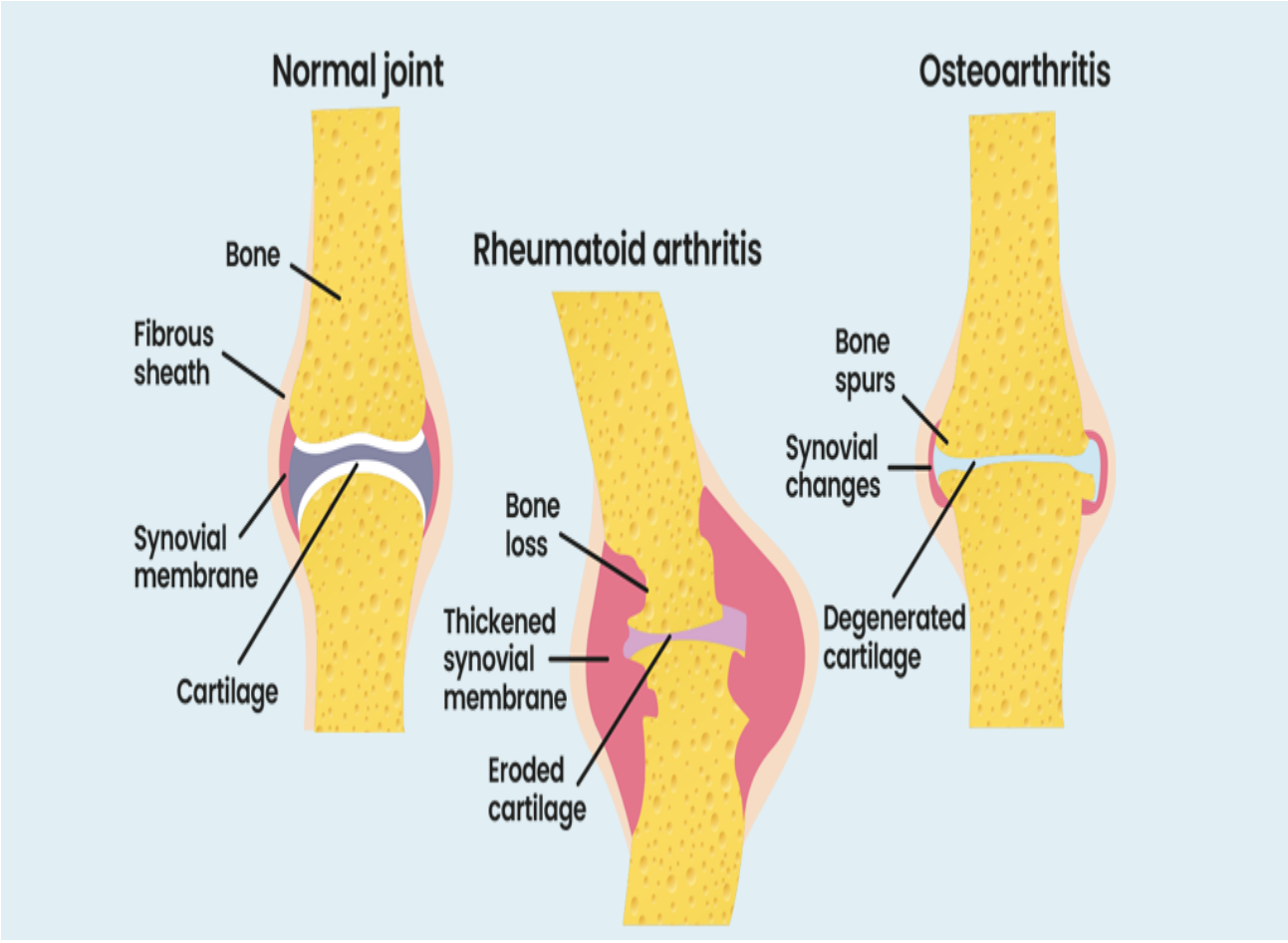
Resource

What is RA?

Rheumatoid arthritis is an auto-immune disease, meaning that the symptoms such as pain and inflammation are caused by the immune system attacking the joints.

