

Sonic Reports

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SONIC
HEALTHCARE

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Cover image: Daniel Odukoya,
Molecular Pathology Laboratory
Supervisor, Health Services
Laboratories, UK



Molecular Pathology,
Sullivan Nicolaides
Pathology, Australia

CEO Message



For many people, 2020 will be remembered for the profound and prolonged effects of the COVID-19 pandemic – the social disruption, the terrible economic impacts and most significantly, the tragic loss of life. For me, however, the most memorable association of 2020 will be the remarkable way that Sonic Healthcare and our extraordinary people have responded during this time of global crisis.

I have been humbled and inspired in equal measure to lead our company this year and to see how we have overcome the many challenges COVID-19 has thrown in our path. We have adapted rapidly to a dramatically new working environment, and in doing so, become stronger than ever before.

Regardless of where we all live and work, we have faced many of the same challenges and hardships. The pandemic has united us through these common experiences and a shared resolve to ensure that, as essential healthcare workers, we play a crucial frontline role in fighting COVID-19. As members of the Sonic Healthcare family, your contribution to Sonic and to the overall public health response to COVID-19 has been immensely valuable and will never be forgotten.

More than ever, I am convinced that Sonic's unique culture – with Medical Leadership at its core – has enabled us to respond to this pandemic so courageously. As healthcare professionals, most of us are motivated by a desire to help others. Our culture at Sonic defines such a higher purpose, one which strives not only to help others but to contribute more broadly to society. In essence, it is a culture which creates value that transcends the conventional financial measures of a company's success.

That this phenomenon is the life force of Sonic Healthcare, has never been more apparent to me than during the 2020 year.

In this special issue of Sonic Reports, we have set out to acknowledge and celebrate some of your inspirational stories and achievements of the past year. For every specific story we have included, there are many more that are equally deserving of acknowledgement. We share these stories simply because they are representative of the challenges, perseverance and dedication shown by Sonic teams around the world.

As we approach the end of 2020 I hope that, like me, when you reflect on this monumental year, you will feel a genuine sense of pride in our achievements and in your personal contribution, not only to Sonic, but to your community and the global response to the pandemic. Please accept my profound thanks for your hard work, dedication and strength of purpose.

Finally, I would like to take this opportunity to wish you and your loved ones a very happy and safe Festive Season – it is my hope that you find a few moments of peace and relaxation in these turbulent times.

A handwritten signature in black ink, appearing to read 'Colin Goldschmidt', with a stylized flourish at the end.

Dr Colin Goldschmidt
CEO – Sonic Healthcare



Louise Cushing, Jenni Griffin and Michelle Culton | Melbourne Pathology, Australia

Behind the mask: Working in Australia's aged-care facilities

Louise Cushing is a Collection Area Manager for Melbourne Pathology in Victoria, Australia. In addition to managing 23 pathology collection centres, three home visiting crews and 30 staff, she is also part of a specialist team collecting COVID-19 specimens from aged-care residents and staff – a group affectionately known as ‘the swab squad’. Despite the contagious nature of the virus and the difficulty of the work, Louise’s frontline experiences have been overwhelmingly positive.

“My team is just amazing. You have to volunteer to be part of the COVID collection team, and it attracts people with the most beautiful natures. They really want to do this. They’re on the front lines to combat the virus. They love the experience, being part of history, the camaraderie, the smiles from the residents who just love to see a visitor.”

Full personal protective gear (PPE) is a requirement for all pathology collectors, who must wear gowns, gloves, facemask and face shield. The equipment is hot, tight and uncomfortable, however it provides an important physical and psychological shield. “I’ve never felt unsafe in my PPE,” says Louise. “I’ve trained many people in how to put it on and take it off safely. We do spot checks every time on one another to make sure we are all safe.”

Despite Louise’s positive experiences, performing aged-care collects also has its difficulties.

“Sometimes we have to keep going back to the facilities week after week to test the residents,” she said.

“You see heartbreaking things in there. The residents haven’t seen anyone in months. You see family members yelling up to their loved ones from the street below, saying ‘Hi Mum’, but that’s it. That’s as close as they can get.”

