

Health Matters

Breast Ultrasound and the Surgeon



Bowen Hospital

Area: General Surgery
Article written by: Mr Burton King,
Breast and General Surgeon,
ph (04) 891 0575

An extension of the fingertips,
a look-through the breast and
a glimpse into the axilla.

Insonate /in·so·nate/ verb: to expose
to ultrasound waves

Breast ultrasound is second only to
mammography in the investigation
of breast disease. Ultrasound is not a
general population screening tool as yet
and does not replace mammography¹.
It is a diagnostic adjunct to the clinical
and mammographic breast examination.

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Breast section

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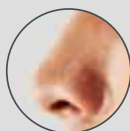
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Message from Acurity

Commercial Manager's Message
Paul Quayle, Commercial Manager, ph (04) 920 0146



I am delighted to present you with edition seven of our Health Matters publication.



New CEO

Our new Chief Executive, Ian England, joined Acurity at the beginning of July and is quickly settling into his new role.

Ian comes to us with extensive experience in the industry, most recently as the General Manager of St. Andrew's War Memorial Hospital in central Brisbane.

Despite coming to us from the other side of the Tasman, Ian has lived in New Zealand previously, after emigrating from the UK in his teens and

completing his education here. With around 17 years on either side of the Tasman we certainly have some interesting conundrums come Bledisloe Cup time!

Acurity Health GP Conference

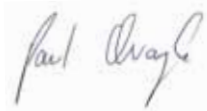
In mid-August, we took the incredibly difficult decision to reschedule the Acurity Health GP Conference. This decision was made in response to low numbers and on-going feedback from GPs indicating that the dates were not workable given the proximity of other conferences.

Alongside this change, we are proud to announce that we will be partnering with the Goodfellow Unit in delivering the 2014 conference.

Together with the Goodfellow team, we remain absolutely committed to delivering an outstanding conference event on April 4th and 5th 2014 at Te Papa on Wellington's waterfront. The organising committee is looking forward to presenting to you an interesting array of speakers, a broad, relevant and educational programme, and a variety of 'guest' speakers who will deliver a valuable and enjoyable event.

As always we welcome your suggestions for Health Matters. If there is a particular feature you would like to see, or a consultant

you would like to hear from, please call me directly on 04 920 0146 or send me an email paul.quayle@acurity.co.nz



Paul Quayle,
Commercial Manager,
Acurity Health Group Limited

Acurity Health Netball News

For the past five years Wakefield Hospital has entered a netball team in the Wellington Netball Association, Sporting Pulse competition under the Wakefield Health Ltd brand.

This year, under the Acurity Health Group Ltd brand, Sophie Henry, Netball Manager, Coach and Captain, began looking for her keen netballers to participate in the 2013 netball season.

The Acurity Health Netball Team consisted of Wakefield Hospital household, reception, nursing and kitchen staff, Acurity Corporate staff and TBI Physio staff.

At the start of the netball season, in April, the team attended a grading day, held at the ASB Sports Centre,

in Kilbirnie, and played a succession of approximately six games. This resulted in the team being placed in the Senior 1 C grade as we won the first three games. The rest of the season was also played at the ASB Sports Centre which has not been the case in previous years as we have played outdoors at the Hataitai courts in all kinds of weather.

Through trial and error the Acurity Health Netball Team finished the season, in August, coming fourth in their grade.



Back row: Deindre, Christina, Gabby, Pina, Sophie
Front row: Tafi, Persephone, Emma, Minnie

Breast Ultrasound and the Surgeon



Mr Burton King

Continued from page 1

Office-based and intraoperative ultrasound remarkably enhances the surgeon's care of patients with breast disease.

Examinations

All doctors appreciate the difficulties, vagaries and uncertainties of the clinical breast examination. Breast ultrasound at the bedside can distinguish solid (Figure 2) from cystic (Figure 3) breast lesions and ascertain the risk of a discrete lesion having malignant potential (Figure 4). Ultrasound can then be used to guide a needle biopsy (Figure 5), cyst aspiration or monitor the millimetric size of a benign discrete mass.

Continued on page 4.