Print



Article

Rheumatoid arthritis (RA) and Osteoarthritis (OA)

The word arthritis simply means ‘inflammation of the joint’. The reasons for that inflammation, however, varies. In the case of osteoarthritis, the cause is ‘wear and tear’. RA is an auto-immune

condition, meaning that the immune system, normally there to protect us, is attacking healthy the joints.

A message from Ailsa Bosworth (National Patient Champion)

‘If you’ve just been diagnosed with RA or you think you may have it, you may be feeling all sorts of things: emotional, anxious or afraid of what the future holds. That’s perfectly understandable. I felt all those things and more when I was diagnosed over 30 years ago.

‘But things are so different now. There are now very effective treatments which are a lot better than used to be the case, so you can expect to lead a more normal life than was ever possible years ago.? There is a lot of research happening around the world, with new drugs in the pipeline. The way in which treatment is delivered is also more targeted and effective.??So it is all the more important to get an early diagnosis and start treatment as soon as possible.

‘And we’re here to support you. You can speak to someone who really understands. We can help you learn more about RA so you can make the right decisions about your treatment.’

What is rheumatoid arthritis?

If you say ‘arthritis’ most people assume you’re talking about wear and tear on the joints, which many older people have.? That’s osteoarthritis.? Rheumatoid arthritis, or RA, is different, as the?diagram? shows.

It is a type of disease known as an?autoimmune condition. This means that your body’s immune system has made a mistake and picked a wrong target. To explain: your immune system is designed to defend your body against infection. It should not attack your body. Sometimes the immune system becomes too active, and mistakenly attacks your body, and this is called ‘autoimmune’ disease.

When you have RA, your immune system attacks the lining of your joints (the synovial lining).? This causes inflammation, which leads to?symptoms?such as pain and stiffness.

RA is generally a?symmetrical?arthritis, meaning that it usually affects both sides of the body in a similar pattern, although this is not always the case. It tends to affect the small joints of the hands and feet first – often the knuckle joints in the fingers. ?It is described as a?polyarthritis, meaning that many joints can be inflamed.

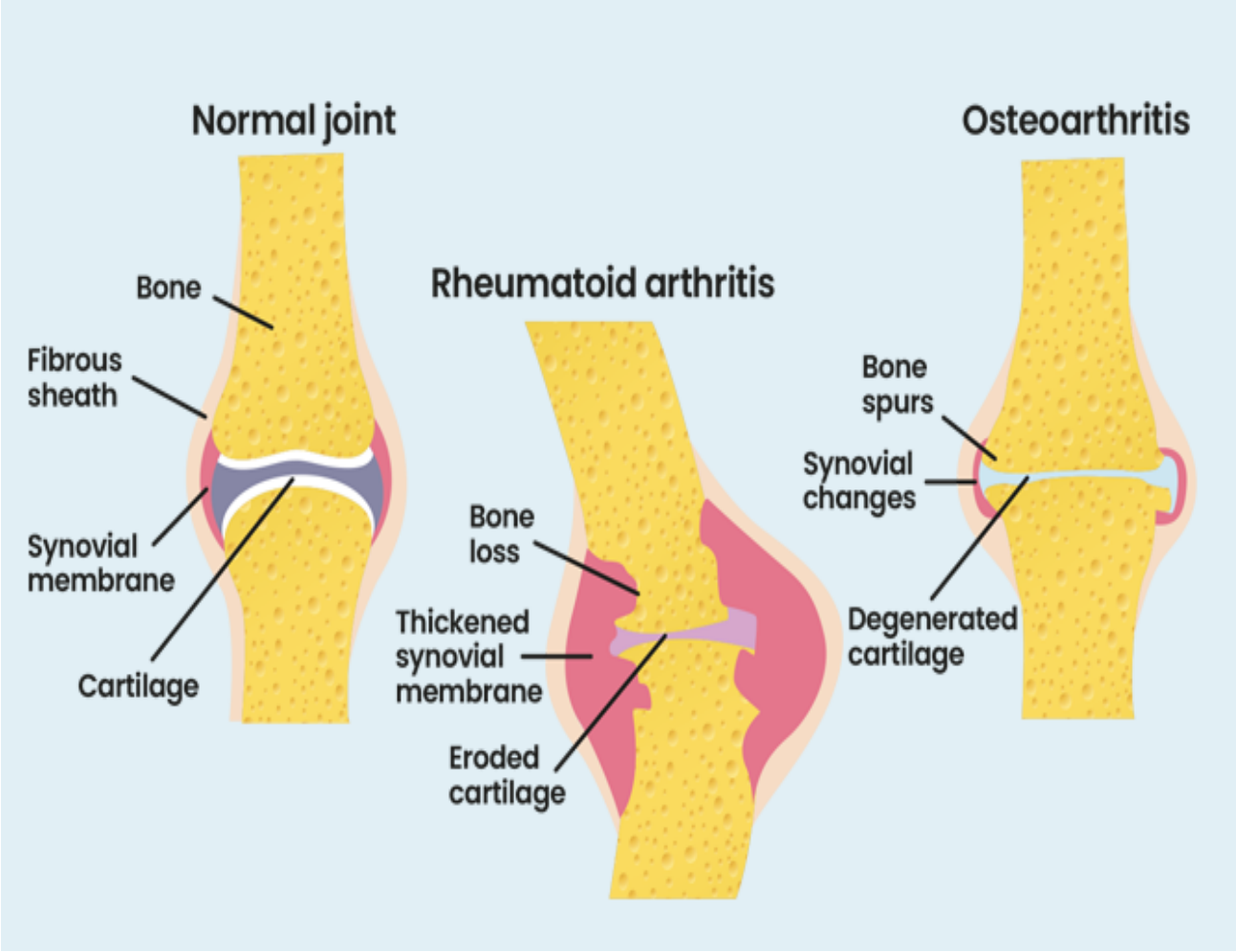
RA is a?systemic?disease, meaning that it doesn’t just affect joints. RA can affect a person’s whole system, including organs such as the lungs, heart and eyes.

