"...quite the most ambitious adventure in the care of national health that any country has seen."

Aneurin Bevan on the establishment of the NHS, July, 1948
Welcome to the special NHS 60th anniversary edition of spectra.

In this special commemorative edition we hope we can take you all on a bit of a stroll through the last 60 years of the NHS and allow everyone to indulge in a spot of nostalgia as we look at how health and healthcare (and the hairstyles!) in Tayside have changed over the years.

The launch of the NHS back in 1948 was almost unbelievably ambitious. It was the first time hospitals, doctors, nurses, pharmacists, opticians and dentists were brought together to provide all their services free of charge to everyone at the point of delivery.

And if the start of the NHS was ambitious, what about today? The huge range of services we all provide and the complexity of treatments would not have been even conceivable back in 1948.

We have tried to include as many staff members as possible over the following pages by asking them about the changes, improvements and innovations that they have seen in their own fields during their NHS careers and we hope you enjoy sharing in their experiences.

The absolute uniqueness of the NHS is that it literally has touched the lives of each and every one of us. It’s true that we probably all take it for granted to some extent, so what better opportunity to take a few minutes out of our busy days and remember the contribution that all staff members make to healthcare in Tayside. Happy Birthday NHS.

spectra editorial team 2008

We want your views
Is there something you’d like to get off your chest or maybe you just want to open up a discussion for debate with your NHS Tayside colleagues. Whatever your opinion, whatever the topic, write to us at:
spectra, Communications Department, Board Headquarters, King's Cross, Clepington Road, Dundee DD3 8AE
Or email us at tay-uhb.spectra@nhs.net

Copy submission
Please send items for the next edition of spectra, issue 37, to any member of the editorial team by Tuesday 8 July 2008. The deadlines for future editions of spectra are as follows:

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For extra copies of spectra, please contact the Communications Department, Board Headquarters, Kings Cross, Dundee DD3 8AE. 01382 424138 x71138.
A message from the Chair

A 60th anniversary surely is a time for looking back but also for turning our attention to the future. The NHS in Tayside has much to be proud of. It can present an excellent picture of success in terms of service to patients, investment, reputation, commitment and community focus.

However, all these successes could not be achieved without the dedication and hard work of our most precious asset – you, the staff.

Here in Tayside we are justifiably proud of our innovations, achievements and patient-centred services in an ever-growing number of fields from community health services to cancer, patient safety to palliative care, telemedicine to the Tayside Children’s Hospital.

Our task now is to build upon this very strong position and make NHS Tayside even more than it is at present – synonymous with all that is best in the health service in Scotland and further afield. We cannot do that alone.

Partnership working is now at the heart of everything we do here in NHS Tayside and by working in partnership we can generate solutions to problems and challenges that we cannot solve alone.

The Scottish Government has set out a programme of work for Health Boards in Scotland in Better Health Better Care – Action Plan. This ambitious plan sets out a clear direction of travel which puts our patients at the centre of all that we are doing to improve health and healthcare in Tayside.

We are fortunate that we have forged many strong relationships with our partners over the years including local authorities, community planning partnerships and local universities and colleges.

Of course, patients, their carers and families, the voluntary sector and the public are also our partners and we will continue to strive to make sure they have a real involvement in their healthcare and that their voices are heard.

However, probably the most important partnership of all, because without it we simply cannot deliver, is our partnership with you - our 14,000 staff.

You all have the most fundamental and vital role to play in the future of our health service. That future depends on focus, on working together and on productive friendships, and I believe that NHS Tayside across all its staff, its Executive Team and its Board Members has had, and will continue to have, the perspective required to be at the forefront of driving change.

The NHS has 60 glorious years behind it thanks to a dedicated workforce and, I believe, a bright future ahead, again thanks to the brilliance of people like you.

Sandy Watson
Chair, NHS Tayside
July 2008
The newly-formed NHS Eastern Regional Hospital Board immediately set about rationalising in-patient facilities, a process that has continued to this day as changing patterns of disease and medical practice have modified the region’s hospital infrastructure. NHS Tayside now administers just 2,149 beds within 22 healthcare buildings.

As an example of changing patterns of care, people who in earlier times might have succumbed to one of the many prevalent infections are now living on to suffer from degenerative diseases of old age. In 1951 Tayside became the first region in Scotland to provide a Geriatric (geron – old man; iatrikos – medical care) service, and from modest beginnings at the old Poor Law institution beside Maryfield and the Bughties in Broughty Ferry, over 600 beds across the region now provide care for the elderly, rehabilitation and psychiatry of old age.

So the old infectious disease hospitals at Kings Cross, Little Cairnie (Arbroath) and Whitehills (Forfar) have required to change their function – no longer do we need hospitals for smallpox, or sanatoria for tuberculosis, for which there were 645 beds at Ashludie, Sidlaw and Noranside in 1948. Infectious disease, however, remains an important issue in our general wards and the challenges of MRSA and C diff have still to be tackled, just as our forebears had to deal with TB and smallpox, and those before them cholera and typhus.

Stracathro and Bridge of Earn arose as Emergency War Hospitals. These were built over large areas to minimise expected air raid bomb damage, from which Tayside mercifully escaped relatively unscathed. After the war both served (with over 1500 beds) as general hospitals for the country districts, but with increasing medical specialisation and centralisation of hospital services their role declined, and Bridge of Earn subsequently closed.

However, as the only functioning example of the original seven Scottish war hospitals, Stracathro has recently received significant reinvestment into elective surgery and outpatient services including care for the elderly, stroke and cancer patients.

Before the end of the Second World War, the Secretary of State for Scotland had arranged a survey of Scottish hospitals with a view to providing a comprehensive and co-ordinated post-war hospital service. The Report published in 1946 strongly criticised the ability of Dundee’s general hospitals (the Royal Infirmary and Maryfield) to provide a modern...
teaching hospital environment, and so the Board had little difficulty in convincing the Department of Health of the need for a new hospital.