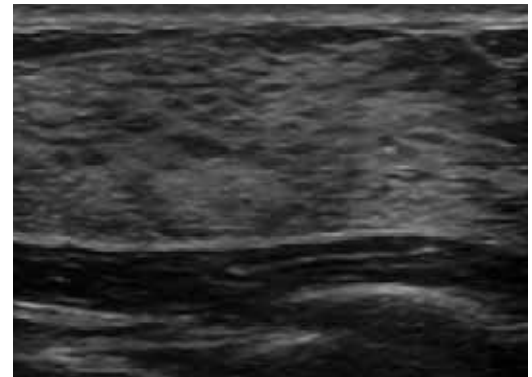


Figure 1 Breast Insonation

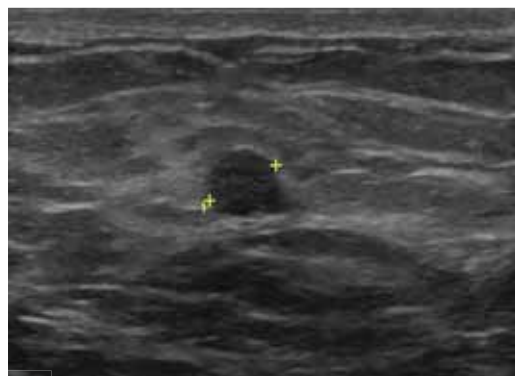


Figure 2 Solid Lesion

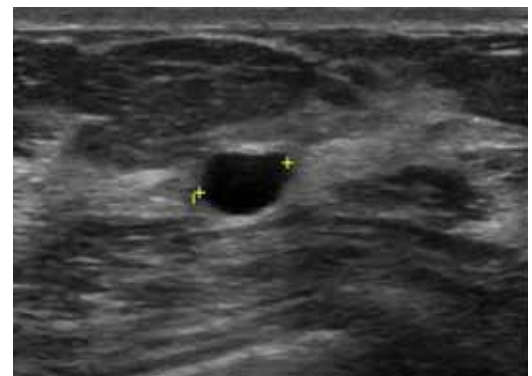


Figure 3 Cystic Lesion

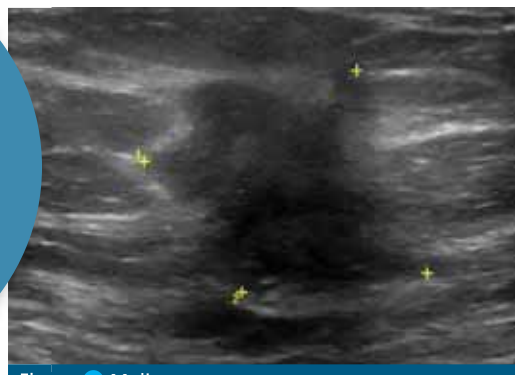


Figure 4 Malignancy



Figure 5 Ultrasound Guided Needle Biopsy

"This multidisciplinary approach to breast care has educated and improved all aspects of management."

Breast Ultrasound and the Surgeon



Mr Burton King

Continued from page 3

History

Historically, a surgeon's training has not emphasised ultrasound image interpretation skills. That situation has improved with training and collaboration with Radiologists. Over the last two decades, great progress has been made in breast ultrasound technology. Ultrasound machines have become smaller, portable and the image clarity can enable anatomical study². Breast surgeons have a unique advantage in interpreting breast and axillary ultrasound images as we are familiar with the internal anatomy, tissue appearance and textures, and we have consistent feedback and validation from operative findings and histology. This multidisciplinary approach to breast care has educated and improved all aspects of management.

Uses

In summary, targeted breast ultrasound is useful for:

- Discrete abnormalities seen on mammography or breast MRI
- Younger women < 35 years of age with discrete symptoms
- An additional assessment of nodular, dense breast tissue that is opaque on mammography
- Breast symptoms during pregnancy
- Women with breast implants
- Breast infection to exclude an abscess or collection
- Breast biopsy, aspiration and drainage
- Axillary lymph node assessment prior to breast cancer surgery
- General surveillance in conjunction with clinical examination and mammography.

Interesting present and future prospects:

- Intraoperative breast ultrasound to improve surgical precision³
- 3D sensor tracking ultrasound
- Elastography⁴
- Automated breast ultrasound for screening
- Contrast enhanced breast and axillary ultrasound.

Breast ultrasound has become a useful clinical tool, indispensable in day-to-day clinical practice. It is a low-cost modality with no ionising radiation, and it is well tolerated and accepted by patients and facilitates good patient care.

Mr Burton King

Mr King is a Breast and General Surgeon who is based at The Breast Centre, at Bowen Hospital in Crofton Downs, Wellington.

Mr King has a special interest in breast cancer and breast ultrasound. He routinely performs ultrasound guided needle biopsies at The Breast Centre. He has published papers in Breast Surgery and Anatomy.

He is also a Major in the Royal New Zealand Army Medical Corps, an examiner for the Royal Australasian College of Surgeons and a Senior Clinical Lecturer at the Medical School University of Otago.

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"This multidisciplinary approach to breast care has educated and improved all aspects of management."



The Breast Centre

Level B1, Bowen Centre,
98 Churchill Drive, Crofton
Downs, Wellington
P: (04) 891 0575
F: (04) 891 0577
E: info@thebreastcentre.org.nz

Chronic Rhinosinusitis – From Douches to Drills



Mr Campbell Baguley

Wakefield Hospital

Area: Otolaryngology

Article written by: Mr Campbell Baguley, Otolaryngologist, ph (04) 381 8120

This article will look at recent changes in our understanding of the condition with implications for primary practice.

Chronic Rhinosinusitis (CRS) is a commonly encountered problem in primary care with numerous challenges relating to diagnosis and treatment. Its prevalence has been reported to range from one percent if endoscopic confirmation is required, to 15% when a population was surveyed regarding persistent 'sinus trouble' for three months or more in the past year.^{1 (pg 55)}

CRS is often managed with topical treatments +/- systemic corticosteroid medications and antibiotics. The benefit of each of these medications is variable and

antibiotics in particular may be overprescribed. One should consider the diagnostic criteria for CRS as recently clarified¹.

Continued on page 6.