While many residents are happy to see a familiar face or just have someone new to talk to, Louise admitted that COVID-19 collections can be particularly difficult for residents with cognitive impairment. “The dementia wards are hard,” she explains. “They don’t understand what is happening.

You try to use your voice to reassure them, but all the tools you would normally use are gone – your smile, your facial expressions. You’re stripped of it all by the mask and face shield you have to wear. You have to make sure the residents understand that they’re safe and that we’re friendly. It’s scary for them.”

Louise is conscious of the impact that aged-care visits may be having on her team, and makes sure they regularly debrief as part of the process. “We’re seeing people die who we’ve been seeing every week.” Despite this, the collectors understand the critical work they are doing to prevent the spread of the disease and to keep the vulnerable residents safe.

Louise can see a time when the pandemic is a thing of the past, and knows it will leave an unexpected void in her life. “I love being on the ground with the team. It’s the best. I’ll really miss it when it’s over.” And then, through tears, she says, “I am so proud of the people I work with. I’ve learnt so much from them.”



Creating a new test to diagnose COVID-19



In January 2020, when COVID-19 was still an epidemic known as novel coronavirus, a commercially available test didn't exist to diagnose the condition. As soon as China released the first genetic sequence of the virus in January, expert molecular pathologists and senior scientists at Sonic laboratories in Germany, Australia and the UK began the task of developing their own in-house tests.

Sonic Healthcare Germany's Medical Laboratory Bremen established one of the first RT-PCR tests in Europe, following the protocols of the Charité's WHO reference lab. Soon after, the rest of the Sonic Healthcare Germany group followed and COVID-19 testing was quickly implemented in 27 Sonic laboratories throughout Germany. In Australia, Sullivan Nicolaides Pathology in Brisbane was the first private laboratory in the country to develop its own in-house testing methodology, using a two-gene panel to test for the presence of COVID-19. In the UK, Sonic Healthcare UK worked in parallel with Public Health England's reference laboratories until their test was ready to go live. All assays then had to pass external quality assurance schemes to receive ISO 15189 accreditation.

These exercises were completed in just a few weeks – a highly compressed development time, reflecting the enormous team efforts, with colleagues working long hours to ensure we were at the forefront of pandemic testing, and ready to play our part in protecting the communities we serve.

Expanding COVID-19 testing for underserved patients across the USA



Access to high-quality testing is a crucial component in the fight against COVID-19. In the USA, however, additional efforts are required to make these vital health services available to people who may not otherwise be able to access them for financial or other reasons. People who fall into this category are known as underserved patients.

In partnership with local and national government and public health agencies, Sonic Healthcare USA's clinical laboratories and pathology practices have employed multiple strategies to improve testing availability for these patient populations, which include nursing home residents, the homeless, disadvantaged communities and prison inmates.

In July 2020, Sonic Healthcare USA was awarded a contract from the National Institutes of Health (NIH) to increase COVID-19 testing capacities at nine high-throughput Sonic laboratory testing locations, as part of the Rapid Acceleration of Diagnostics (RADx) COVID-19 initiative. Sonic was also selected by the US Department of Health and Human Services (HHS) as one of two commercial laboratories to receive critical laboratory equipment to support COVID-19 testing expansion. A significant component of both initiatives includes improving testing access for underserved communities. The RADx initiative complements Sonic's current commitment to prioritise services to the most vulnerable and high-risk patients, which is a central part of our testing strategy.

The medical and operational teams at WestPac Labs (Santa Fe Springs, CA) are just one example, of the tireless efforts by Sonic Healthcare USA staff to support local municipalities, nursing homes, first responders, and underserved populations by providing on-site resources and logistical needs. Maryann O'Toole, Acting Vice-President of Operations of WestPac Labs, assisted the Union Rescue Homeless Mission in Los Angeles, including the infamous Skid Row, by being on-site and working alongside their physicians in the handling of specimens, transport coordination, and assisting with the delivery of results. This allowed the physicians and their teams to be more at ease with the entire process. "I truly believe that as Medical Laboratory Professionals, it is our responsibility to be ambassadors to all patients in need. We are not just known as a testing laboratory but have become true partners and colleagues to our hospitals, communities, nursing homes, senior living facilities, and our homeless populations," Maryann said.



