

Mammography reporting at Tygerberg Hospital, Cape Town, South Africa

To the Editor: In their recent article, Apffelstaedt *et al.*^[1] analysed 16 105 mammograms performed at Tygerberg Hospital (TBH), Cape Town, South Africa (SA), between 2003 and 2012. The summary reported that 'mammograms were read by experienced breast surgeons', while the discussion stated: 'A further noteworthy fact is that this TBH series was based exclusively on mammography interpretation by surgeons with a special interest in breast health.' The suggestion that mammograms were exclusively interpreted by breast surgeons does not reflect the mammography workflow at our institution.

Throughout the review period, same-day reporting of all TBH mammograms was done by senior radiology registrars working under the supervision of consultant radiologists; the latter were solely responsible for sign-off of the final mammography report.

All mammograms were reviewed at a weekly multidisciplinary meeting between radiologists and our colleagues in the breast clinic. If there was consensus that a radiology report required modification, this was done by way of an addendum, written by the duty radiology registrar and attached to the original report, without changing the report itself. Addenda were required in a small minority of cases, as reflected in the TBH mammography records. Our breast clinic colleagues loaded all radiology reports onto their MS Access database during the weekly multidisciplinary meetings.

Since June 2009, when TBH converted to a digital imaging platform, all mammography reporting has been on 5-megapixel diagnostic monitors, in keeping with international quality assurance requirements. TBH's two 5 megapixel monitors are in the mammography unit in the Division of Radiodiagnosis. The only time breast surgeons have access to these monitors is during their weekly review of cases at the multidisciplinary meetings with radiologists.

Richard Pitcher (*Head of Division of Radiodiagnosis*),
Jan Lotz, Christelle Ackermann, Asif Bagadia, Razaan Davis,
Anne-Marie du Plessis, Stephanie Griffith-Richards,
Retha Hattingh, Georg Wagener
Division of Radiodiagnosis, Department of Medical Imaging and Clinical Oncology,
Faculty of Medicine and Health Sciences, Tygerberg Hospital and Stellenbosch
University, Tygerberg, Cape Town, South Africa
 pitcher@sun.ac.za

1. Apffelstaedt JP, Dalmayer L, Baatjes K. Mammographic screening for breast cancer in a resource-restricted environment. *S Afr Med J* 2014;104(4):294-296. [http://dx.doi.org/10.7196/SAMJ.7246]

Apffelstaedt *et al.* respond: The letter by Pitcher *et al.*^[1] commenting on our article requires clarification that at the same time is instructive on the delivery of medical care and education in a developing country such as SA. 'Developing country' supposes an upward trajectory of improving services. However, changes in political circumstances often have a profound and disruptive effect on service delivery.^[2] As a long-serving member of the TBH staff, JA wishes to acquaint the above esteemed colleagues with events that predate their arrival or specialisation at TBH. Political changes in SA in the mid-1990s resulted in an exodus of specialists from the public sector, leaving the Department of Radiology at TBH with only two consultant positions filled over several years; especially in mammography, there was no effective supervision by a consultant radiologist for a long period. In southern Africa the lack of educational resources, particularly in mammography, is well documented,^[3] and under these conditions guidance of junior staff and reporting in mammography

suffered even further. At the same time, mammographers delivered excellent breast imaging, and the first mammography certificate course was started at TBH in 1999. As Head of the Breast Clinic, JA was engaged in a number of multicentre international trials reliant on accurate reporting for clinical management, and had been at several international breast imaging courses. With the support of the then Head of Radiology, he instituted a reporting meeting to ensure continuing education of clinical assistants in radiology and surgery in mammography interpretation, and these meetings have been held regularly since 2001. Since 2002 each mammogram has been entered into a database after reporting by the surgical team, and reports are printed out of the database and filed in the patient folders. Clinical management is based on these reports, and the results were presented in the article^[1] referred to by Pitcher *et al.* The enthusiasm of radiology and surgery clinical assistants was patchy at first, but soon the educational value of the meetings was recognised and attendance was made compulsory. To this day the meetings are a vital educational resource, and many radiologist colleagues, including some of the authors of the letter above, have benefited from the expertise in interpretation of mammograms and the insights into clinical management issues that we surgeons have imparted. After a particularly rough patch from 1998 to 2005 things have improved significantly, not least as a result of the efforts of Prof. Pitcher as head of the department and regular reporting by his staff.