About 1% of the population in the UK has RA – more than 450,000 people in the UK.? It affects more women than men, roughly two to three times as many women. The most common age for people to develop RA is between 40 and 60, or a bit older for men.? But people can get it at any age, even from the age of 14 when it’s ‘early onset’ RA. There are other forms of inflammatory arthritis, but RA is the most common.

If RA is not treated or is inadequately treated, it can cause irreversible damage to joints and lead to disability – and this used to happen often.??But today,?the management of RA is very good, far better than it was even 15 years ago

.? Although there is no cure, most people diagnosed today can expect to lead pretty full and active lives once the disease is under control.

How rheumatoid arthritis affects joints:



What are the symptoms?

The important signs and symptoms to be aware of are:

- pain, swelling and possibly redness around your joints.? Hands and feet are often affected first, though RA can start in any joint
- stiffness in your joints when you get up in the morning or after sitting for a while, which lasts for more than 30 minutes and has no other obvious cause
- fatigue that’s more than just normal tiredness

If you have any of these symptoms, go and see your GP. The sooner RA is?diagnosed?and treated, the better the long-term outcomes are likely to be.

Pain?is a significant symptom for most people. At first, it is caused by the inflammation in the joints, and later on pain can be as a result of damage to the joints. Pain levels can also vary from day to day.

Stiffness?is most marked/severe first thing in the morning and it can last several hours if you’re not

taking effective medication. There's a?'gelling'?of the joints, meaning that they become difficult to move from a position after you've rested them.? This also happens when you have been sitting for any length of time.

Fatigue?can be due to anaemia (low haemoglobin levels in the blood) but it can also be due to the inflammation. It has been linked to a number of things including pain levels.

Some people get?flu-like symptoms?with fever and muscle pains as well as being tired, especially in the early days before or during diagnosis.

Quite often people?feel?low, sad?or depressed, because of RA's overall effect on their body and the pain they are experiencing. ?And, understandably, because RA is a lifelong condition and there isn't yet a cure.? But there are now very?effective treatments.

What causes RA?

We know what causes inflammation in RA and?how to treat it effectively.

But we don't yet know exactly what causes RA itself.? What we do know is that there are two elements involved: genetics and environmental factors.

Genetics?are involved even if you don't have anyone in your family with RA. This has been extensively studied.? But it's not all about genes, genes indicate increased risk/susceptibility but not everyone with these genes develops RA as we can see from studies of identical twins. If one identical twin has RA, the other has only a one in six chance of developing the disease, even though they have the same genes.