Maryann O'Toole

Celebrating our nurses

When the World Health Organization designated 2020 as the Year of the Nurse and the Midwife, no-one could have foreseen the health crisis that would engulf the world in the space of a few short months.

2020 was chosen as the Year of the Nurse and the Midwife because it marks the 200th anniversary of the birth of Florence Nightingale, the world's most famous nurse and the founder of modern nursing. Her innovative, pioneering work was born out of crisis. Today, nurses around the world once again find themselves on the front line in a time of crisis – this time against COVID-19.

To mark the Year of the Nurse and the Midwife, Sonic Clinical Services (SCS), the Australian division that includes our network of general practices, is honouring and celebrating our nurses throughout 2020. Sonic employs almost 1,000 nurses whose outstanding expertise is helping to transform Australia's primary healthcare system, making a significant contribution to the health of the Australian people, particularly during COVID-19.

SCS CEO, Dr Gerard Foley, acknowledged the expertise and dedication of Sonic's nurses. "Now, more than ever, it is important that we make a special effort to recognise the invaluable contribution nurses make to the health and wellbeing of our entire nation," he said.

That recognition and admiration is mirrored by members of the general public who have taken to social media to acknowledge the amazing job our nurses do, thanking them for their care and compassion.



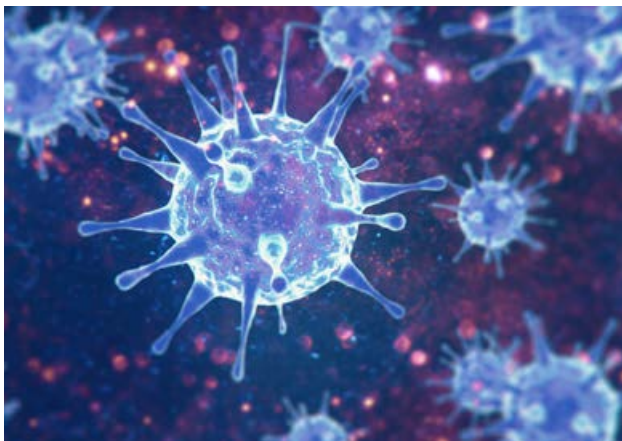
Nurses Claire Hill (L), Ruth Buckley (M) and Medical Director Dr Melissa Hikila | Omega Medical Centre, Australia

Vaccine trials

Oxford Vaccine Trial

Sonic's UK joint venture, Health Services Laboratories (HSL), is working with University College London Hospital (UCLH) in the trial of a new COVID-19 vaccine developed by the team at Oxford University. Known as ChAdOx, the trial is assessing whether the vaccine can protect healthy people from COVID-19, providing valuable information on safety aspects of the vaccine and its ability to generate good immune responses against the virus.

UCLH is a participating site in the trial, and HSL is actively supporting them by providing COVID-19 serological screening. The first phase of the nationwide trial in adult volunteers began in Oxford in April, using healthcare workers who have had a higher chance of exposure to the SARS-CoV-2 virus.



So far, more than 1,000 immunisations have been completed, and follow-up is ongoing. In early August, vaccination and screening was expanded to the 56–70 age group, with the 70+ age group planned shortly thereafter.

Imperial College London Vaccine Trial

In another trial, UCLH has begun screening and vaccinating healthy volunteers in support of Imperial College London's COVAC-1 trial. This early phase trial aims to evaluate the vaccine on 300 people across a selected number of sites in the UK.

Many traditional vaccines are based on a weakened or modified form of virus, or parts of it, but the Imperial College's vaccine uses synthetic strands of genetic code (called RNA) based on the virus's genetic material. The COVAC-1 study is the first test of a new self-amplifying RNA technology, which has the potential to revolutionise vaccine development.

Having carried out rigorous pre-clinical safety checks of the vaccine, early studies suggest the vaccine could provide the desired immune response. Once injected into muscle, the RNA generates copies of itself and instructs the body's own cells to make copies of a spiky protein found on the outside of the virus. This should train the immune system to respond to the coronavirus so the body can easily recognise it and defend against it in future.

Sonic Healthcare and HSL are pleased to provide pathology support across all NHS partners for key COVID-19 clinical initiatives.

