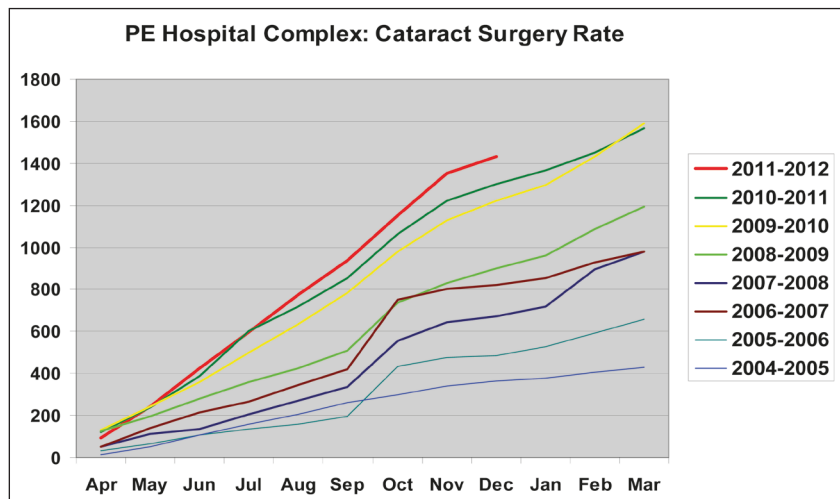


PE eye department carves up cataract surgery record book



What seven years of hard work looks like to November last year.

An ophthalmology department headed by two specialists in Port Elizabeth (PE) has quietly been restoring sight to thousands of mostly indigent patients across their province for seven years – and is closing in on the internationally accepted target for the elimination of cataract blindness.

Close friends and Matie 2004 graduates, Drs Mark Jacoby and Danie Louw at Port Elizabeth Provincial Hospital, are 300 procedures short of the gold standard annual cataract surgery rate (CSR) for South Africa at 2 000 surgical procedures per one million people. This is the internationally accepted target for the elimination of cataract blindness and the PE team are well above a nationally revised local target of 1 500 set in 2010 (set after research showed that most units were failing to make even this level).¹ The chief reasons cited by researchers for the general target failure were a lack of commitment to increase the CSR, insufficient theatre time, erratic supplies of surgery consumables and inefficiencies in theatres.

Professor Andries Stulting, Head of Ophthalmology at the University of the Free State and an award-winning training and outreach veteran of the public sector, described the pair's achievement as 'fantastic, this is going well beyond the call of duty, especially if you run a general hospital department where you have a whole lot of other eye surgery as well. These guys have really gone the extra mile.'

Cataracts are the leading cause of blindness in South Africa (responsible for half of the prevalence of blindness) and surgery is

one of the most cost-effective of all health interventions, making it a national health priority. Not only does it improve the self-care and potential earning capacity of the mostly elderly patients, but the impact on HIV/AIDS-orphaned children is huge.² In South Africa each elderly caregiver looks after an estimated average of 4.6 children, while in Zimbabwe approximately 71% of grandparents older than 60 years have responsibilities for HIV/AIDS-orphaned children.³

Unsurprisingly, the PE duo has overcome the hurdles cited by researchers for falling short of CSRs, going from no proper micro-instruments or equipment, a toe-hold in one theatre and no day-beds – with an initial CSR of under 500 – to over 1 700 today.

Success changing entire patient profile

Drs Jacoby and Louw, whose cataract patient profile has changed from mostly blinding cataracts to early cataracts requiring a less invasive procedure with quicker healing (and similar quality of restored vision), have expanded their outreach programme significantly. Uniquely, they alternate the position of Head of Ophthalmology at the Port Elizabeth Hospital Complex to reduce work pressure.

From travelling to Humansdorp, Somerset East and Grahamstown twice a year for screening, they (and/or their staff) now

make four annual visits to each town (for one day of screening and four days of surgery). Noticing an unusually large cohort of cataract patients coming from Uitenhage, they sent their most senior medical officer (MO) there weekly from 2009. This has expanded to two full-time MOs with a new consultant who spends two days a week there conducting a clinic and doing surgery. Unsurprisingly, the PE duo has overcome the hurdles cited by researchers for falling short of CSRs, going from no proper micro-instruments or equipment, a toe-hold in one theatre and no day-beds – with an initial CSR of under 500 – to over 1 700 today.

