



Figure 1: The Pro-Vice Chancellor International, Nottingham Trent University, Prof. Cillian Ryan (C) in a group photo with members of the SPICES consortium at the Nottingham Trent University, United Kingdom during the face to face consortium meeting 5th—7th October 2017.

**In this issue:** This is the second news letter of the SPICES project. The first issue was published in January 2017 and is accessible on our website [www.spicesproject.eu](http://www.spicesproject.eu). In the current issue, we highlight project progress since the kick off meeting on 14th January 2017 held at the University of Antwerp, in Belgium. We also present a summary of the findings of the situational analysis report

**Project coordination and management (WP lead—University of Antwerp):** In the first half of 2017, the project management structures were established. These are: (1) The general assembly—is the overall governing body of the project with eight members; (2) The Executive Board—responsible for monitoring and implementation of the project; and (3) The External independent Ethics Board comprising of two members.

**Health Promotion and community engagement (Work package lead—Nottingham Trent University):** During the year 2017, NTU started working toward the preparation of a basic intervention plan and identified community engagement as a model of choice to be applied in the SPICES project. The metaphor of a traffic light system for working with people at risk of or vulnerable to CVD was identified as a useful tool for signposting people to appropriate services. People in the orange zone will receive interventions and lifestyle advice and education to help them reverse their symptoms and hopefully push them into the green zone. Upstream work will be done in the green zone to prevent CVD early on. This model was presented and discussed at the two face to face meetings by WP Lead Dr Linda Gibson where it was decided that the Consortium would undertake a training workshop in community engagement approaches. The workshop was successfully organised and attended by 21 participants at NTU during the face to face meeting from 5th—7th October 2017. Dr Chris Moore, Dr Jason Pandya Wood, D Linda Gibson and Lisa Wardle facilitated the work shop. Figure 2 on page 3 shows a cross section of participants during the workshop.



**Situational analysis (WP Lead—Makerere University):** In the year 2017, we conducted a situational analysis of the burden of CVDs, contextual factors, current practices and policies in Belgium, Uganda, United Kingdom, South Africa and France. The situational analysis mainly involved review of literature, CVD stakeholder mapping and (group) interviews, and use of existing data across 5 countries. Collected information was reported per country and afterwards summarized to generate a consortium project situation analysis report.

Key findings in the report:

CVDs and risk factors: In all the five countries, CVDs and their risk factors are highly prevalent comprising mainly heart disease, strokes, ischemic heart diseases and heart failure. Proximate risk factors for CVD, including hypertension, diabetes and hypocholesteremia are common in all countries. The major vulnerable groups for CVDs in the different contexts are persons aged above 40 years and those with multiple CVD risk factors. Factors contributing to vulnerabilities included: low socioeconomic status, addiction to alcohol and drugs, poor access to health and social care as well as individual lifestyle behaviours.

Policies and stakeholders: In Belgium, UK, South Africa and France, many policies, frameworks and guidelines are already in place and guide the provision of CVD prevention, care and management services at different levels. In Uganda, there are huge policy gaps with many essential policies and guidelines not yet in place and a few under development. In all countries, several stakeholders are involved in CVD prevention, care and management at national, regional and local levels.

Organization of care for CVDs: In the United Kingdom, Belgium, South Africa and France, basic services for CVD prevention, care and management is found at the General Practitioner level (Primary healthcare level). In Uganda, basic care for CVDs concentrate at the higher level of the healthcare system.

Challenges: In Belgium, the way the health system is organized creates a risk for shortage of GPs in certain urbanized regions in subsequent years. There are also overwhelming demands placed on the GPs due to demographic and policy evolutions in primary health care. A similar shortage of GPs is reported in France and this leads to more time dedicated to disease management than prevention. Furthermore in France, decision making is very centralized and sometimes proposed recommendations may not be appropriate for some settings. The UK has a Universal healthcare system, however, this is increasingly experiencing financial constraints. In Uganda, the health system faces a multitude of capacity and human resource challenges in addition to transport, referral and follow up difficulties affecting delivery of CVD services. In South Africa, there is gross proportional shortage of health personnel as compared to the population.

Opportunities: In the health systems of all the countries, several opportunities exist which can be harnessed to improve CVD prevention, care and management outcomes. These include, the existence of extensive network of health facilities within the countries, the availability of health workers with basic knowledge on CVDs, availability of community structures that can be involved in CVD prevention and the presence of multiple stakeholders with interest in CVDs.

In conclusion, the situational analysis highlights the burden of CVDs, their risk factors and the policy environment for their prevention, care and management in five settings; two in sub-Saharan Africa (Uganda and South Africa) and three in Europe (United Kingdom, Belgium and France). Health system challenges in the different settings and existing opportunities that can be harnessed for CVD prevention, care and management are articulated. The final and full report is submitted via the European Authentication Service Portal (ECAS) and will be made accessible to the public in due course.



Figure 2 below: Members of the consortium in a community engagement workshop facilitated by Nottingham Trent University, 5th –7th October 2017 at the Nottingham Trent, United Kingdom.