The Board had hoped to concentrate all acute hospital services for Dundee on one site, but a centrally imposed bed limitation necessitated a complete reappraisal of content and function of the new hospital. From this came the concept of Ninewells, supplemented by a modernised and expanded Maryfield, with each hospital providing patient care, student teaching and clinical research. However, in the event, it was Maryfield that closed when Ninewells opened in 1974, with the Royal Infirmary going on to provide care for a further quarter of a century.

Ninewells was the first new post-war teaching hospital to be built in the UK. Most aspects of policy and design had to be examined from first principles, and much thought and practical trialling went into the planning process. With the benefit of hindsight, some of the design concepts of the hospital (and also subsequent additions) have been more successful than others, but there is no doubting the hospital’s magnificent situation and ability to impress visitors. One aspect which has always found favour is the ‘embedding’ of the medical school within the hospital, a process that was meant to allow the closest possible ‘through the door’ relationship between patient care, research and teaching functions (but the planners did not anticipate locks on the doors).

A visit in the 1970s from the International Hospital Federation described Ninewells as the ‘Jewel in the Scottish Hospital Crown’, but we all know it is the staff who are the gems.

May we continue to sparkle!
At the dawn of the NHS, tobacco smoking by men was the norm and was regarded as harmless but many were dying of lung cancer.

1950 saw the publication of the first of several retrospective studies linking the disease to the weed and the following year Richard Doll and Bradford Hill began what is probably the longest running prospective clinical study. They sent a questionnaire about smoking habits to all doctors on the UK medical register and, in those who died over the following two and a half years, looked at the cause of death. The risk of dying from lung cancer and ischaemic heart disease increased according to the amount of tobacco smoked. When this landmark study was published in the British Medical Journal in 1954 my father was a medical student. Over the next few years some doctors stopped smoking, others didn’t; my father was one of the latter. Fifty years on in 2004, Richard Doll published the latest update on the effects of smoking on doctors. The bad news is that smokers are three times as likely as non smokers to die before age 70, and they die on average 10 years younger. The good news is that quitting at age 30 gains 10 years, at 50 an extra six years can be expected and, at 60, smokers will gain three years added life expectancy. My father didn’t stop until after his first heart attack at 42 and he joined the list of the studied victims at 52.

Since the 1950s smoking has declined among men and so has their incidence of lung cancer. Perhaps women in the 1950s and 60s didn’t think the hazards applied to them; they certainly do and more than ever are dying of the disease. Smoking-related illnesses occupy a lot of my time as a physician, with lung cancer remaining the biggest challenge of them. Despite the considerable advances in medicine since the 1950s the five-year survival rate for lung cancer of around 7% in the UK is little changed. The best advice I can give many of my patients who don’t have cancer is preventative and dates from the 1950s: don’t smoke.

In the 1950s, colourful and stylish packaging encouraged smoking. The habit was ingrained into society as acceptable and non-harmful, despite the findings of the Doll-Hill clinical study. 60 years on and education and experience have taught us to convey a very different message.
Celebrating 60 years

1962 – First full hip replacement

Many of the best ideas in orthopaedics have been British, and particularly in joint replacement.

The classic metal on plastic hip was designed and introduced by probably the greatest surgeon/engineer who has ever lived; Sir John Charnley, from Manchester.

Charnley was obviously a very fine surgeon, with an exceptionally clear way of tackling surgical and conceptual challenges. His engineering background was no doubt invaluable in this. However, his first few hundred hips were, in his own words, “disastrous” as the plastic socket was made of Teflon, which wore away very quickly. This began in 1958.

By 1961 he had recognised the problem, found out why it was happening and introduced an alternative, which is still in use today in Tayside.

This was the use of “ultra-high molecular weight polyethylene” which revolutionised hip replacement and later on knee, elbow and shoulder replacement. It is ironic to think that if he had trialled the original Teflon implant in 2008 he would probably have been banned from operating, and reported to the GMC, given the terrible results!

Although there have been many new implants introduced since then, the original Charnley is still hard to beat as a straightforward tried and tested hip replacement. Charnley was an innovator, and I hope would have recognised real innovation when it came along.

In the field of hip surgery, resurfacing (also British!) has become established, particularly for the very active patient, using very similar trial protocols to the ones that Charnley himself established 40 years before. Of all the many elective procedures done in the NHS, it is difficult to find another operation as reliable and as life-changing as hip replacement. It helps to make being an orthopaedic surgeon a generally very gratifying job, and there are now literally millions of beneficiaries all over the world.

Charnley died in 1982, and there must be very few doctors who have left such a vast and successful legacy.

1960 – First kidney transplant

An Edinburgh doctor, Michael Woodruff, performs the first UK transplant involving an identical set of twins.

1961 – The Pill

Liz Kennedy, Clinical Lead for Sexual Health, outlines the introduction of the combined oral contraceptive pill. “The combined oral contraceptive pill was first marketed in the UK in 1961. It seemed that at last there was an answer to the prayer of so many couples through the ages – contraception without complication. Simple and safe, expectations were high. Control of fertility was now possible.

“The pill cannot live up to all expectations – it is not 100% safe for all women, it does not protect from sexually transmitted disease, it is not 100% effective.

"Women - and society - have to choose. The benefits of the pill are amazing and the pill more than any other medical advance has changed women’s lives. We are lucky to have this choice, a choice that our grandmothers and great grandmothers would have loved to have had.”

1962 – First hip replacement

First full hip replacement is carried out by Professor John Charnley in Wrightington Hospital.