NGO help pivotal

With just 18 in-patient beds they've finally convinced hospital management to provide day-case beds for them (day-case CS is standard at private eye hospitals), addressing one of the three main reasons for procedure cancellations (no consumables, equipment or day beds). Working with the prestigious Australian-founded Fred Hollows Foundation that targets Third-World countries, today they receive regular large consignments of vital lenses, sutures and visco-elastics (a jelly to protect the cornea and keep the eye firm while they operate), plus logistical help in Graaff-Reinet. The Nelson Mandela Metropole (covering Port Elizabeth, Uitenhage and Dispatch) has a drainage of 1.2 million people – giving a strong indication of how close the work of



Rural woman does an eye test at the remote Bulungula Lodge near Coffee Bay.

their team is coming to eliminating blindness in their area. From two consultants and three MOs, their department has blossomed to four consultants, four registrars and four MOs, increasing capacity, with the use of a third theatre at Port Elizabeth Hospital now a top priority.



Port Elizabeth surgeons remove cataracts for an indigent patient.

'If we can get one dedicated theatre [currently they have one theatre for 80% of its time and use of another], we can get into serious high-volume cataract surgery at 40 - 50 per week – the potential is huge,' enthused Jacoby. He explained that they were averaging this number across all their sites at present but that with a dedicated cataract theatre for just three days a week, the boost would be huge – even though achieving this 'might take a few years.'

Asked what kept them going, Louw said 'reasonable' government pay, dedicated committed theatre nurses and 'the satisfaction of going forward every year'.

Asked what kept them going, Louw said 'reasonable' government pay, dedicated committed theatre nurses and 'the satisfaction of going forward every year.' 'The support is not as great as it could be, but enough to make it worth continuing. When government sees that you're doing your bit they often reciprocate and it's the same with NGOs.'

Buddy system keeps motivation going

He confessed that without his varsity mate who shared a graduate vision of 'taking on

a relatively new department and building it up to something great, he doubted he'd still be there.

'Also, I remember one 99-year-old patient in Kimberley about eight years back. He wore this kind of British khaki uniform, was completely blind and walked hunched over his stick. He was an aide to some old colonial army type. He was just sitting there, not *lus* for the world. After the op he could see perfectly. He stood bolt upright, waved that stick above his head and said in perfect Queen's English: "Yesterday I was under the ground but today I'm on top of the world!"'

Upon their return to the village, Dodwana (who previously could only discern the difference between night and day) animatedly pointed out a road built during his blindness, his cattle and family members, ordering that a sheep be slaughtered for a celebration feast.

Another example of how profound the patient experience can be comes from residents of the remote Nqileni village, home to the renowned community-based, eco-friendly Bulungula Lodge near Coffee Bay. Using the lodge's network and goodwill of a former local district hospital doctor, half a dozen villagers had their sight restored. Dr Will Mapham, now based at Uitenhage Hospital, spent several days at the lodge assessing villagers with eye problems, the first two referrals elderly men who'd never left the village. Pulling strings through its Bulungula Incubator (an NGO dedicated to sustainable community upliftment), the lodge secured free transport (the Baz Bus from Bulungula to PE) and accommodation (Lungile Backpackers) for locals Zwelithemba Dodwana and Mabele Boklein in August last year. Neither man



Blinding cataracts in an Eastern Cape woman.

had ever stayed in a lodge/hotel in their lives, let alone contemplated their sight being restored. Dodwana's eyes were found to be operable (Boklein's unfortunately had additional damage). Upon their return to the village, Dodwana (who previously could only discern the difference between night and day) animatedly pointed out a road built during his blindness, his cattle and family members, ordering that a sheep be slaughtered for a celebration feast. Thanks to the PE surgical duo and the team they've built up, such 'miracle' celebrations are no longer an isolated event. The potential impact of a CS programme on the care of orphans and vulnerable children was dramatically illustrated in a paper submitted to the SAMJ last month⁴ (by three generations of UCT graduates), assessing the situation in Swaziland (which has the highest documented prevalence of HIV in the world).



Vision warriors: Joint Port Elizabeth Hospital Complex Ophthalmology Department heads, Drs Mark Jacoby and Danie Louw.

Half the elderly people interviewed (average age 70) reported being the primary caregiver for the child(ren) living in their homes, despite being visually impaired from their cataract. Visual acuities and the range of activities they were able to perform postoperatively, including child care and income generation, improved significantly. A full 54.1% reported improved direct care of children and 62.2% reported improved activities of daily living; 27% said their income-generating activities had improved.

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1. Lecuona K, Cook C. South Africa's cataract surgery rates – why are we not meeting our targets? *S Afr Med J* 2011;101(8):510-511.
2. Impact of AIDS on Older People in Africa. World Health Organization. <http://www.who.int/hiv/pub/casestudies/pubzimaids/en/index.html> (accessed 17 December 2011).
3. Ardington C, Leibbrandt M. Orphanhood and schooling in South Africa: Trends in the vulnerability of orphans between 1993 and 2005. *Econ Dev Cult Change* 2010;58(3):507-536.
4. Pons J, Mapham W, Newsome B, et al. The potential impact of a cataract surgery programme on the care of orphans and vulnerable children in Swaziland. *S Afr Med J* 2012;102(3):140-141.