The diagnostic criteria for CRS:

→ Inflammation of the nose and paranasal sinuses characterised by two or more symptoms, one of which should be either nasal blockage/obstruction/congestion or nasal discharge (anterior/posterior nasal drip)

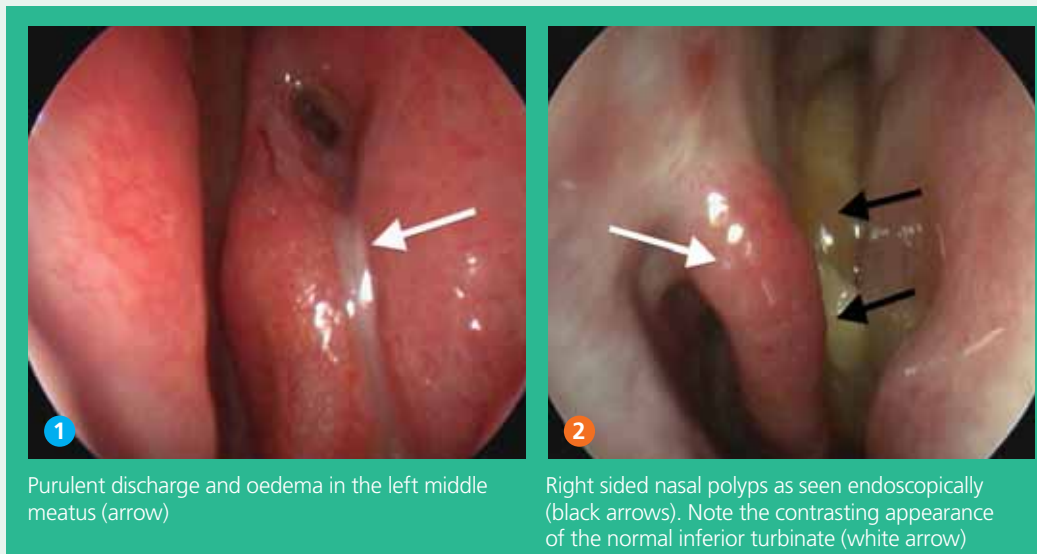
→ ± facial pain/pressure

→ ± reduction or loss of smell

→ for ≥ 12 weeks

Chronic Rhinosinusitis – From Douches to Drills

Continued from page 5



1 Purulent discharge and oedema in the left middle meatus (arrow)

2 Right sided nasal polyps as seen endoscopically (black arrows). Note the contrasting appearance of the normal inferior turbinate (white arrow)

This should be supported by demonstrable disease. Either endoscopic signs of:

- nasal polyps, and/or
- mucopurulent discharge primarily from middle meatus

and/or

- oedema/mucosal obstruction primarily in middle meatus

and/or

- CT changes
- mucosal changes within the ostiomeatal complex and/or sinuses.

An example of mucopurulent discharge as seen endoscopically is shown, see figure 1, polyposis in figure 2 and radiologic changes in figure 3.

Access to endoscopy and imaging (CT) is not practical for some patients so many are treated when symptomatic criteria are reached. Many patients though, have predominant pain symptoms, frequently with associated nasal symptoms that are autonomic nerve-mediated. Alternate reasons for facial pain should be considered.

Response to Medical Therapy

I recently investigated a cohort of patients, with CT confirmed CRS, who underwent maximal medical therapy that included three weeks of prednisone, topical steroid sprays, saline irrigation and antibiotics if their nasal discharge was discoloured². Their follow-up after medical therapy included repeat endoscopy and CT at around six weeks.

50%	of the group of 86 were surgical candidates, as they remained symptomatic after medical therapy, with persistent inflammation on CT.
14%	had resolution of both symptoms and radiological change, see figure 4.
24%	were asymptomatic, or had 'control' of symptoms, but still had radiologic changes.
12%	had symptoms, but normal CT scans. This implied that their CRS resolved but they also had other diagnoses that required treatment such as allergic rhinitis without CRS, tension type headaches or migraine.

Impact of Persistent Radiologic Disease

43% Those with persistent CRS on CT who were not symptomatic, were highly likely to suffer relapse of symptoms (requiring further prednisone or surgery). This occurred in 43% of this group of 21 patients a median of six months after medical therapy.

