WONCA Special Interest Group on Global Point-of-Care Testing



January 2015 Editor: Lara Motta

NEWSLETTER

Inside this issue:

Survey on Point-of-Care Testing

Workshop in Kuching

ACE Program in PNG

Have you seen these recent articles?

More information on Special Interest Group

Current Member List

Hello everyone and welcome to 2015, which we hope will be a very successful and enjoyable year for WONCA SIG Members.

To keep everyone updated on what is happening in the world of point-of-care testing, we have started a regular newsletter for members of our SIG. In our newsletter we aim to bring you news about what our members are working on, papers of interest that have been recently published and relevant conferences that are happening.

If you have something that you would like to share with the group, please email us. Mark Shephard (Chair) & Lara Motta (Secretary)



SIGpointofcare@wonca.net

Survey on Point-of-Care Testing

During 2014, the SIG launched an online survey on POCT and Members were asked to disseminate the link to their family doctor colleagues. The purpose of the survey is to obtain a wide understanding of the clinical use, availability, needs, advantages, and limitations or barriers to the implementation of POCT across all WONCA regions of the world.

Preliminary results (as of 28 November 2014):

- 101 responses have been received representing 6 of 7 WONCA regions, 66% respondents from Europe.
- 90% of respondents are Family Doctors.
- 80% of respondents are currently using POCT in their practices.
- POCT is performed by doctors (59%), nurse/nurse practitioners (54%) and lab professionals (41%).
- 56% of respondents perform quality testing to support POCT in their practices.
- The most common POC tests used in respondents' practices are glucose (73%), urinalysis (58%), pregnancy (40%), haemoglobin (36%) and lipids (35%).
- When asked which POC tests respondents would like to have available for their use, 70% said that they would like to have HbA1c testing available by POC. Other tests that >50% respondents would like to have available are cardiac markers, full blood count and INR.
- The most commonly reported attributes of POCT were rapid diagnosis and/or treatment (92%), convenience for the patient (76%), ease of use (64%) and improved doctor-patient relationship (60%) (*see Figure 1*).
- 97% of respondents reported one or more barriers to the implementation of POCT. The three most commonly reported barriers related to the cost of POCT (81%), lack of Government reimbursement (51%) and staffing issues (37%).
- Regarding government regulations and support, only 25% of respondents stated that their country had standards or guidelines for the conduct of POCT, had access to quality assurance programs, and had an accreditation framework for POCT. Just over 40% stated that their local laboratory provided support for POCT.

The survey is open for responses from WONCA Family Doctors and their health professional colleagues: www.sogosurvey.com/survey.aspx?k=SsQSQVYsWsPsPsP&

We encourage you to make this link available to your colleagues so that we can get as wide a response as possible to continue to inform our SIG on priorities for education and research.



Figure 1. Results from 101 respondents when asked **'What are the most valuable attributes of POCT in your practice?'.**

POCT Workshop at WONCA Asia Pacific Conference, Kuching

An invitation to present a session on POCT at this regional WONCA conference was received by the Chair in July 2013. An abstract was prepared and lodged by the Secretariat. The 90 minute workshop titled 'How to Set Up and Manage Point-of-Care Testing in Your Family Practice' was presented by Mark Shephard and Lara Motta on behalf of the SIG on 24 May 2014. The workshop aimed to provide participants with an overview of the key principles that should be applied when establishing and maintaining a POCT service. Working together in four small groups, participants then had the opportunity to utilise these learnings to develop a framework for introducing POCT for a clinical need relevant to their family practice.

The workshop was attended by 30 participants from Nigeria, Brunei, Malaysia, Indonesia, Japan, Hong Kong and Australia. During the group activity, the four groups discussed the introduction of the following POC tests HbA1c, CD4



count. malaria and light microscopy. Some participants already had access to pathology laboratory testing but believed that the introduction of POCT would reduce the turnaround time for pathology results which would mean added convenience for the patient and a reduction in the number of visits to the clinic. POCT may also encourage patient motivation and compliance with medication. Other participants who did not have access to good laboratory support felt that the introduction of POCT would give them access to much needed pathology testing to support their clinical judgement and allow them to better manage their patients. There was a lively discussion held about the definition of POCT and

what constitutes a POC test. It was agreed that any test done near the patient with results available during the patient encounter could be considered POC and all agreed that the implementation of POCT must systematically follow key principles rather than just buying a device and testing patients.

In addition to presenting the workshop, Mark and Lara also manned an exhibition booth promoting the SIG in the WONCA Village, inviting delegates to complete the POC survey and answering questions relating to POCT. The booth was well attended over the 3 days and 34 new members joined the SIG during the conference.



