A. Finding systematic reviews. Lecture and practical session with students doing the postgraduate diploma in Healthcare Management. Faculty of Medicine and Health Sciences, Stellenbosch University. 16 November 2015

• Rohwer A. Interpreting findings and assessing applicability. Lecture and practical session with students doing the postgraduate diploma in Healthcare Management. Faculty of Medicine and Health Sciences, Stellenbosch University. 17 November 2015

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 2015

• Schoonees A, Rohwer A. Session 2: Questions and study designs. Online presentation for students doing the postgraduate certificate in health technology assessment. August 2015

• Schoonees A, Rohwer A. Session 3: Overview of the steps of EBHC. Online presentation for students doing the postgraduate certificate in health technology assessment. August 2015

Pre-doctoral Short Course Programme

• Esterhuizen T. Statistical design of quantitative research. 18th February 2015

• Young T. Evidence Based Health Care. 19th February 2015
## Continuing Professional Development: Presentations, seminars and workshops

### Lectures and presentations
- McCaul M. Bias, error and confounding. Webinar Event, ECSSA. 25th March 2015
- Rohwer A. Compiling a data extraction form. Lecture to participants of the Systematic Reviews Programme, UCT. Date: 5 February 2015
- Rohwer A. Bias and critical appraisal. Lecture to participants of the Systematic Reviews Programme, UCT. Date: 12 February 2015
- 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: 22 June 2014

### Workshops
- Prof Hofmyer, Schoonees A. McCaul M. Research Methods Course. Postgraduate clinicians. Stellenbosch FMHS. Date: 26 & 27 November 2015
- Rohwer A. Stellenbosch University BEME International Collaborating Centre (SUBICC) Workshop: Accessing, assessing and interpreting findings of BEME systematic reviews. 20 May 2015
- Van Schalkwyk S, Young T and Schoonnees A. Stellenbosch University BEME International Collaborating Centre (SUBICC) Workshop: Reading a systematic review. 20 May 2015

### Seminar Series
- McCaul M. Cohort studies and RCTs. Short course in clinical research, FMHS. Date: 22nd June 2015

The Biostatistics Unit also facilitated monthly 1.5-hour biostatistics seminar series covering current topical issues. The main objective of the seminar series was to create awareness and literacy of biostatistical methods that are commonly found in research articles. Such knowledge assists students and researchers in interpreting and evaluating evidence from studies that apply these advanced methods. Participants were given an article relevant to the topic under discussion to read prior to the seminar.

### Biostats Seminars

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Facilitator</th>
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</thead>
<tbody>
<tr>
<td>25 Feb 2015</td>
<td>Introductory Data Management</td>
<td>Tonya Esterhuizen</td>
</tr>
<tr>
<td>25 March 2015</td>
<td>Sample size calculation</td>
<td>Rhoderick Machekano</td>
</tr>
<tr>
<td>29 April 2015</td>
<td>Exploratory data analysis</td>
<td>Michael McCaul</td>
</tr>
<tr>
<td>27 May 2015</td>
<td>Presenting results</td>
<td>Moleen Zunza</td>
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</tbody>
</table>

### Biostats: Data Management Workshop

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Facilitator</th>
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</thead>
<tbody>
<tr>
<td>13 July 2015</td>
<td>Data Management</td>
<td>Tonya Esterhuizen</td>
</tr>
<tr>
<td>13 July 2015</td>
<td>Introduction to STATA</td>
<td>Alfred Muskewa</td>
</tr>
<tr>
<td>14 July 2015</td>
<td>Exploratory Data Analysis (EDA) Using STATA</td>
<td>Michael McCaul</td>
</tr>
<tr>
<td>14 July 2015</td>
<td>Statistical tests</td>
<td>Maxwell Chirewa</td>
</tr>
<tr>
<td>14 July 2015</td>
<td>EpiTab: Table for Epidemiologists</td>
<td>Alfred Muskewa</td>
</tr>
<tr>
<td>14 July 2015</td>
<td>Simple linear regression and correlation</td>
<td>Alfred Muskewa</td>
</tr>
</tbody>
</table>
ANNEX 4: Governance

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
• Dr 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.
ANNEX 5: Staff

The work of the CEBHC is supported by an excellent team of full-time and part-time staff. Each staff member has a detailed job description, key performance areas and development plans.

1. 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.

2. 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.

3. 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.

4. 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 healthcare such as clinical guideline development, implementation, monitoring and evaluation in practice.

5. Ms Tonya Esterhuizen
Tonya Esterhuizen 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.

6. Ms Liesel Esterhuizen
Liesel Esterhuizen is the Administrative Assistant 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.
Dr Nyanyiwe Mbeye

Nyanyiwe holds a PhD in Tropical Medicine from the University of Liverpool and University of Malawi, College of Medicine, a Masters of Science degree in Epidemiology from Erasmus University Rotterdam in the Netherlands, a Masters degree in Public Health from the College of Medicine, University of Malawi. She has a Bachelor of Science degree in Nursing and also holds a University Certificate in Midwifery. Currently she is a Post-doctoral research fellow at the Centre for Evidence Based Health Care at Stellenbosch University, Cape Town. Her main focus is systematic reviews and knowledge translation. Over time, Nyanyiwe has gained a lot of experience in research and programme management. She has ran national programmes on reproductive health and malaria in Malawi. She has a number of publications in peer reviewed 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 BHSc 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.

Mrs Traci Naidoo

Traci Naidoo is the project manager at the Centre for Evidence-based Health Care. She is responsible for 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.
12. Dr Celeste Naude
Celeste Naude 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.

13. Dr Valantine Ndze
Valantine 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.

14. Dr Liesl Anne Nicol
Liesl Nicol 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.

15. Dr Eleanor Ochodo
Eleanor Ochodo 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.

16. Dr Charles Okwundu
Charles Okwundu 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.
17. Ms Anke Rohwer

Anke Rohwer is a researcher at the Centre for Evidence-based Health Care. 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.

18. Ms Anel Schoonees

Anel Schoonees 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 (e.g. evaluation of allied health curricula for EBHC competencies), 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 such as the media and a NGO.

19. Prof Charles Shey Wiysonge

Charles is the Deputy Director of the CEBHC. He 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), undertook a research fellowship in evidence-based health care at the UK Cochrane Centre, 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. He has an H-index of 28 and a ResearchGate index of 42.57. 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.

20. Prof Taryn Young

Taryn, MBChB, FCPHM, MMED, PHD. Director of the Centre for Evidence-based Health Care and consultant to the South African Cochrane Centre, 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.

21. 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. She is currently working for the Centre for Evidence-based Health Care, Stellenbosch University. Her work involves conducting primary and secondary research, teaching, statistical consultations and supervision of postgraduate students.
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
- Dr Olalekan Uthman, Warwick University, United Kingdom
The achievements of the CEBHC are made possible by the excellent team who supports the work of the Centre.

This annual report is a reflection of the teams’ dedication and accomplishments.