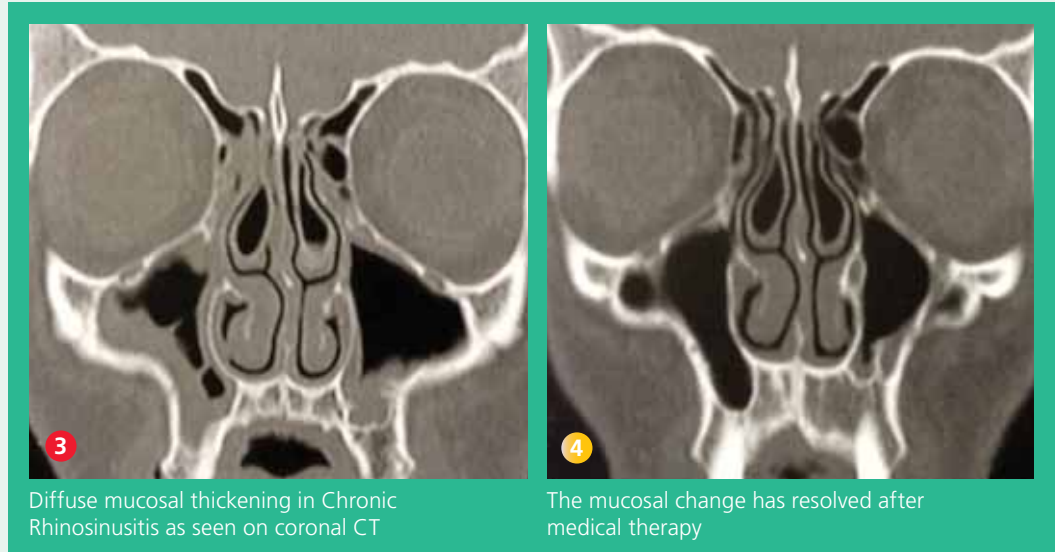




The Value of Post Treatment Endoscopy

Endoscopic findings were significant in that symptom relapse was much less likely if endoscopy was normal (0 vs 53%, $p=0.035$). Knowledge of the endoscopic appearance of a patient's sinuses after both medical and surgical treatment helps guide the exact maintenance regimen and follow-up required.

Furthermore, endoscopy may reveal specific problems like postoperative scarring, that can explain in some patients why topical therapy is failing.



Diffuse mucosal thickening in Chronic Rhinosinusitis as seen on coronal CT

The mucosal change has resolved after medical therapy

Surgical Treatment

For carefully selected patients, surgery is highly effective for medically resistant CRS. What isn't always understood by those other than ENT surgeons, is the range of surgeries available, all of which may be called 'Functional Endoscopic Sinus Surgery' (FESS). Procedures range from balloon dilatation to minimal openings of one or more paranasal sinuses, to wide opening of all of them to the anatomical limits available and including drilling of bone that separates sinuses (such as the modified Endoscopic Lothrop procedure for frontal sinusitis). Surgical time can thus vary from about 15 minutes to over three hours.

Choice of Procedure

Limited surgery usually addresses anatomical variations that contribute to limited sinus disease, as depicted by the CT. Or patients may have isolated sinus disease presumably due to a triggering factor (bacterial, fungal) that affected mucosa in a limited area.

Extensive disease such as widespread polyposis generally requires more extensive surgery, unless a patient accepts a series of minimal procedures over an indefinite period.

What is true for virtually all patients with extensive mucosal inflammation is that the aim of surgery is to facilitate access for topical (mainly steroid) treatment. It has become clear that wide openings of all involved sinuses are required to allow access, and high volume irrigation allows optimal steroid penetration^{3,4}.

Thus even the most severe cases can achieve long term symptom

and disease control. Patients can hope to transition from frequent systemic, to topical maintenance therapy.

Summary

Chronic rhinosinusitis, like asthma, is an inflammatory process that tends to suffer relapses and require long-term management. This may depend on the degree of 'inflammatory load', as depicted by imaging and endoscopy. More severe cases require surgical management to achieve symptom control via postoperative topical therapy, which is possibly as important as the surgery itself.

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Mr Baguley is an Otolaryngologist who consults at the Wakefield Specialist Medical Centre, 99 Rintoul Street, Newtown, Wellington and operates at Wakefield Hospital, Florence Street, also in Newtown, Wellington.

Mr Baguley specialises in:

- Nose and sinus surgery with its extended (orbital and skull base) applications
- Complex frontal sinus pathology
- General adult and paediatric ENT conditions and surgery.