ACE Program - POCT for Diabetes Management in PNG

As previously noted from the survey results presented in this Newsletter, HbA1c is the POC test that most respondents would like to have available in their practice. For this reason, a brief outline of a current international POCT model for diabetes is provided for the interest of members.

The ACE (Analytical and Clinical Program Excellence) is an international POCT model for diabetes management coordinated by Mark Shephard and Lara Motta (Flinders University International Centre for Point-of-Care Testing). Working collaborative research partnerships have been fostered and developed with international organisations that are socially accountable and have strong links with their local communities that have a high burden of diabetes. Through these collaborations, the ACE Program has been introduced to PNG, Canada, South Africa, Thailand, Solomon Islands, East Timor, and Samoa. Health professionals from participating communities conduct POCT for HbA1c and/or urine ACR on the Siemens DCA Vantage under a quality management framework to monitor diabetes patients in their communities for glycaemic control and renal status.



L-R: Sheila Harou, Lynna Albert, Helena Stoesel & Dr Cathy Timothy

In PNG, the ACE Program has been introduced to four sites in the Morobe Province, including two Government health clinics, a hospital diabetes clinic, and a university clinic. According to Dr Timothy from ANGAU Hospital Diabetic Treatment Centre, "As far as diabetes goes, this is a prayer answered. Until now, we have never been able to properly manage diabetes patients. Now we are able to prevent the progression of the disease, and in many cases save lives."

Lynna Albert, a nursing officer in Morobe province, and a former Flinders student, described how the program had grown from a dream shared by her and Mark Shephard at Flinders University, into a life-changing reality for hundreds of Papua New Guineans. "I was a student at Flinders in 2010 when the program was introduced, and was the first one from PNG to be trained," Ms Albert said. "I knew it would be really good for the country and asked if I could help to roll it out. I was really grateful to Prof Shephard when he agreed with my suggestion."

During a visit to Flinders in 2014, Vicky Warimbelie, Manager, Non **Communicable Disease, at PNG's** Department of Health, said visiting the International Centre was a great opportunity to assess the program and see how the government might increase its **involvement. "Diabetes has been** increasing in PNG to a rate of 7% and I believe the results of the ACE program so far are very **encouraging." she said.**

"Being able to support health professionals to manage diabetes in rural communities is hopefully just the first step in a very fruitful partnership that will eventually use POCT to manage a wide range of conditions," said ACE Program Coordinator, Lara Motta.

For more information on the ACE Program, which has been rolled out to over 35 communities in seven countries, visit: <u>www.flinders.edu.au/medicine/</u> <u>sites/point-of-care/</u>



Delegation from Morobe Provincial Government with Mark Shephard and staff from Flinders University International Centre for POCT

Page 4

Have you seen these recent articles?

- Drain, P, Hyle, E, Noubary, F, Freedberg, K, Wilson, D, Bishai, W, Rodriguez, W & Bassett, I 2014, 'Diagnostic point-of-care tests in resource-limited settings', *Lancet Infectious Diseases*, vol. 14, pp. 239-49.
- Wood, B, Ballenger, C & Stekler, J 2014, 'Arguments for and against HIV self-testing', *HIV/AIDS Research and Palliative Care*, vol. 6, pp. 117-26.
- Louie, R, Ferguson, W, Curtis, C, Vy, J & Kost, G 2014, 'Vulnerability of point-of-care test reagents and instruments to environmental stresses: implications for health professionals and developers', *Clinical Chemistry Laboratory Medicine*, vol. 52, no. 3, pp. 325-35.
- Shephard, M, Spaeth, B, Mazzachi, B, Auld, M, Schatz, S, Lingwood, A, Loudon, J, Rigby, J & Daniel, V 2014, 'Toward Sustainable Point-of-Care Testing in Remote Australia the Northern Territory i-STAT Point-of-Care Testing Program', *Point of Care*, vol. 13, no. 1, pp. 6-11.

If you have recently published a paper you think would be of interest to members of our SIG, please email <u>SIGpointofcare@wonca.net</u>

Tell us what you would like to see in our Newsletter!

Please send us any contribution about how you are using POCT in your practice or what your needs are. Email: <u>SIGpointofcare@wonca.net</u>

For more information on the SIG on Point-of-Care Testing, or to join, visit: <u>www.globalfamilydoctor.com/groups/SpecialInterestGroups/</u> <u>Pointofcaretesting.aspx</u>

WONCA SIG on POCT Executive Members

Mark Shephard, Asia Pacific (Chair) Lara Motta, Asia Pacific (Secretary) Anthony Omolola, Africa Ndi Okwuosa, Africa Dalal Alarfaj, East Mediterranean Bohumil Seifert, Europe Cristina Isar, Europe Jose' Carlos Prado Junior, Iberoamericana Tim Kolotyluk, North America Raman Kumar, South Asia Igor Toskin, Europe (WHO Observer)