An?environmental trigger?can be a virus, infection, trauma of some kind, or having a very stressful episode in your life such as bereavement, divorce or childbirth.? There are many theories about triggers but nothing's been conclusively identified.?

We know that smoking makes RA more likely.? A combination of smoking and having certain genes increases the risk of developing RA considerably, and the disease is more aggressive if it does occur.? So if you do smoke, this is another good reason to give up.?

There's a huge amount of research being done around the world to find the cause of RA, and many doctors think this will ultimately lead to a cure.?

Diagnosing RA

Rheumatoid arthritis can be tricky to?diagnose.? Why??

Firstly, most people aren't aware of RA –about one in a hundred people has it.? So when people do get?symptoms,?they put them down to some other cause: 'I've overdone it at the gym/ gardening/ playing with the kids.'? These are all typical explanations people have for the pain in their hands or feet, and explain why they may not go to their GP straight away.

Secondly, when someone goes to their GP with a painful joint, it could have many causes. GPs aren't specialists and there is no single test they can do to find out whether it is RA.? Your GP may not

know exactly what is causing the symptoms. He or she may treat you with an anti-inflammatory, for example, and ask you to come back in a month if things don't improve.? RA symptoms can come and go, so you may feel OK again for a while. And then the?symptoms?come back again.?

Getting a diagnosis

There is no single test that detects RA.? Diagnosis is almost always made or confirmed by a consultant rheumatologist who is trained to identify synovitis, the swelling of joints. This can be very difficult for the untrained eye to see. The rheumatologist also takes other information into account:

- What?symptoms?have you been having? (e.g. joint pain, stiffness and swelling).
- Can?blood tests?help? Your blood may show signs of inflammation (a raised ESR or CRP). One sign is something called rheumatoid factor in the blood, but it isn't conclusive.? About 30% of people with RA don't have rheumatoid factor, and people with some other conditions can have rheumatoid factor too. Another blood test, for something called anti-CCP antibody, is more specific for RA. ?But blood tests don't tell the whole story.
- Are there signs of?joint damage? If damage is already visible on x-rays you have had inflammation in your joints for some time. ?You may also have an ultrasound scan, especially if there's any doubt about whether there is inflammation of the joints (for example, you have lots of pain but no obvious swelling).? Less often, doctors use Magnetic Resonance Imaging (MRI) scans, as these can detect inflammation and damage more accurately and earlier than x-rays.
- Do you have any?family history?of inflammatory arthritis? You can't directly inherit RA, but if it's in your family you may be more susceptible to getting it when an?environmental trigger? occurs.? This certainly does not mean that you will automatically get it just because someone in your family has RA.

- Have you had?other illnesses?such as skin diseases (psoriasis, for example) and bowel problems (colitis and Crohn's disease)? These can indicate other, slightly different types of inflammatory arthritis which also require treatment by a rheumatologist.?

What is the treatment?

NICE guidelines for the management of RA? and the RA Quality Standard recommend that a 'Treat to Target' approach should be adopted which should include,?frequent review?of your RA,?formal assessment?of your joints to see if there is still inflammation and an?escalation?of therapy until good control of joint inflammation is achieved.? Taking medication is necessary in RA as this is the only way you are likely to be able to adequately reduce inflammation and get your disease under control. This table shows the different types of drugs used to treat RA.

Drug type	Examples	Purpose
Analgesics, also known as painkillers	paracetamol, co-dydramol, co-codamol	Help to control pain ?

Non steroidal anti-inflammatory drugs	aspirin, ibuprofen, meloxicam	Ease pain and stiffness by reducing inflammation, but do not prevent future damage
Corticosteroids, also known as steroids ?	prednisolone, depo-medrone ?	Reduce inflammation. They can be injected into inflamed joints or into muscle, given directly into the vein or taken as tablets. Often used as “rescue” therapy during severe episodes of RA.
Disease modifying anti-rheumatic drugs or DMARDs		
Standard DMARDs (these are in the form of tablets) ?	methotrexate, sulfasalazine, leflunomide, hydroxychloroquine ?	Reduce the immune system ‘attack’. They take time to work (weeks, even months). Control the disease over the long term and reduce/prevent damage.