For further information

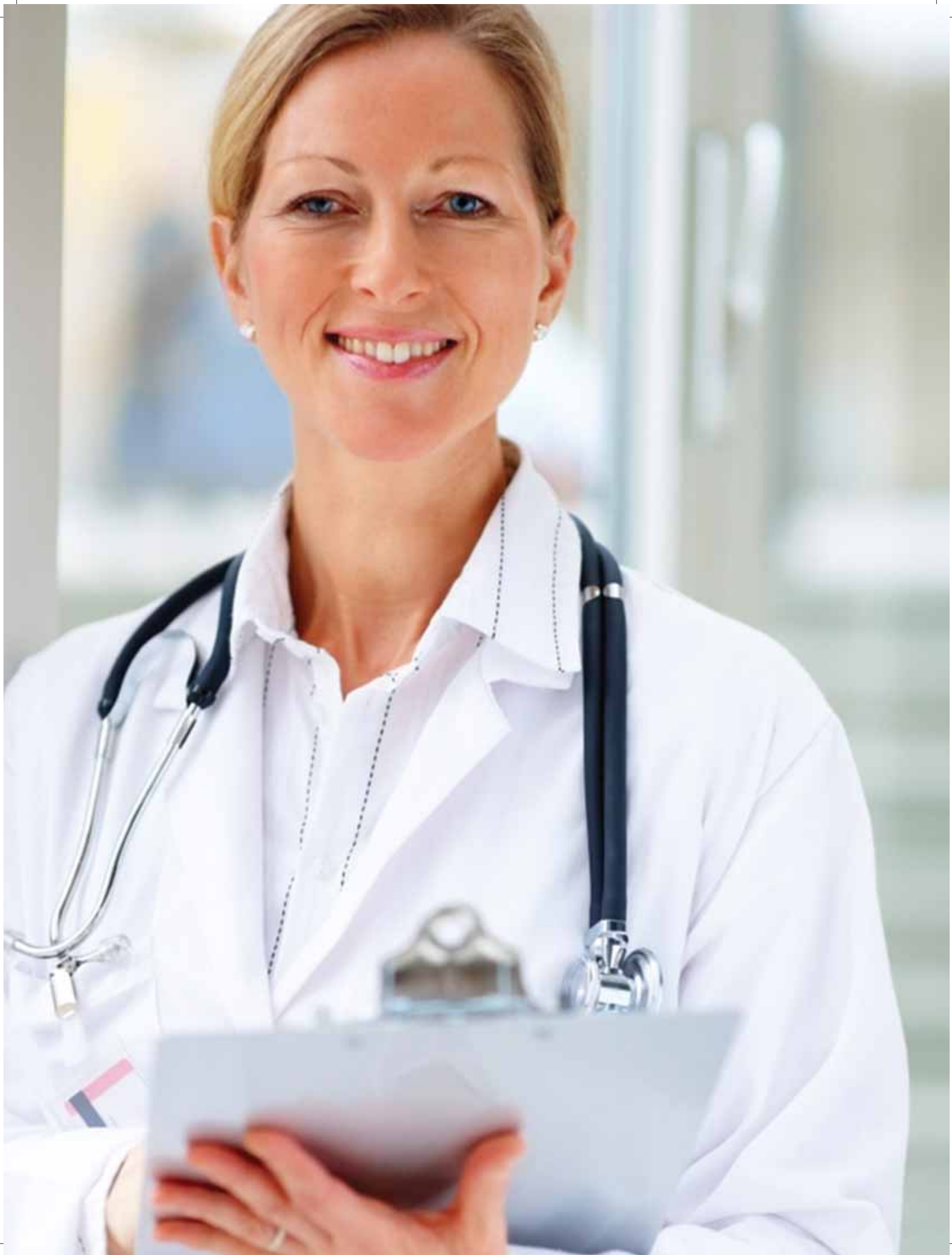
Mr Baguley can be contacted:

P: (04) 381 8120

F: (04) 381 8121

E: specialists@wakefield.co.nz

Healthlink: wakespec





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Capital Critical Care Specialists

Wakefield Hospital

Profiling Wakefield Hospital's Intensivists



1 Dr Paul Young
BSc(Hons), MBChB, FCICM

Paul is an Intensive Care Specialist and is the Medical Director of the Wakefield Hospital Intensive Care Unit. Paul grew up in Wellington, attended Auckland School of Medicine, and then completed most of his Intensive Care training in Melbourne. Paul is a member of the Australian and New Zealand Intensive Care Society Clinical Trials Group and is actively involved in a number of research projects.

2 Dr Richard (Dick) Dinsdale
MB ChB, FANZCA, FCICM

Dick obtained his medical degree from Sheffield, UK in 1978 and completed specialist training in 1987. He is a specialist in Cardiac Anaesthesia and Intensive Care Medicine. Dick has expertise in mechanical ventilation, invasive monitoring, ultrasound and fibreoptics, as well as in the advanced support of critically ill patients. He has been practising as an Anaesthetist and Intensive Care Specialist at Wellington Hospital and at Wakefield and Bowen Hospitals since 1988.

3 Dr Alex Psirides
MB, BS, BSc, FCICM

Alex is a member of the Intensive Care team providing ICU and HDU services at Wakefield Hospital. Alex graduated from University College London in 1995 and has trained in Intensive Care Medicine in England, New Zealand and Australia.

He has worked as a specialist in the Intensive Care Unit at Wellington Regional Hospital since 2011 and was recently appointed a Senior Clinical Lecturer at the University of Otago. His special interests are Early Warning Scores and Medical Emergency Teams, Aero-medical Retrieval and Inter-hospital Transfers, ICU Outreach Services, eLearning and FOAMed (Free Open Access Medical Education).

4 Dr Peter Hicks
MB ChB, FCICM

Peter trained in Auckland Hospitals completing Anaesthesia and Intensive Care Medicine in 1993 but no longer practises Anaesthesia. He works at Wellington Hospital and Wakefield Hospital as an Intensive Care Specialist. In addition to intensive care medicine, he is interested in clinical information technology and informatics.

5 Dr Ben Barry
MBBS (London), BSc (Hons), FRCA (UK), FCICM

Ben is both an Intensive Care Specialist and Anaesthetist. As well as being part of the Intensivist group at Wakefield Hospital, he regularly anaesthetises at Bowen Hospital. Ben graduated from the Middlesex Hospital Medical School, London, in 1990. In 1998, Ben trained in both Anaesthesia and Intensive Care Medicine in Sheffield and Leeds where he gained his Fellowship of the Royal College of Anaesthetists. After completing advanced Intensive Care training in Leeds he spent 2002 as Locum Intensivist at Middlemore Hospital before returning to St James's University Hospital in Leeds in 2003 as Consultant Intensivist and Anaesthetist. Ben has worked in Wellington Regional Hospital in Intensive Care and Anaesthesia since 2006 and gained the Fellowship of the College of Intensive Care Medicine in 2007. Ben's experience over the years in Leeds, Auckland and Wellington enables him to safely, confidently and effectively manage patients with a wide range of critical illnesses. His special interests include paediatrics and the management of renal failure in the ICU.