Services to pathology and COVID-19 acknowledged in Queen's Birthday honours

Sonic Healthcare UK's Group Medical Director, Dr Rachael Liebmann, and Ann Hannah, Rapid Response Laboratories and Histology Manager, have been recognised in the Queen's Birthday Honours.

Dr Liebmann has been awarded an OBE (Officer of the Most Excellent Order of the British Empire) in the Queen's Birthday Honours in recognition of her services to pathology. Ann Hannah has been awarded a BEM (British Empire Medal) for her services to healthcare during the COVID-19 pandemic.

Chief Executive of Sonic Healthcare UK, David Byrne, said: "We are absolutely delighted and warmly welcome Rachael and Ann's awards, which are hugely deserved. Both have worked tirelessly throughout the pandemic to ensure our laboratories have functioned efficiently and safely in times of extreme challenge."

Dr Liebmann said: "To be awarded an OBE for my services to pathology is an absolute privilege and is due to the amazing support I have had from my colleagues. It is really a testament to the recognition of the importance of pathology tests now more than ever."

Ann Hannah said: "This is a tremendous honour but all that we achieved, we achieved as a team so the honour is mine to share."



Ann Hannah | Rapid Response Laboratories and Histology Manager, Sonic Healthcare UK



Dr Rachael Liebmann | Group Medical Director, Sonic Healthcare UK

In addition to her role at Sonic, where she provides clinical oversight for The Doctors Laboratory and Health Services Laboratories, Dr Liebmann is a Consultant Histopathologist at Queen Victoria Hospital NHS Foundation Trust (QVH) and Vice-President of the Royal College of Pathologists. She has been recognised by her peers as one of the world's 100 most influential pathologists, been shortlisted for the Health Service Journal Clinical Leader of the Year, and has also received the Royal College of Pathologists Medal for Distinguished Service.

During COVID-19 QVH was designated a specialist surgical cancer hub, treating patients with high-risk cancers (head and neck, skin and breast) from hospitals across Kent, Surrey and Sussex, with pathology provided by Dr Liebmann and her team.

Ann Hannah is a Fellow of the Institute of Biomedical Sciences (cellular pathology), has a diploma in Medical Laboratory Management, and a Masters in Business Administration from the University of Westminster, where she was awarded a distinction, which has been invaluable in the complex provision of links with Health Services Laboratories and their NHS Trust partner and client hospitals.



The team from Bioscientia (from left to right): Dr Moritz Schuster, Dr Daniela Schui, Dr Oliver Harzer (CEO) & Dr Georg-Christian Zinn (Medical Director)

The science behind restarting a national sporting league 🇩🇪

In mid-May, 2020, Germany's Bundesliga became the first major international soccer league to return to the pitch, following the earlier suspension of its season due to COVID-19. At the time, Germany was in the middle of its first wave of infections, and strict guidelines were developed to safely allow teams to recommence their matches.

Sonic Healthcare Germany was closely involved with the league's restart, leading a consortium of Sonic and non-Sonic laboratories to set-up and implement comprehensive testing protocols.

Sonic's Bioscientia, Labor Augsburg and Labor 28 laboratories were also responsible for testing 37 teams across the country in the premier, second and women's leagues. All players, staff and referees were tested twice each week, with the second test performed 24 hours prior to the match.

The league's restart was a complete success, with the 2019/20 season completed on time and without major disruptions.

The approach has now become an operational blueprint for other sporting leagues around the world.

During the season, Bioscientia participated in a study to determine the presence of COVID-19 antibodies in all players and support staff.

The study monitored symptoms in players and officials, analysed PCR test results throughout the season and followed up with antibody testing. It concluded that professional soccer training and matches can be carried out safely during the COVID-19 pandemic as long as they are accompanied by strict hygiene measures and regular PCR testing. The study will be published in the British Journal of Sports Medicine.

Sonic Healthcare Germany's extensive experience in hygiene control during the pandemic, in both hospital and general settings, is also being used to safely re-open other venues across the country. Dr Christian Zinn, Medical Director of Bioscientia's Centre for Hygiene and Infection Control, is applying his expertise to develop sophisticated protocols for the re-opening of stadiums, sports halls and music and cultural events.