Biologic drugs: These are made of proteins and have to be given either by self-administered injection or by intravenous drip		
“Biosimilars” are also biologic drugs which can be made after the patents expire on the first generation of “originator” biologics. Biosimilars are very similar copies of the originator. But they are generally more cost-effective, in part because the company producing them does not have to recoup decades of research and development expenditure	infliximab, etanercept, adalimumab, certolizumab pegol, golimumab, tocilizumab, sarilumab, rituximab, abatacept	Reduce the immune system ‘attack’, by targeting particular chemicals or cells in the body’s immune system. Control the disease over the long term and reduce/prevent damage.
JAK inhibitors (these are in the form of tablets)	tofacitinib, baricitinib, filgotinib and upadacitinib.	Reduce the immune system ‘attack’, by targeting particular chemicals inside cells which act as “on switches” for the body’s immune system. Control the disease over the long term and reduce/prevent damage.

When you’re first diagnosed, your consultant will want to get you started straight away on Disease

Modifying Anti-Rheumatic Drugs or?DMARDs?(pronounced?dee-mards). ?These can be very effective in slowing down or even halting the progress of the disease, and preventing the severe damage to joints that people with RA used to suffer.?

Disease modifying treatment might be one drug or a combination of drugs. It usually includes methotrexate. This is often used as the?anchor drug?in treating RA, meaning a drug that others are added to, in order to get the best effect. Not all drugs work equally well for everyone, so it may take time to find the right drug or combination for you: namely, what is most effective and has the least side effects for you.

DMARDs take several weeks to work, so you'll probably be offered a short course of steroids or a steroid injection. This is to help control your symptoms while the DMARDs start to take effect.? Steroids can be very effective in the early days after diagnosis, or when the disease flares, to get things under control quickly. Treatment guidelines don't recommend taking steroids for long periods, as they can have unwanted side effects.? Your rheumatologist will gradually reduce the dose of steroids as he or she finds the best combination of drugs for you.

Pain killers and non-steroidal anti-inflammatory drugs can also be used to help control symptoms, alone or in combination.? A?rheumatology nurse specialist?or a pharmacist in some hospitals, who works alongside the consultant, will talk to you about your medication so you know when to take it for best effect and why.

It can be daunting to think of taking medication your whole life. But if you decide not to, the damage to your joints is likely to be a lot worse than any side effects from the medication itself. Once joints are damaged, this cannot be reversed with medication, so the aim is to prevent damage before it occurs.

A word about?complementary therapies: there's no evidence that complementary therapies, diets or homeopathic remedies can do enough to control the progression of RA and prevent joint damage.? And once damage happens, it's irreversible. The only way to suppress the inflammation and control the disease is to take the disease-modifying medication that your rheumatology team can prescribe. There is lots of good evidence for this. However, some people do find that complementary therapies can help alleviate particular symptoms. If you?are?thinking about taking any alternative or complementary therapies, always talk to a?healthcare professional?before you take anything. Some complementary therapies can react with your prescribed medicines and cause problems.

Monitoring your treatment

You will have blood tests at intervals during your treatment, and how often depends on which drugs you're taking. ?With the blood tests, your GP can:

- monitor how active your RA is and how it's responding to treatment – these blood tests are known as ESR and CRP
- look out for early warnings of any possible side effects of your drug treatment: to make sure your treatment is not dampening down your immune system too much. You may also have blood tests for kidney and liver function.

If the treatment isn't effective or it causes side effects that are a problem, you can then try a different drug.?

What if you don’t respond to the standard disease modifying drugs?

For some people, maybe 10% to 20% of people with RA, the disease is more aggressive and more difficult to get under swift control. But a range of injectable?biologic drugs?(which include biosimilars) have revolutionised treatment for people who don’t respond to the standard DMARDs. Biologic drugs are a more complex form of DMARD. More recently, another class of drugs called “JAK inhibitors” have become available which are taken orally in the form of tablets which are as similarly highly effective as biologic drugs.

The NHS follows guidance set out by the National Institute for Health and Care Excellence (known as NICE, for short) about when biologics or JAK inhibitors can be prescribed. They are used after standard DMARDs haven’t worked sufficiently well, so they’re not usually prescribed for people who are newly diagnosed. They are also used if someone does not respond sufficiently well to the first biologic or JAK inhibitor given after standard DMARDs. In many cases, biologic drugs and JAK inhibitors are used with concomitant methotrexate therapy as an “anchor drug”, as mentioned earlier, as this boosts the overall benefits.