6 Dr Chris Poynter
MBChB, FCICM, FANZCA

Chris is an Intensive Care Specialist and Anaesthetist who works at Wellington Regional Hospital as well as part of the Capital Critical Care group at Wakefield Hospital. He trained through Auckland Medical School and moved to Wellington in 2009, completing both fellowships in 2012. Chris currently runs the Wellington Intensive Care Medicine course and has interests in education, welfare and environmental sustainability.

7 Dr Shawn Sturland
MBBS, FANZCA, FCICM

Shawn is an Intensive Care Specialist and Anaesthetist who works at Wellington Regional Hospital and is also part of the Capital Critical Care group at Wakefield Hospital. He is the Clinical Leader of the Wellington Hospital Intensive Care Unit and works as an Intensive Care Specialist at Wakefield Hospital.

8 Dr Bob Ure
FCICM, FANZCA, MBChB

Bob is an Intensive Care Specialist and Cardiac Anaesthetist.

Enhanced Intensive Care Services at Wakefield Hospital

New Consultant

Wakefield Hospital

Service: Intensive Care



Wakefield Hospital, long recognised for delivering complex surgery within an environment noted for its uncompromising patient care, recently announced a partnership with Capital Critical Care focused on enhancing its already market-leading Intensive Care service.

Wakefield Hospital now offers what is arguably the most comprehensive private Intensive Care service in the country. A total of eight Intensive Care Specialists, all Fellows of the College of Intensive Care Medicine (FCICM) of Australia and New Zealand provide 24 hour care for patients in the Wakefield Hospital Intensive Care Unit, allowing the safe delivery of highly complex surgery in a private setting.

The implementation of this service also provides further peace of mind for patients undergoing less complex procedures in the unlikely event that unforeseen complications arise during their surgery.

Wakefield's decision to enhance the existing Intensive Care service is part of an ongoing commitment to offering the highest standards of safety and quality to patients ensuring we continue to provide a world-class private healthcare service.

What is Intensive Care?

In recent years, Intensive Care has become a complex medical specialty in its own right – focused on the diagnosis and management of life threatening conditions which require sophisticated organ support and invasive monitoring.

The modern specialty of Intensive Care began with the poliomyelitis epidemic in Denmark in the early 1950s. The use of prolonged manual positive pressure ventilation in Copenhagen during this epidemic stimulated further research into this patient support modality.

Building upon the success of mechanical positive pressure ventilation, the management of pulmonary diseases and complications passed from infectious diseases departments to recovery wards, with Intensive Care Units usually developing adjacent to operating rooms.

The ability to treat respiratory failure made a whole range of new diseases and complications amenable to treatment. Chest injuries, tetanus, and postoperative respiratory failure became common conditions treated in Intensive Care Units.

The first recognisable Intensive Care Unit in Australasia was founded in Auckland in 1958. Since that time Intensive Care Units have proliferated rapidly and the scope of Intensive Care practice has increased substantially.

Intensive Care Units now care for critically ill patients with a wide range of life-threatening respiratory, circulatory, neural, and metabolic disorders caused by many medical and surgical diseases. Intensive Care Units have also become critical to the provision of perioperative care for patient's undergoing various forms of surgery including cardiac surgery, gastrointestinal surgery, and neurosurgery.

While the management of patients requiring Intensive Care was once mainly undertaken by Anaesthetists and General Physicians with an interest in Intensive Care Medicine, there is now a dedicated training programme for Intensive Care Specialists in Australia and New Zealand which is widely recognised as the best training programme anywhere in the world.

For further information

Please contact:
Julia Catsburg
Wakefield Hospital Manager
P: (04) 381 8107
julia.catsburg@wakefield.co.nz

Wakefield Hospital



Mr Kelvin KH Woon
MBBCh BAO FRCS (SN) Eng
FRACS

Consultant Neurosurgeon

P: (04) 381 8120
F: (04) 381 8121
E: specialists@wakefield.co.nz

Speciality

Neurosurgery

Background

Kelvin has been a Consultant Neurosurgeon at Wellington Hospital since 2009.

Training

Kelvin completed his medical school degree at the Queen's University Belfast, UK. He subsequently completed his neurosurgical training including a spinal fellowship in Nottingham, UK. He is on the Neurosurgical Specialist Register in the United Kingdom and New Zealand.

Special Interests

- Brain and spinal intradural tumours
- Hydrocephalus, neuroendoscopy
- Degenerative spines.

Osteotomies Around the Knee

An alternative to knee joint arthroplasty?

Bowen Hospital

Area: Orthopaedics
Article written by: Mr Grant Kiddle, Orthopaedic Surgeon,
ph (04) 464 0035

Osteotomy around the knee became a standard treatment option for unicompartmental knee osteoarthritis in the late 1950's and 1960's, however with the success of knee joint arthroplasty in the 1980's and 1990's, osteotomy lost its importance although always remained an option. The development of new plates, particularly those with angular stability, during the last 15 years has led to a revival of osteotomy especially for the younger patients.