1968 – First NHS heart transplant

A 45-year-old man becomes the first Briton to have a heart transplant.

1968 – Sextuplets born

Sextuplets born after British woman receives fertility treatment.
The IVF Unit in Ninewells was set up in the early 1980s by Dr John Mills and Dr Geoff James and resulted in the first IVF baby in Scotland, born in September 1984. The news of the birth led to a rush of enquiries but lack of resources meant treatment had to be restricted to Tayside patients only.

Ninewells was also the first unit in Scotland to offer NHS-funded IVF treatment. A grant was obtained which allowed for the employment of staff to set up the laboratory; following this the salaries of scientific and support staff and other expenses were met by the health board, supplemented by fund-raising money and contributions from patients.

Other ‘firsts’ for the unit include:
- 1989 – first baby born following treatment using donated embryos
- 1994 – first baby born following treatment using frozen embryos
- 1995 – first baby born following intracytoplasmic sperm injection (ICSI)

Until 1994, the department operated from a laboratory on level 6 of Ninewells with a staff of two consultants, three embryologists, a technician and an administrator. Egg retrievals and embryo transfers took place in maternity theatre at the end of the theatre list and patients were nursed in the early pregnancy ward.

In 1994, the unit opened in Ward 35, a self-contained ward with its own in-patient and out-patient areas, laboratory and office accommodation. The same year, the Board gave authorisation for patients to be treated on a self-funded basis. The unit now has a staff of 30 comprising clinical, scientific, nursing, administrative and counselling staff.

Around 450 treatment cycles are now carried out each year and success rates have consistently been above the national average. So far, more than 2,100 babies have been born as a result of IVF/ICSI treatment at Ninewells. NHS patients from Tayside, Fife, Forth Valley and the Western Isles are treated in the unit, as well as self-funded patients from throughout Scotland.

The unit has now outgrown its present accommodation and plans for a new centre are under way. We hope this will be open within the next two years.
Celebrating 60 years

1986 – Aids Health Campaign launched

Following a number of high-profile deaths, the UK government launched a massive public health advertising campaign. The first Aids public information drive set out to shock with full-page adverts in newspapers.

Richard McIntosh, NHS Tayside Senior Health Promotion Officer, said, “In 1986 it had become clear that Dundee had a high prevalence of injecting drug users and needle sharing was commonplace.

“In response to this the UK’s very first needle exchange was opened in Dundee followed by a number of others around the rest of the UK.”

“The Aids and HIV public health information movement was the biggest public health campaign in history,” he added.

“It continued its momentum into 1987 when the Government continued its prevention campaign posting leaflets with the slogan Aids – Don’t Die of Ignorance to every home in the country.

“In fact this was very much in keeping with the NHS’s original concept that it should improve health and prevent disease rather than just offer treatment.”

1987 – Keyhole Surgery

Professor Sir Alfred Cuschieri performed Britain’s first ever keyhole surgery operation when he removed a 59-year-old Dundee housewife’s gallbladder at Ninewells Hospital.

The woman, who would normally have had months off work, was fit for normal activity after a few days and the procedure made medical history.

A pioneer and leader in the field of endoscopic or keyhole surgery, Sir Alfred came to the University of Dundee in 1976 and has become respected throughout the world for his work in the development, execution and clinical evaluation of minimal access surgery. The technique has been adopted internationally for a range of conditions.

Now retired, Sir Alfred continues to develop and evaluate novel technologies and he is the Director of the Institute of Medical Science and Technology, a joint venture between the Universities of Dundee and St Andrews.

1986 – Aids Health Campaign

The government launches the biggest public health campaign in history to educate people about the threat of Aids as a result of HIV.

1987 – Keyhole surgery

Minimal access surgery carried out for the first time in Britain to remove a woman’s gall bladder at Ninewells Hospital.

1987 – Heart, lung and liver transplant

First heart, lung and liver transplant is carried out at Papworth Hospital in Cambridge.

1988 – Breast screening and cervical screening introduced

Comprehensive national breast screening and cervical screening programme introduced.

The Queen Mother officially opened Tayside’s first CAT scanner in 1986.
In the late 1980s MRSA was a relatively infrequent isolate. The original strain we saw, although resistant, did not spread very quickly and tended to cause more colonisations than infections. But over the years something changed in both the number and behaviour of the MRSA we were seeing and we tracked a doubling of new cases each year as awareness of the bacteria grew and more screening was undertaken.

The Annual Report of the Dundee Infection Control Committee in 1996 recorded 134 new cases from the Dundee area. What we were unable to appreciate at that time was how different types of MRSA behaved in different ways. This turned out to be important because by 1997, 293 new cases were picked up. With the typing results from SMRSARL we were able to see that most were identified as being an ‘epidemic’ strain which behaved very differently. This strain required very much more aggressive control measures to be put in place. The easy access to the typing results meant that we could distinguish sporadic episodes from outbreaks and this helped inform screening policies in certain units.

In 2000 the rate of increase has levelled off and fluctuates, being influenced by the larger number of patients going through the hospitals now compared to the 1990s.

The SMRSARL is an extremely important national function providing in-depth analysis to clusters and outbreaks helping us track how strains spread and may change.

1994 – NHS Organ Donor Register launched

The NHS Organ Donor Register was launched in 1994 following a five year campaign by a couple from West Midlands. John Cox, a retired civil engineer and his wife Rosemary began their campaign after the death of their 23-year old son Peter.

Peter died in 1989 following a brain tumour. He had asked before his death that his organs be used to help others but his parents found that although patients in need of a transplant were listed centrally, there was no equivalent register for potential donors.

They were eventually successful and the new register was launched on the 6 October 1994.

Following an advertising campaign more than 2,250,000 had joined the register by 1995. In 2008 that total has risen to over 15.1 million.