Globally, Sonic Healthcare practices have provided testing to sporting codes that include soccer, cricket, rugby league, rugby union, netball, Australian rules football, American football, volleyball, surfing and more.



Commemorative soccer ball presented to Sonic Healthcare Germany. The wording translates to 'Working together to start the ball rolling again'

Dealing with Australia's devastating bushfires

The catastrophic bushfires that raged across Australia in late 2019 and early 2020 had a devastating impact on people and property, as well as precious and unique flora and fauna.

The ferocity of the fires consumed everything in their paths, burning more than 12 million hectares. Almost 6,000 buildings were destroyed and, tragically, 34 people lost their lives.

Regional communities bore the brunt of the fires' impact, and, sadly, several Sonic staff were directly affected, losing their homes or animals, while hundreds more suffered as a result of the dislocation to their communities.

Sonic Healthcare responded by providing direct support to affected staff and communities, including emergency cash payments to staff members who lost their homes, regular wages to staff members who volunteered in local community fire services, and access to professional and confidential counselling and support services for affected staff.

In addition, Sonic donated to the Australian Red Cross Society's Disaster Relief Fund, as well as the Foundation for National Parks & Wildlife's Emergency Appeal. Staff around the world made further donations to these two charities, which were matched by Sonic, dollar for dollar.

Throughout the crisis, Sonic staff provided uninterrupted healthcare services, often in extremely trying conditions. Medical clinics in affected areas remained open, providing support for patients who had lost everything. Some just needed their prescriptions rewritten because they had been lost to the fires, while others needed greater medical and emotional support.



Dr Scott Reid | GP and volunteer firefighter, Lower Mountains Family Practice, Australia

Where possible, pathology collection centres also remained open to cater for urgent requests.

Couriers then volunteered to transport these specimens to a collection point or to one of our laboratories, often navigating perilous conditions in the process.

We are incredibly proud of the resilience and courage demonstrated by the many Sonic staff who served their communities with dedication and care under such difficult circumstances. Our thanks and appreciation is also extended to those Sonic staff members who worked as volunteer firefighters on the front lines.

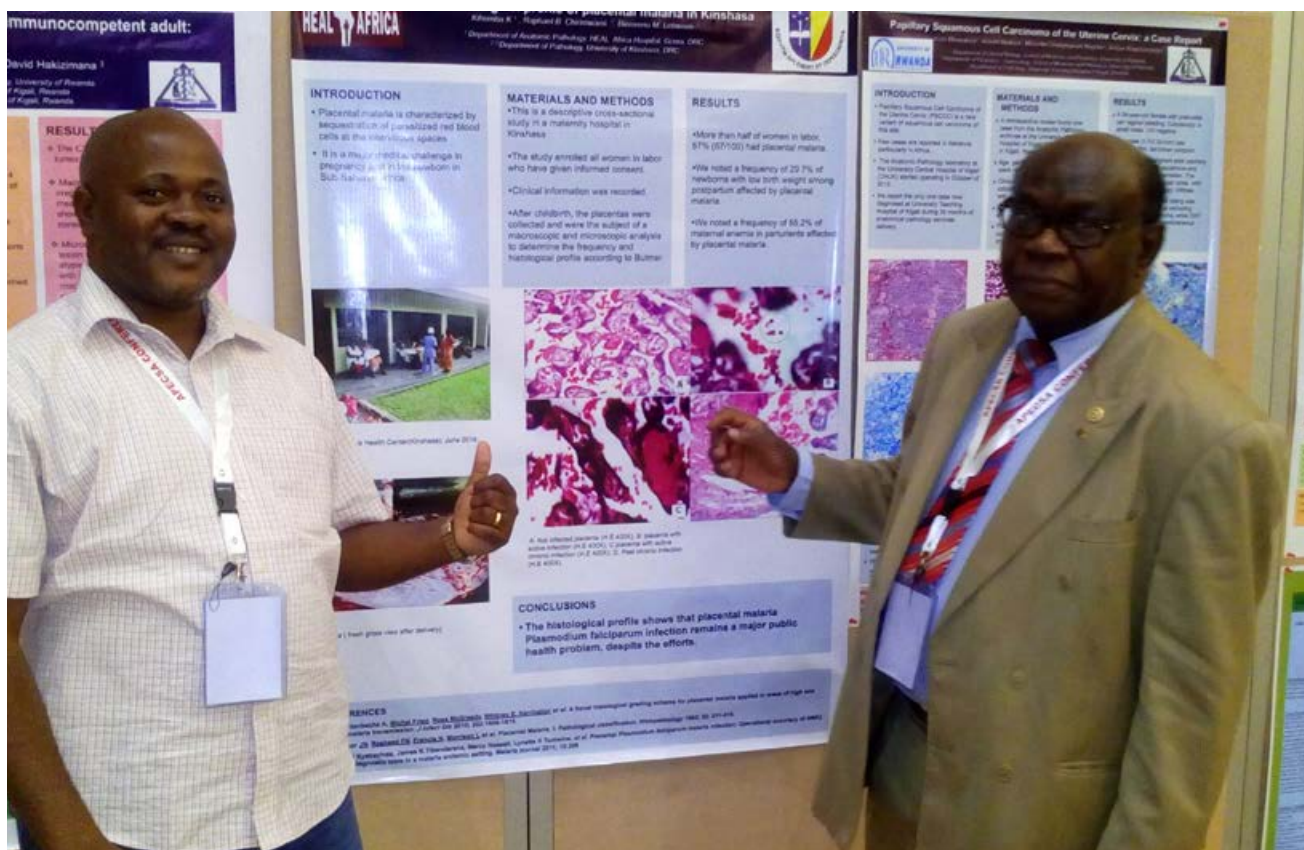
Testing for individual breast cancer risk in Switzerland