These stable implants enable earlier mobilisation of the knee, and provided patient selection is correct, one could expect between 65-90 percent lasting at least ten years before requiring a knee joint arthroplasty.

Knee joint arthroplasty is a well-established and accepted technique for advanced knee joint osteoarthritis, however in younger patients alternatives need to be considered. Wainwright et.al compared revision and mortality rates of 4668 patients undergoing



X-ray and illustration of distal femoral osteoarthritis

primary total hip and knee replacement between 1989 and 2007 at a Dunedin Hospital and found that patients younger than 50 years at the time of surgery have a greater chance of requiring a revision than of dying, those around 58 years of age have a 50:50 chance of needing a revision, and in those older than 62 years the prosthesis will normally outlast the patient. Patients over 77 years old have a greater than 90% chance of dying than requiring a revision whereas those around 47 years are on average twice as likely to require a revision as die.



Mr Grant Kiddle



Image: Grant Kiddle

Image: Depuy Synthes

al opening lateral wedge osteotomy for lateral



Image: Grant Kiddle

Image: Depuy Synthes

X-ray and illustration of proximal tibial opening medial wedge osteotomy for medial compartment (varus) osteoarthritis

By careful patient selection, surgical technique and planning complications such as non-union, over or under correction can be avoided and decreased pain with an improved level of function could be reasonably expected to last for at least ten years before knee joint arthroplasty need be considered.

Which Patient?

Typically suitable patients:	
✓	have unicompartamental medial or lateral femorotibial osteoarthritis
✓	< 60 years of age
✓	complain of pain in the affected joint compartment when weight bearing
✓	no patellofemoral osteoarthritis
✓	range of motion >100 degrees with <10 degree fixed flexion deformity
Contraindications include:	
✗	cigarette smoking (often leads to delayed consolidation of the osteotomy)
✗	overweight
✗	rheumatoid arthritis

Continued on page 14.

Osteotomies Around the Knee



Mr Grant Kiddle

Continued from page 13

Which Osteotomy?

Osteotomies around the knee provide pain relief by realigning the mechanical axis and unloading the degenerative compartment. The most common form of osteoarthritis is for the medial compartment to be primarily involved, here the deformity is described as *varus* and the osteotomy should be designed to shift the mechanical axis into the lateral compartment. Alternatively and less common the lateral compartment is involved, the deformity is known as *valgus* and the osteotomy moves the mechanical axis medially.

The osteotomy can be performed either above or below the knee joint, i.e. in the tibia or the femur, and are described as either an opening or closing wedge. In the opening wedge, a transverse cut is made in the bone and the two bone ends are held distracted at the medial or lateral cortex. In the closing wedge, a wedge shaped piece of bone is removed and the bone ends are compressed together medially or laterally.

My Osteotomy Technique

My personal preference is to perform a distal femoral opening lateral wedge osteotomy for lateral compartment osteoarthritis and a proximal tibial opening medial wedge osteotomy for medial compartment osteoarthritis. Most corrections require an opening of between seven – 12mm, for larger corrections autograft (from patients iliac crest), demineralised bone (cadaveric bone) or synthetic materials such as hydroxyapatite can be used to bridge the gap between the bone ends and enhance bone healing.

There are a number of internal fixation devices on the market that hold the osteotomy in place till the bone healing has occurred. The simplest of these are metal staples but more commonly a more rigid fixation device is used such as the angular stable plate and screws as seen in the illustrations on the previous page. These enable early mobilisation of the knee joint postoperatively thus avoiding stiffness and reducing muscle atrophy.

Mr Kiddle is an Orthopaedic Surgeon who consults from the Wellington Orthopaedic and Sports Surgery, based at the Bowen Centre, Bowen Hospital, Crofton Downs, Wellington and also operates at Bowen Hospital. Mr Kiddle's current professional interests are knee/shoulder and sports related orthopaedic problems.

For further information

Mr Kiddle can be contacted on,
P: (04) 464 0035, or
E: admin@woss.co.nz

Recovery Process

Postop	Patients are placed in a hinged knee brace
Overnight	Patients are usually in hospital overnight
First six weeks	Crutches are used with only touch weight bearing over this period
Six week mark	An x-ray is taken to ensure the bone is healing
After six weeks	Brace and crutches are usually discarded

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Lateral compartment osteoarthritis of the knee: Biomechanics and surgical management of end-stage disease
C. E. H. Scott, R. W. Nutton, L. C. Biant
Bone Joint J April 2013 95-B: 436-444.



Surgery Partnership for Hawke's Bay

Royston Hospital

Service: Public/Private Partnership for Elective Surgery in Hawke's Bay



For over ten years, Royston Hospital and Hawke's Bay District Health Board, HBDHB, have mutually agreed short term contracts to undertake public waitlist surgery within our private facility.

In 2011, HBDHB and Royston agreed a more sustainable three year contract, to provide up to \$3m of elective surgery for HBDHB waitlist patients.