Cognisant that the reporting of mammograms (or any other imaging) by surgeons may be criticised, the surgical team regularly analysed the outcomes of their reporting at TBH and at another site. These analyses are routinely subjected to peer review, which confirms that the quality of reading and reporting conforms to international best radiological practice and has resulted in several publications.^[4-7] Despite an invitation to do so,^[4] similar independent confirmation of high standards of mammography interpretation by our SA radiologist colleagues is lacking.

Uncritically and rigidly taking over service delivery models of well-resourced environments is counterproductive in a developing country. Services in resource-restricted environments must often be delivered by the willing and capable instead of those with the qualifications deemed necessary in wealthier settings. In a neighbouring country, for example, there is no qualified medical oncologist to treat cancer patients, and medical oncology is provided by a single general practitioner with a special interest. By all accounts, she is delivering care matching that of specialist oncologists. Insisting that only qualified oncologists can administer chemotherapy would deprive the citizens of a vital service. Similarly, in peripheral hospitals in SA after-hours reporting by radiologists is often not available, and clinicians treat according to their interpretation of the images. Evidence that this disadvantages patients is lacking. In our own practice, KB and JA, as surgeons with a special interest in breast health, have demonstrated that insistence that a radiologist interprets images would not add anything except expense, and must therefore be viewed critically in a resource-restricted country. While we value the input provided by our radiologist colleagues on imaging not directly related to our area of interest, and gladly share our expertise with colleagues from other specialties, it is time to accept that specialists with a particular field of interest such as vascular surgery, neurosurgery, or in our case breast health can report imaging to high standards and provide a vital educational resource of benefit to both medical practitioners in training and patients.

Justus Apffelstaedt

Head, Breast Clinic, Tygerberg Hospital, Tygerberg, Cape Town, South Africa,
and Department of Surgery, Faculty of Medicine and Health Sciences,
Stellenbosch University, Tygerberg
jpa@sun.ac.za

Lisa Dalmayer

Department of Radiation Oncology, Faculty of Medicine and Health Sciences,
Stellenbosch University, Tygerberg, Cape Town, South Africa

Karin Baatjes

Department of Surgery, Faculty of Medicine and Health Sciences, Stellenbosch
University, Tygerberg, Cape Town, South Africa

1. Apffelstaedt JP, Dalmayer L, Baatjes K. Mammographic screening for breast cancer in a resource-restricted environment. *S Afr Med J* 2014;104(4):294-296. [<http://dx.doi.org/10.7196/samj.7246>]
2. Murray EM. Medical and radiation oncology for breast cancer in developing countries with particular reference to locally advanced breast cancer. *World J Surg* 2003;27(8):924-927. [<http://dx.doi.org/10.1007/s00268-003-6977-9>]
3. Rabinowitz DA, Pretorius ES. Postgraduate radiology training in sub-Saharan Africa: A review of current educational resources. *Acad Radiol* 2005;12(2):224-231. [<http://dx.doi.org/10.1016/j.acra.2004.11.014>]
4. Apffelstaedt JP, Steenkamp V, Baatjes K. Performance data of screening mammography at a dedicated breast health centre. *S Afr Med J* 2008;98(12):950-953.
5. Apffelstaedt JP, Steenkamp V, Baatjes KJ. Surgeon-read screening mammography: An analysis of 11,948 examinations. *Ann Surg Oncol* 2010;17(Suppl 3):249-254. [<http://dx.doi.org/10.1245/s10434-010-1241-7>]
6. Mouton JB, Apffelstaedt J, Baatjes K. Surgical mammography reporting in a limited resource environment. *World J Surg* 2010;34(11):2530-2536. [<http://dx.doi.org/10.1007/s00268-010-0530-4>]
7. Taylor L, Basro S, Apffelstaedt JP, Baatjes K. Time for a re-evaluation of mammography in the young? Results of an audit of mammography in women younger than 40 in a resource restricted environment. *Breast Cancer Res Treat* 2011;129(1):99-106. [<http://dx.doi.org/10.1007/s10549-011-1630-z>]

S Afr Med J 2014;104(7):456-457. DOI:10.7196/SAMJ.8455