You can find out more about organ donation and join the Organ Donor Register by calling 0845 60 60 400 or visit the UK Transplant Website www.uktransplant.org.uk.

1997 – The Scottish MRSA reference laboratory established

The Scottish MRSA reference laboratory (SMRSARL) was set up in 1997 in response to a growing need for a Scottish focus and local expertise and surveillance to address the burgeoning MRSA problem in the UK.

Peter died in 1989 following a brain tumour. He had asked before his death that his organs be used to help others but his parents found that although patients in need of a transplant were listed centrally, there was no equivalent register for potential donors.

They were eventually successful and the new register was launched on the 6 October 1994.
2006 - The ban on smoking in public buildings in Scotland

The smoking ban in public buildings in Scotland was introduced in order to reduce the levels of disease caused by cigarette smoke inhaled by non-smokers.

It was also hoped that the creation of no-smoking buildings would encourage smokers not to smoke in their homes and hopefully quit altogether.

The smoking ban was launched on 26 March 2006 and has been an enormous success.

eHealth driving quality care... from 1948 to 1978, 2008 and beyond!

In 1978 a local team led by Dr Ronnie Graham, the Chief Administrative Medical Officer, George Savage and Keith Martin, designed and implemented the ‘Master Patient Index’ throughout Tayside and stated, “A uniform method for indexing patient records in primary and secondary care will transform services and research, leading to a more integrated approach to healthcare.” Arguably the introduction of the Community Health Number has been one of the most influential developments in Tayside over the past 60 years.

The development and innovation in eHealth and health informatics is a key to delivering quality healthcare in the 21st century. The availability of dynamic, real-time clinical information management is putting NHS Tayside at the forefront of efforts to enhance patient care and safety internationally.

We already have a significant track record in relation to eHealth developments building upon 100% use of the Community Health Number, widespread use of Central Vision which lies at the heart of our electronic patient record, and the development and hosting of several national systems, including SCI-DC which now is used for the care of over 200,000 people with diabetes across Scotland.

These are all key components of the established region-wide strategy which would not be possible without a resilient Tayside-wide infrastructure. Under the leadership of Ian Fenton, a young fully-haired apprentice in 1978, we now have the Health Informatics Directorate that will deliver a safe, secure and fully integrated electronic patient record by 2010.

2006 - The ban on smoking in public buildings in Scotland

2004 – Paramedics give clot buster drugs

Ambulance service rolls out its thrombolysis programme, where paramedics administer life saving clot-busting drugs to cardiac patients.

2005 – Smoking Bill

Ban on smoking in public buildings in Scotland introduced.

2006 – Kerr Report and Delivering for Health

Delivering for Health action programme launched in response to the Kerr Report on “Building a Health Service Fit for the Future”.

2008 – Better Health, Better Care

New SNP Government publishes Better Health, Better Care – Action Plan which sets out programme to deliver a healthier Scotland by helping people to sustain and improve their health ensuring better, local and faster access to health care.

The Clinical Research Centre at Ninewells was built to harness the potential for clinical research and, physically linked to the hospital and Translational Medicine Research Collaboration Centre, is where 21st century treatments will be developed.

By Professor Andrew Morris

eHealth Director

By Paul Ballard

Deputy Director of Public Health
The changing face

Do you remember when Matrons ruled the wards and you had to visit your GP in their own home? When nobody had a computer at their desk but many had an ashtray? Were you among the first staff at the newly-opened Ninewells teaching hospital?

From the first organ transplants and CT scans to keyhole surgery and the national ban on smoking, the National Health Service has seen many changes and advances since its inception in 1948.

We asked our staff about their memories of working for NHS Tayside and the changes and improvements they have seen in the health service over the years.

Elizabeth Lemon
Paediatric nurse
Ninewells

I started my nurse training in 1967 at Seafield in Ayr and began working in paediatrics at DRI in 1972 before we were moved to Ninewells in 1974.

Things have changed a lot since my early days with the NHS, some things for the better and some things for the worse!

We’re definitely a lot busier now and don’t have so much time to spend playing and interacting with the kids. There are dedicated play specialists to do that now and it’s a part of the job that I really miss.

Dawn Hutchison
Practice & Treatment Nurse
Parkview Primary Care Centre, Carnoustie

I have worked for the NHS for 25 years and I think the developments in the area of chronic disease management such as COPD have been very important to patient health services.

The fact is that we are keeping people alive and well for much longer compared to years ago and that has had such an impact on patients’ expectations.

This has been achieved through the advancements in medicines; we couldn’t do what we do now for patients without these very specialist medications.

Marie Hebden
Charge Nurse
Surgical Outpatient Clinic, Ninewells

After leaving school I was too young to start nurse training so began my career at Dundee Women’s Hospital at Elliot Road in 1965 before starting training at DRI the following year.

The health service has changed beyond all recognition since I first joined, especially in the number of patients we see! But one thing that has never changed is the way that staff pull together and work as a team for the benefit of the patients and I am proud to have been a part of that at both DRI and Ninewells.

Falls are the leading cause of fatal and non-fatal injuries for people aged over 65 and the leading cause of hip fractures. Consequences of falls include functional impairment, loss of independence, hospital and care home admission, increased medical costs and increased demands on care services.

One major improvement within the past 15 years is the recognition that by implementing often very straightforward yet highly effective strategies we can reduce older people’s risk of falling. This includes empowering older people to take action to prevent falls themselves, and ensuring health and community services adopt effective risk management strategies.

Creating services which enable older adults to live longer, more fulfilled, independent lives in their own homes, free from injury and hospital admission must be top of our agenda.
of NHS Tayside

I often wonder on reflection what the model of care and what things in the Health Service will look like 60 years from now!

voxpop

Gordon Milne
Lab Manager
Pathology, Ninewells

Having started my career in the Histopathology Department at the DRI in 1967, before transferring to Ninewells in 1974, I have seen many changes.