Your RA healthcare team

After you’ve been diagnosed with RA, a team co-ordinates your treatment along with your? consultant rheumatologist.? This combination of professionals is the key to effective treatment.? The exact team will vary, depending on where you live and your needs, but you should expect to see some of the following people as part of your rheumatology care:

A?rheumatology specialist nurse?can help you learn about RA and your treatments, how to look after your joints, and how to have a healthy lifestyle. The nurse will be your first point of contact at the hospital.

A?physiotherapist?and/or?occupational therapist?can teach you how best to protect your joints and the best exercises to keep them moving. He or she may advise splints for severely affected joints. Evidence shows that staying active and exercising regularly is beneficial.

Generally, the?GP?works together with others in the practice to provide support and reassurance to patients with long-term conditions, advising about? self management and lifestyle issues as well as prescribing the recommended drugs, monitoring your blood tests and advising about pain management. The?GP’s?involvement in your care may vary from practice to practice.

If your feet are significantly affected, a?podiatrist?(footcare expert) is an essential member of the team. He or she can advise you about looking after your feet and footwear and provide appropriate insoles for your shoes.

A?clinical psychologist?can provide important help with dealing with the long-term impacts of RA on your life, which can sometimes seem overwhelming.

And then there's?you?-the most important person in the team. The person with RA. ?Research shows that when people learn about managing their disease and take on this responsibility as part of the team, they do much better in the long term. The importance of self management cannot be underestimated. NRAS can help. Find out more about our?RA self management courses.

Looking after yourself

There's also a lot you can do to help yourself.? There's lots of information on our?Living with RA? section about these and other topics.

Keep at a?healthy weight.? If you're overweight it puts an undue stress on your weight-bearing joints, so losing weight is really important.? The biologic drugs also work better in people who are not overweight.

Try to?reduce your cholesterol.? People with RA can have an increased risk of heart disease and strokes in later life.? So it's all the more important to follow a good, balanced diet and one that reduces your cholesterol level.?

Try to?stop smoking.? Evidence strongly suggests that smoking may increase the risk of developing RA.?Smoking?may also affect the severity of?rheumatoid arthritis?once it does develop.

Keep your vaccinations?up to date – talk to your GP about the vaccinations you may need if you are taking a DMARD.

Physical activity?is vital to help keep your joints moving, and there's good evidence that exercise also helps to relieve pain.? The only time you shouldn't exercise is when a joint is very inflamed, swollen and painful. Give it a short period of rest, but once the swelling begins to settle, physical activity is essential to keep the joint moving. A physiotherapist will be able to advise you about the best exercises for you.

Learn to?pace yourself, because tiredness or fatigue is so common in RA. Overdoing things can be like taking two steps forward and three steps back. So keep to a balanced programme of activity to help you cope with and control your RA.

And?get?as much information about RA as you can?– from us at NRAS, and there may be?local NRAS groups?that can help, as well as our online JoinTogether groups.

If you feel anxious or vulnerable, it can be really helpful to talk to someone else with RA, who's been through what you're going through, and is now doing well on treatment. ?Family and friends may be very supportive, but it can be hard for them to appreciate what you're feeling as they haven't been in the same situation.??Our?helpline team and telephone volunteers?are here to help whenever you need us.?

Don't wait

If you have symptoms that could be RA, do talk to your doctor.? It’s important to get a referral to a rheumatologist at an early stage. The sooner RA is?diagnosed?and the sooner treatment starts, the better the long-term outcomes are likely to be.?

Updated: 01/07/2022

NRAS Publications

View

What is RA fold out card

FREE

View

New2RA

FREE

View

Living better with RA

FREE

Read more

RA diagnosis and possible causes

RA is diagnosed through a combination of blood tests, scans and examination of the joints.

RA medication

RA is a very variable condition so, doctors do not start all patients in exactly the same way on the same drug regimen.

10 Healthcare Essentials

Understanding what good care looks like can make a big difference to your emotional and physical wellbeing. NRAS have put together a list of 10 essential checks and services you should be entitled to and may benefit from knowing about.