**CVD profiling. (Work package lead—University of Manchester):** The team in Manchester is currently working on an overview of profiling tools and how these would be implemented. An initial draft of the plan has been developed and currently under internal review. The team also developed an mhealth questionnaire to assess the potential mhealth tool in the different settings (Belgium, Uganda, United Kingdom, France and South Africa). The questionnaire assessed: (1) Types of phones and other network connected devices available to participants and healthcare workers in the different study settings/countries, (2) Mobile network and wifi coverage available, (3) Charging facilities for mobile devices, (4) Existing use of messaging apps, and (5) Previous experience of mHealth projects.

**Results:** Responses from the questionnaire enabled the identification of two groups of sites based on the types of interventions that could be applied: (1) Uganda and South Africa. Text messaging interventions and / or intervention for healthcare workers. No smartphone based intervention is likely to be viable at present due to the lack of availability of suitable devices. There is the potential to target a smartphone-based intervention at healthcare workers as more of them have smartphones than in the general population. (2) Belgium, United Kingdom and France. A wide range of mHealth interventions, including smartphone or text message based, for participants and/or healthcare workers.

**Recommendation:** The proposed next step is a review of relevant literature, by the Manchester team, focused on the application of eHealth and mHealth to the primary prevention of CVD.



**Care and management (Work package lead—Brest University) & Self Management & follow-up (Work package lead—University of Antwerp):** The team at the University of Antwerp and Brest University focussed on searching and evaluating literature on effective and scalable interventions related to the respective work packages. The structured approach of the ADAPTE procedure was used to find relevant guidelines. In the second step, a purposive search for national guidelines from participating countries in the SPICES project was undertaken. Guidelines were checked for quality using the AGREE instrument. The search focussed on reviews and meta-analysis. Draft reports are currently under review.

**Overall implementation plan (Work package lead—Makerere University):** The team at Makerere University in partnership with the University of Antwerp designed the initial draft of the overall implementation plan which was subsequently at the face to face meeting in Nottingham by Dr. Geoffrey Musinguzi. To further inform the plan, the consortium invited Paul Wilson, Deputy Editor in Chief, Implementation Science from Manchester University Business School to facilitate a workshop on implementation science which he did on 6th October 2017.



Figure 3: A cross section of participants at the Implementation Science Workshop, 6th October 2017



During the workshop, Paul outlined the theory of implementation science, what it is and what it is not, methods, theories, approaches, and designs. After the workshop, the consortium adopted the RE-AIM and CFIR frameworks as the primary models that would be used in the overall implementation and evaluation plan. A revised draft has been designed and currently under review to ensure a harmonised process for a multi-country study spanning the global north and south contexts.

**Dissemination and communication (Work package**

**lead—Nottingham Trent University):** To date, two abstracts about the project have been presented either as poster or oral presentations. (1) What are the evidences for Healthy diet strategies in CVD prevention: Finding the best evidence with the ADAPTE procedure for the SPICES project ...Authors: Delphine Le Goff, Michele Odorico, Naomi Aerts, Geoffrey Musinguzi, Rhoda Wanyenze, Tholene Sodi, Linda Gibson, Harm Van Marwijk, Paul Van Royen, Hilde Bastiaens, Jean Yves Le Reste, listed in Abstracts / Programme Book of the 85th EGPRN Meeting, Dublin-Ireland, 19-22 October 2017. URL: <https://www.egprn.org/file/3898d1a2-a2f8-479a-899c-c90a1266e949/2017-oct-dublin-ireland-programme.pdf>. (2) Improving cardiovascular disease (CVD) prevention and care in Europe and Sub-Saharan Africa: an implementation project (SPICES). Authors: Hilde Bastiaens, G. Musinguzi, Lieve Peremans, Jean Yves Le Reste, Harm Van Marwijk, T. Sodi, L. Gibson, R. Wanyenze, JP Van Geertruyden, Paul Van Royen. <https://www.egprn.org/file/a437759b-44bd-4a6b-9c15-bab988d10f97/PROGRAMMeRiga-Latvia2017%20ISBN-version.pdf>

**Ethics:** The aim of the ethics work package is to ensure compliance with the ethics plan. A range of ethics approvals were obtained in compliance with the ethics requirements in the different contexts. In Belgium at the University of Antwerp, the Ethics approval to conduct the situational analysis was granted by the ETHISCH COMITE at UA, In Uganda, Makerere University, the Ethics approval was granted by the Makerere University School of Public Health Higher Degrees Research and Ethics Committee and the National Council of Science and Technology, in the United Kingdom at the Nottingham Trent University, the approval was granted by the College Research Ethics Committee, in France at Brest University, the Ethical approval was granted by COMITE de PROTECTION des PERSONNES EST-III and in South Africa at Limpopo University, the Ethical approval was granted by TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

**Next Steps and planned activities:** In the year 2018, the consortium will focus on developing context specific protocols based on the results of the situational analysis and the basic intervention plans. Planned consortium meetings; 1) Kampala, Uganda—12th-14th, March 2018 and 2) Brest, France—22nd-24th June 2018.

**Credit:** This news letter was designed by Dr. Geoffrey Musinguzi and reviewed and approved by the Project Coordinator (Prof Hilde Bastiaens) and the work package leads— Dr. Linda Gibson, Prof Sodi Tholene, Prof Harm Marwijk and Prof Jean Yves Le Reste.