The diagnostic laboratories have seen the automation of most routine tasks, as well as the introduction of IT systems which most departments these days would be unable to function normally. When I started the only computer within the laboratories was in Biochemistry, filled a whole room.

As the Training Officer within the Pathology Department I have seen major advances in the education and training. Standards and opportunities for advancement have been increased and other members of staff now take on the roles that have been seen as the preserve of trained medical staff.

my NHS

Margaret Farquharson
Senior Staff Nurse
Ward 3, Ninewells

I started in Ward 8 acute medical in DRI in October 1970 and worked there until it was transferred to Ninewells.

I then spent six years at Kings Cross in the respiratory unit before moving to ward 3 respiratory at Ninewells where I have been ever since.

Over my 40 years with NHS Tayside, I think the biggest change I have seen is in the way nurses are trained.

I began my training at DRI in 1967 and was part of the first class to go into the new school of nursing at Ninewells in 1969.

It was a lot more focused on practical learning back then and I don’t think I would be able to keep up with all the essays the students have to do now!

my NHS

Jim Henderson
Senior Charge Nurse
Surgical Unit, Stracathro Hospital

As a surgical nurse I think the biggest improvement which I have witnessed over the past 20 years is the reduction in the length of stay in hospitals for patients.

Advancing surgical techniques such as the development of ‘keyhole’ surgery has negated the need for patients to endure a lengthy stay post-operatively in hospital.

Some operations, for example laparoscopic hernia repair and cholecystectomy, 10-15 years ago normally required a patient to stay in hospital for anything up to seven days. Now these patients go home on the same day they have their operation.

I often wonder on reflection what the model of care and what things in the Health Service will look like 60 years from now!

voxpop

Alan R Orr
Clinical Group Manager
Clinical Support Services, Ninewells

In 1967 we had Regional Hospital Boards and Boards of Management. I started work for the South Eastern Regional Hospital Board and the Board of Management for North Edinburgh Hospitals. Each Authority had its own Board Members, Chairman and Board Secretary. Some smaller Boards of Management had fewer beds than Level 7 at Ninewells Hospital!

Willie Ross was Secretary of State and I met him when he came to Kilmarnock Infirmary in 1974 and George Younger a year or two later, both Ayrshire MPs (and later Rikkind, Lang and Forsyth and Blair!).

Lunch cost 1/9 d (9p) and you had to buy tickets from the hospital cashier or the House Steward’s office. Hospital parking was free but was for named doctors only. £10 per week was a very good pay. We worked on Saturdays to 1.00 pm and had one public holiday at Christmas and one public holiday at New Year. Many people smoked in their offices including many of the Senior Administrators – we didn’t have managers or computers or health and safety! It was all a bit like TV’s ‘Life on Mars’!
In essence the purpose of the NHS is to secure through the resources available the greatest possible improvement in the physical and mental health of people by:

- promoting health
- preventing ill health
- diagnosing and treating injury and disease
- caring for those with long term illness and disability who need the services of the NHS

This purpose has wide public acceptance and commitment to it induces more than a million staff to get up every morning to work in the NHS. The aim is still to provide services on the basis of equal access for equal need not the ability to pay and, whilst this is always going to be difficult to achieve in practice, political consensus around this principle is now stronger than it has been at many points over the last 60 years.

Writing about the 50th anniversary of the NHS, Nick Timmins of the Financial Times said, “Bevan’s dictum that ‘expectations will always exceed capacity’ and that the service ‘must always be changing, growing and improving: it must always appear inadequate’ needed to be held permanently close to politicians’ and the public’s heart – and recognised as a characteristic of healthcare systems everywhere.” If you understand this, you understand the NHS and you can only admire the sheer determination and resilience of the people who work in it.

Clarity of purpose, the capacity to grow and improve, and determined, professional staff are all to be found in NHS Tayside as key ingredients of its success. The University of Dundee is proud to work in partnership with the NHS in Tayside and Fife and with health systems further afield. We benefit enormously from the facilities at Ninewells, Perth and Stracathro, a supportive primary care network and an attitude of collaborative working.

The Dental Hospital, the Health Informatics Centre, the Tayside Institute of Cardiovascular Research, the Colorectal Screening Service, the Tayside Children’s Research Facility, the Diabetic Research Centre and the Institute of Medical Science and Technology are just some examples of cooperation which further University education and research and provide health benefits to the people of Tayside and beyond.

The latest and perhaps the most striking example of this collaborative effort is the Clinical Research Centre, to be opened by Nicola Sturgeon, Cabinet Secretary for Health and Wellbeing in the NHS 60th anniversary week. This new facility forms part of a Tayside network but is also linked scientifically and organisationally to similar initiatives in Glasgow, Edinburgh and Aberdeen, ensuring that Scotland and Dundee will continue to operate at the frontiers of clinical research and translational medicine.

The relationship between NHS Tayside and the University of Dundee is certainly productive and, as we celebrate the 60th anniversary of a great institution, we should resolve to build on our common approach to excellence in the tripartite mission of research, education and, above all, patient care. This is the challenge moving forward.

The University sends thanks and good wishes to all staff in NHS Tayside for all that they do to improve health and health services and for the essential support they provide to our education and research community.
A number of the key health problems which took their toll on the health of the Tayside population before, during and after the last war have diminished, while new threats have emerged.

Many of the infections which caused serious illness and death in the past have been reduced in severity or eradicated altogether through a combination of immunisation – for example, smallpox, measles and influenza – and antibiotics. Over-use of the latter has, of course, led to the emergence of new problems such as MRSA and clostridium difficile.