In the early 1990s, genomic identification and sequencing identified BRCA1 as the major gene responsible for early-onset hereditary breast and ovarian cancer. This discovery led to significant breakthroughs in the prevention of cancers with a hereditary predisposition.

However, most breast cancers are not hereditary and, in the last two decades, scientific advances have allowed doctors to determine a woman's personal risk of developing the most frequent forms of non-hereditary breast cancer. This mathematical tool is known as a polygenic risk score (PRS).

PRS is a mathematical formula that captures the combined effects of hundreds to thousands of genetic variants called single nucleotide polymorphisms (SNP). Individually, these SNPs only confer a tiny breast cancer risk (one hundredth that of BRCA1 mutations), however, jointly they are responsible for breast cancer risks similar to that of certain mutations. SNPs occur much more frequently than single gene mutations, so understanding how they work has the potential to benefit large numbers of women.

Medisupport in Switzerland has developed a PRS test that provides a personalised breast cancer risk score. The PRS score allows younger women to be assigned to a risk-appropriate screening scheme specific to their circumstances. This earlier intervention may help to save the greatest number of precious, young lives, while also improving public healthcare in Switzerland.



Dr Kasereka Kihemba (left, with the late Dr Raphael Kalengayi Mbowa) | Heal Africa

Maintaining a high-quality laboratory

Lifelong learning is a fundamental requirement for any practising physician, especially for pathologists who need constant exposure to rare and complex cases. Most pathology practices run weekly sessions for pathologists to discuss unusual cases that have been seen within the practice, but when you are the only pathologist in a busy teaching hospital, there is little opportunity for this kind of collegial professional development.

Pathologist Dr Kasereka Kihemba is the head of laboratory at HEAL Africa. In addition to establishing and maintaining a high-quality pathology laboratory in the HEAL Africa hospital, Sonic Healthcare also funded Dr Kasereka's formal pathology training.

Sonic ensures that Dr Kasereka and his scientist colleagues remain up-to-date by providing the latest microbiology and current histopathology texts, and access to many medical journals.

We also send histology slides from rare and interesting cases for Dr Kasereka to evaluate, to enhance his diagnostic skills.

Servicing of laboratory instruments is now done by specialised professionals rather than the maintenance staff at HEAL Africa.

This has seen a great increase in the scientific staff's knowledge of the instruments' functions.

Sonic provides access to high-quality reagents for the laboratory instruments from reputable, accredited suppliers in Africa, as well as ongoing technical advice and suggestions to the HEAL laboratory, particularly in the area of microbiology, which is vital in the African setting.