General Practitioners within our region may be aware that a number of patients referred for surgical clinic assessments at HBDHB have in turn been referred for their elective surgery at Royston. This initial selection process is managed by HBDHB according to their wait time criteria.

This partnership contract has resulted in over 400 patients undergoing their procedures at Royston since August 2011.

With the contract now in its final year it is timely to reflect on the delivery of this service to the Hawke's Bay community.

A total of 402 procedures have been undertaken to date, spread across several specialties including orthopaedics, ophthalmology, general, ENT, urology and gynaecology.

Orthopaedic procedures include over 50 total hip and knee joint replacements, with a high volume of general surgery undertaken including 70 gall bladder procedures. Cataract extractions number close to 100 with ENT, gynaecology and urology making up the remaining patient numbers.

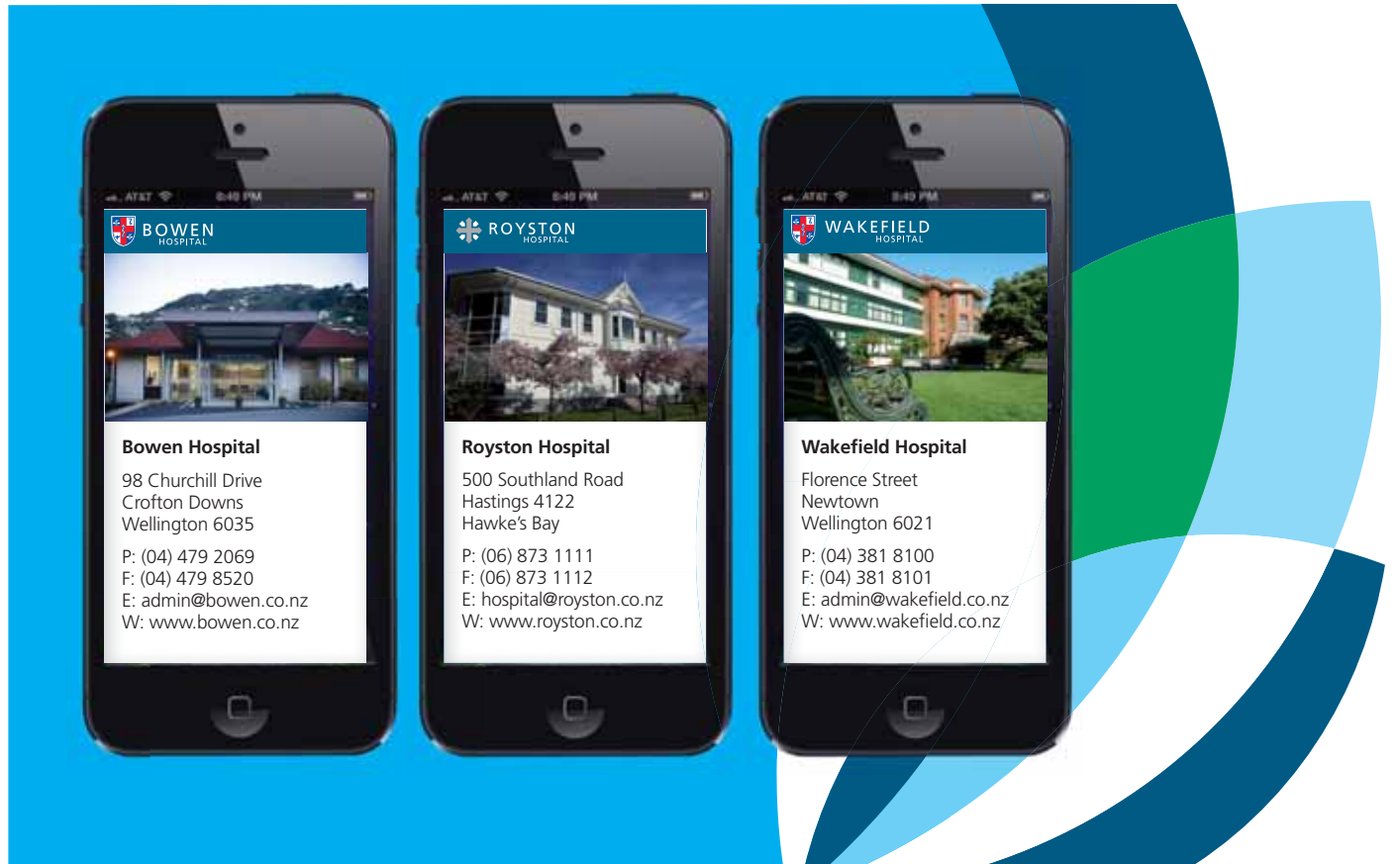
With Royston's relocatable 'POD' now fully equipped and operational as a fourth theatre it provides us further capacity to extend this public/private partnership beyond July 2014, should HBDHB require this adjunct to their services.

As a courtesy, Royston Hospital continues to inform GPs by fax on a daily basis when your patient is admitted to our hospital for surgery. Our Infection Prevention Coordinator continues to be active in monitoring all postoperative wound issues and values the feedback received from you and your practice nurses.

For further information

Please contact:
Denise Primrose
Royston Hospital Manager
P: (06) 873 1113
E: denise.primrose@royston.co.nz

Contact Us



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