Changes in employment patterns, housing, transport, education and recreational provision have also had a major impact on the pattern of disease; for example the increase in more sedentary employment compared with more physically active jobs in the past has contributed to the emerging obesity epidemic.

Improvements in maternity services have led to major reductions in maternal and infant mortality in the past 60 years and measures such as smoking cessation and the ban on smoking in public places have led to significant reductions in the prevalence of smoking and smoking-related diseases.

Sexual health has gone through a major transformation, much of it related to the development and consequent wide availability of oral contraceptives since the 1960s. There have been positives and negatives in this – one of the less desirable consequences has been a rise in sexually transmitted infections. The emergence of HIV and other blood borne viruses since the 1980s has additionally changed attitudes and behaviour around sexual health and has had a major impact on the provision of services for intravenous drug users. While tackling illicit drug use remains a significant challenge, the increasing over-consumption of alcohol poses a much greater threat to public health in Tayside and the cultural acceptance of binge-drinking and drunkenness is making that particularly resistant to change.

Programmes to detect disease at an early stage have multiplied in recent years, and include routine screening for breast, cervical and colorectal cancers, and new anticipatory care approaches to the early detection and management of coronary heart disease and other preventable and treatable conditions.

Much of the focus of anticipatory care and other public health/preventive programmes has been on tackling the gross health inequalities that surround us, particularly relating to the marked differences in health experience between the most and the least affluent. In developing these approaches, there has been an increased emphasis on the adoption of evidence-based approaches, as there has in all other aspects of health and health-service provision. This includes participation in preventive programmes ranging from tackling alcohol misuse to preventing falls.

The remaining challenges include further improving our relatively poor oral health record, tackling the obesity epidemic and narrowing the widening health gap between rich and poor. The solution to almost all of the major public health challenges and opportunities lies in close collaboration between the NHS, other public bodies, the voluntary sector and communities themselves. The emergence of increasingly effective Community Planning alliances between these sectors holds unprecedented promise for much improved health and reduced health inequalities in the future.
The radiology department at Dundee Royal Infirmary had been established in 1896 by George Pirie in the year after Roentgen's discovery of x-rays, and in Tayside this department had been supplemented by 1948 with newer departments in Arbroath, Stracathro and Perth. Many radiologists at that time provided both a diagnostic radiology and therapeutic radiotherapy service, and it wasn’t locally until 1952 that these functions were fully separated.

These departments introduced ultrasound in the 1960s and this provided the first direct imaging of solid abdominal organs. In 1976 a CT head scanner was installed that provided information on intra-cerebral conditions and this was followed in 1986 by a whole body CT scanner that allowed all parts of the body to be assessed in cross-section.

Further technological advances followed in the 1990s with the introduction of the first MRI scanner in Tayside in 1992. These ultrasounds, CT and MRI scanners that have been introduced since the NHS began have revolutionised imaging, and they are able to provide exquisitely detailed information on all body parts. This has allowed accurate initial diagnosis and assessment of a wide range of clinical conditions and subsequent evaluation of the response to treatment.

In addition to diagnosing known pathology, screening of apparently well individuals to detect serious but unsuspected disease has been introduced. In the 1990s, x-ray mammographic breast screening was established in Tayside that has allowed the early detection of breast cancer and more effective treatment.

Patient treatments are now performed in the radiology department itself with interventional radiology procedures. This enables many patients to benefit from less invasive and safer but equally effective treatment, including angioplasty to open up narrowed arteries, endovascular stenting to treat abdominal aneurysms, the drainage of abscesses and blocked organs, and the image guided ablation of some tumours.

More recently, the advent of picture archiving and communications systems (PACS) allows the images to be stored on a central computer and displayed on computer screens across Tayside rather than being distributed on plastic-based films.

Radiology is continuing to develop with further improvements to equipment and procedures, and the pace of change that has been seen over the last 60 years is unlikely to slacken. This will ensure that radiology will continue to be central to high quality patient care and management.

Clinical radiology has been transformed by technical and clinical innovation since the inception of the NHS in 1948.

At that time radiology was restricted to plain film x-rays and simple fluoroscopic examinations that provided important but limited information.
GPs – providing care from the cradle to the grave

Imagine if you visited your GP and his surgery was in his home, the consulting room was in fact his dining room and the waiting room was his hallway.

No practice nurse providing advice and care, no receptionist arranging appointments; you just turned up at the doctor’s house and waited for however long it took until you were seen. On top of all this you were expected to pay the doctor for his services - preferably in cash, though if you were a bit strapped for cash... the odd chicken would do nicely!

This was the reality for many patients visiting their local family doctor before 1948. Doctors ran private single-handed practices from their own homes with little or no resources and often the only support was provided by their wives. Medicines were either bought directly from the GP or from the chemist. Family doctors looked after the entire family from the cradle to the grave, providing a continuity of care.

With the birth of the National Health Service in 1948, overnight the patchwork provision of medical services which had left millions of people with very often little or no reliable healthcare was swept away.

While hospital doctors became salaried under the NHS, GPs were allowed to retain their independent status, own their practice and subcontract their services to the NHS. Although in the early days of the NHS, GPs still tended to work from home, by the 1960s they were encouraged to work together in practices.

Dundee third generation GP Dr David Dorward, explains, “My grandfather Dr William Fyffe Dorward and father Dr Morrison Dorward both worked as GPs in Dundee.

“Over the decades GPs and their role within healthcare services has developed and changed to reflect the continuing demands of patients. GPs are the first point of contact in a patient's journey. The paternalistic approach of general practice in 1948 has now moved forward to a partnership approach; patients and doctors working together on an equal basis.

“Working in modern surgeries, GPs today no longer work in isolation but are part of a multi-disciplinary team delivering care and treatment to patients.