Sonic also sponsors Dr Kasereka and HEAL Africa radiologist Dr Sosthene Tsongo to attend regional conferences.

We have also enrolled the laboratory in the Centre for Disease Control's (CDC) parasitology quality assurance programs in Atlanta, Georgia. This includes the ability for lab staff to email photos of difficult parasites to the CDC parasitology staff for identification.

Together with the skill and dedication of Dr Kasereka and his staff, these collective initiatives help to ensure that the HEAL Africa laboratory provides high-level pathology services. Pleasingly, the high calibre of HEAL's laboratory was one of the deciding factors in HEAL Africa becoming a teaching facility for the COSECSA (College of Surgeons of East, Central and Southern Africa) Surgical Training program, a decentralised surgical training program with a common exam and an internationally recognised surgical qualification. Pathology labs of the order we have developed at HEAL are extremely uncommon in Central Africa.

Online education portal

Medicine is a continually evolving discipline, and Sonic Healthcare has always recognised the important role we play as leaders and educators.

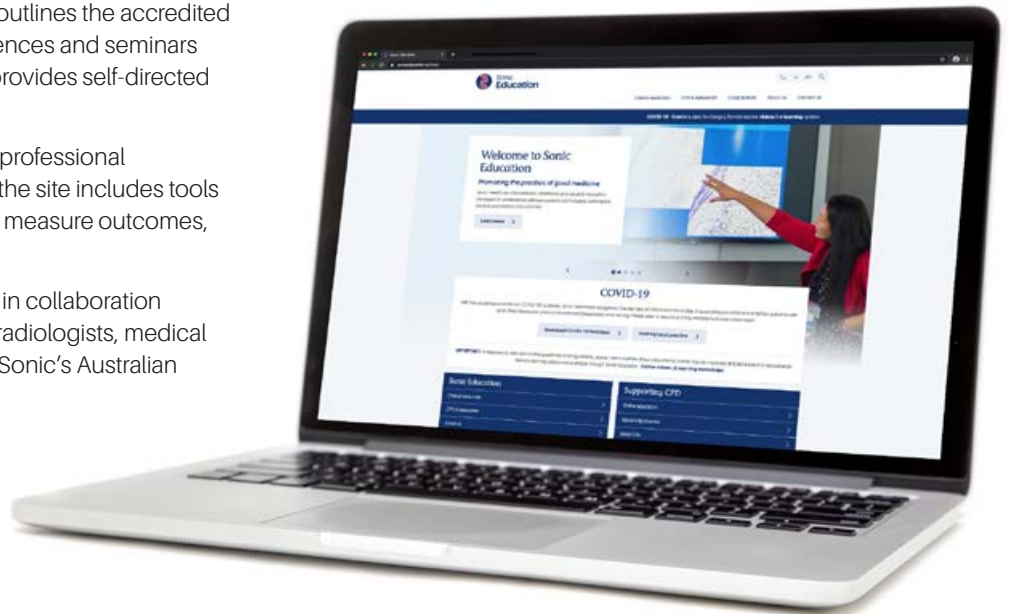
As part of our commitment to sharing knowledge and expertise, Sonic's Australian divisions have launched Sonic Education, a new online learning platform that showcases a comprehensive range of medical education programs and resources for doctors and healthcare professionals.

The dedicated education website – www.soniceducation.com.au – outlines the accredited face-to-face educational conferences and seminars available to clinicians, and also provides self-directed activities.

Most courses attract continuing professional development (CPD) points, and the site includes tools to help assess performance and measure outcomes, as part of the CPD requirements.

All content has been developed in collaboration with our specialist pathologists, radiologists, medical practitioners and scientists, and Sonic's Australian practices offer learning activities across the country through our network of diagnostic practices and clinical service groups.

Other resources on the site include online training videos, course bookings for conferences and events, e-learning workshops, clinical audits that help doctors to monitor and evaluate their current knowledge and processes, as well as access to the Sonic Pathology Handbook, and Sonic Dx – a secure results platform for doctors.



Wishing you and your loved ones a happy, restful and above all, safe Festive Season. Special thanks to those valued staff members who keep our services running over the holiday period.