“GPs have access to a wide range of diagnostic tests and procedures and are able to admit patients directly in to some hospital wards.

“More future healthcare looks set to be delivered out with hospital settings with GPs providing anticipatory care, which will hopefully highlight in advance conditions such as mental health, cardiac, diabetes and respiratory problems.

“With the development and availability of Information Technology for all healthcare professionals, GPs have, at their fingertips, a wealth of knowledge and access to diagnostics and medicines unimaginable back in 1948.

“The days of Dr Findlay’s Case Book-style of family doctor may well and truly be over but the sentiments that underpinned the role of the GP in 1948 are just as valid today. Continuity of care for patients, working together to create a bond of trust and a mutual understanding of healthcare outcomes are all as important today as they were then.”

Above: Dr Dorward’s practice, Westgate Health Centre in Dundee.

Left: Dr Dorward’s Family home on Magdalen Yard Road in Dundee where his father and grandfather saw patients.
However, nursing was still very much seen by the public as a calling rather than the highly-skilled profession it is today.

Until the 1960s, Matrons reigned supreme in every hospital and everything that happened on the wards was controlled completely by the ‘Ward Sister’.

Even consultants were classed as ‘visitors’ and were told what times they could conduct their rounds. The wards themselves were also mostly closed to allow patients to rest, and visiting was limited to three days a week.

Professor Liz Wilson, Nurse Director for NHS Tayside, began her nurse training at Dundee Royal Infirmary in 1965, and remembers how it was to nurse under a Matron’s steely gaze.

“When I started nursing at DRI in the 60s, it was at a time when nursing was starting to attract large numbers of students, some of whom are still working on our wards throughout Tayside today,” says Liz.

“Back then, as it is now, nursing was a demanding profession although the average working week came in at an exhausting 48 hours.

“Our uniforms were also quite labour intensive back then – it took us around half an hour every morning just to get dressed and get our uniforms up to scratch to pass Matron’s extremely exacting standards.

“Regardless of height, aprons had to be 14 inches from the floor and senior members of staff even went to the lengths of measuring this regularly to ensure compliance!”

Thankfully, nurses’ uniforms are a tad more practical these days and it’s not just uniforms which have undergone a transformation: nurses’ training has been revolutionised and nurses are taking on more and more advanced roles in community and acute care than ever before.

There are now thousands of clinical nurse specialist roles in Scotland as well as developments in the numbers of nurse practitioners.

In areas such as stroke and coronary heart disease, areas which have historically been dominated by doctors, nurses are now taking on lead clinical roles and more and more nurses are leading clinics for many specialties. Patients now realise they don’t always need to see a doctor.

Maggie Simpson, Director of Nursing for the Single Delivery Unit, has witnessed the revolution in the nurse’s role. She says, “I started my nursing career in Glasgow and remember as if it was yesterday the feeling I had when I put on my student nurse uniform for the very first time. I was so proud, I felt 10 feet tall! I also remember the enormous sense of responsibility I felt and that is something that I have never forgotten. As nurses and midwives, people let us into their lives at the most personal and intimate times. That is a real privilege and we must never forget that or take it for granted.

“I was so in awe of the Matron but she was very remote with the only time we saw her being at the start of our training and then again at the end! As the Nurse Directors in NHS Tayside, Liz and I are, I hope, much less remote and have a real connection with the nurses and midwives.

“One of the constants for me is ensuring that patients are at the centre of what we do and that we are professional, treat people with respect and are compassionate and caring.

That’s what our patients and their families tell us is important to them and that’s the one thing that hasn’t changed.”

Of course, for everyone in the nursing family from the Healthcare Assistant to the Directors of Nursing, patient care is still the most important factor.

No matter how nursing evolves in the future and what challenges are faced what keeps nursing at the very forefront of our NHS is the nurses themselves – the original caring profession.
Cancer through 60 years

This is a story of huge advances but some things remaining the same. Surgery remains the mainstay of cure, but surgery has changed – more technology (e.g. laparoscopic surgery which Tayside pioneered), more specialisation and crucially more pre-operative imaging (CT, MRI etc.) so the surgeon has a much clearer idea what can and cannot be done surgically.

Radiotherapy remains an important component of care, with changes in technology so it can reach tissues with fewer side-effects and be more accurately directed (CT scanning, computer planning etc.). Chemotherapy has been introduced and has transformed the outlook for childhood, haematological and testicular cancers.

It is also an important component of the curative care of patients with, for example, breast and colorectal cancer and effective palliation for most of the other common cancers. The last decade has seen the introduction of new “biological” agents that target specific defects in the cancer cell (e.g. trastuzumab (Herceptin) for breast cancer), but there are many other agents whose introduction should help future cancer patients.

Paradoxically, for the cancer patient the most obvious advances have not been technological but low tech/high impact – two other “Big C’s”, Communication and Care. Sixty years ago cancer wasn’t talked about. The importance of careful explanation of the diagnosis and treatment options is now recognised and is at the core of the care of patients with cancer. Information comes not only from clinical staff but also from the internet (e.g. cancerbacup) and specialist agencies (e.g. Maggie’s Centre).

Care is now delivered by a team, based both in primary and secondary care. Care for particular cancers is delivered by a team of specialists encompassing a range of disciplines (e.g. surgeons, oncologists, radiologists, pathologists, specialist nurses etc.). For those patients for whom cure is not possible, palliative care is now routine with access to specialist palliative care being widely available.

Over 60 years, technology has yielded many advances, but good communication and individualised care are as important.
During the 60 years of the NHS in Scotland, maternity care has changed dramatically in Tayside. Gone are the much-loved maternity homes such as Fyfe Jamieson, Charlton, St Johnson, Alyth and Clement Park, and the maternity wards at Aberfeldy and Irvine Memorial. There are still those working today who remember Maryfield and then DRI and now Ninewells. PRI also moved into its own purpose built facility.

In 1948, maternity care was very much led by midwives. They were held in high regard and were well respected professionals. Then during the 1960s there was a fierce debate about hospital versus home birth. The gradual transition towards hospital birth and the ascendance of the obstetrician began and continued for almost 30 years. Then in a small way midwives started to question what was happening. Their training became education and they carried out research, becoming professors and consultants.

Tayside has retained this much-respected traditional midwifery care with Community Maternity Units in Perth, Arbroath and the award-winning Montrose. This year will see the opening of the Ninewells CMU - a first for Dundee. Normal childbirth is here to stay and midwives are leading the way.

The earliest developments in specialist care for children with physical and learning disabilities also took place in Tayside with the appointment of the first consultant in community paediatrics in Scotland and the establishment of the Armitstead Child Development Centre in Broughty Ferry.

These early developments are the foundations for subsequent changes to women and children’s services with the opening of the Tayside Children’s Hospital at Ninewells and modernisation of the Ninewells Neonatal Unit, the establishment of the Ambulatory Paediatric Unit at PRI and the new Armitstead Child Development Centre, which will be completed later this year.

Finally, the origins of audit and measurement of quality of care emerged from pioneering developments by consultant neonatologist Dr Colin Walker, who developed the SMR11 database to record information on all newborn babies born in Scotland, and consultant obstetrician Professor James Walker, whose handwritten maternal records from the late 1950s have now been computerised. This data has now been linked to current databases through the Tayside Community Health Index Number (CHI No) and has provided an invaluable resource for investigating the early origins of adult diseases.
Pharmacy – from mortar and pestle to power drugs

When the NHS was established 60 years ago the practice of pharmacy was, of course, very different from the present day.

Medicines and remedies were produced in a very different way, with liquid preparations or mixtures much more common, and the mortar and pestle was in constant use to prepare formulations such as emulsions. Dispensing of medicine in this way was done by adherence to a formula like a recipe in cooking.

Solid dosage forms were not the tablets and capsules of today and antibiotic use was at a very early stage. Pills were compounded and made in the pharmacy on a rolling contraption.

Other common dosage forms were powders and cachets which were dissolved by the patient prior to taking them. All the labels were hand written and everything was wrapped in sheets of white paper before being handed over to the patient with some words of guidance.

All this was very resource intensive and dispensing medicines at current day levels, where community pharmacies typically process thousands of prescription items every week, would simply not have been possible. The public in the early days of the NHS was still rooted in the principal of self care and of not troubling the doctor with minor ailments.

The appearance of the typical pharmacy in the fifties was also very different. Behind the heavy wooden counter we redrawers full of different compounds and ingredients. The drawers were typically lined with gold leaf and inscribed with a latin description of the contents. Above this would be shelves of heavy glass jars similarly labelled.

Sterilisation of medicines such as eye drops was a major issue and every pharmacy had an autoclave for this purpose.

In the hospital setting it was also a very different environment for pharmacy.

Interestingly some minutes of a meeting of a health board reveal that concerns were being expressed about the increasing costs of medicines. Looking at the situation today it is clear that some issues do not change.

Patients typically had longer stays in wards. In the present day treatment is much more commonly maintained at home and in the future the workloads relating to chronic disease medication and minor ailments are likely to shift increasingly to community pharmacies.

The medicines of today are very different agents many of which are much more powerful than the drugs of the fifties. With that increasing effectiveness comes a greatly increased level of risk for the patient from their medicines. As a result the role of the pharmacist in all settings has developed to focus on patient safety. This movement towards developing clinical roles will increase in the future with much of the workloads relating to supply of medicines being carried out by other staff.

Prescription charges of one shilling (5p) were introduced on 1 June, 1952. Prescription charges were then abolished in 1965, and prescriptions remained free until June 1968 when the charges were reintroduced. At the present day in Scotland prescription charges are planned to be phased out by 2011.

Right: A typical pharmacy in the 1950s.
Keeping staff up to date...

The days before spectra

**Eastern Regional Hospital Board (ERHB) Quarterly Magazine, October 1968**

"The new X-ray Department at Arbroath Infirmary came into operation in June, replacing a previous out-of-date department of two diagnostic x-ray rooms which were separated by a considerable distance."

**ERHB Magazine, April 1967**

"Patients at Bridge of Earn Hospital, Perthshire, are now able to select individual meals from a daily menu following the installation of a Central Tray Service."

**ERHB Magazine, September 1972**

"A feature of the upgrading of wards 7 and 8 at Kings Cross Infectious Diseases Hospital is the transformation of what were open balconies into two of the most attractive day rooms in any hospital in the Region."
Dundee Royal Infirmary 1978-1998, Norman Watson
“Treatment and tears at the new casualty department at DRI in 1964.”

General Training at Stracathro Hospital
Nurse Recruitment flyer for Stracathro School of Nursing

ERHB Magazine, December 1973
Preview of Ninewells Hospital and Medical School
“The most difficult thing to convey to anyone who has not seen Ninewells Hospital and Medical School is the sheer size of the project. Shown opposite is what all outpatients and visitors will see when they pass through the self-opening front doors - the main floor in the Concourse Block.”

“Also showpieces in their own right are the ward units, planned on the ‘race track’ principle, each having 48 beds in two wards of 24 beds (three six-bed bays and six single rooms). Theatres, laboratories and associated clinical facilities are close to their respective ward units.”

“Statistics
800 beds; 3,500 staff; 500 University staff; 1,500,000 square feet of floor space...”
"...quite the most ambitious adventure in the care of national health that any country has seen."

Aneurin Bevan on the establishment of the NHS, July, 1948