lt's.

Right. Is that better? Cool.

Good. Thank you, Caroline, and thank you Carol. And the centre for Ageing Research for inviting me here today. As Caroline said, I'm based at the University of York. I'm a health services researcher by background, focusing on mental health research. And I'm based at the Department Health Sciences. Just a quick shout out to our newish institute at York. I am currently a pool ead with my colleague, Professor Piron. White of our environmental.

And Sustainability institute at York, which is there to essentially promote and catalyse Environmental Research across the university at York. And I lead a theme there that focuses on environment and health, which is the focus essentially of my talk today. Yeah, sure.

OK.

Good. I'm being a Mancunian. It's great to be back in the Red Rose County, so it is good to be here. So without further ado, I'll just make sure we're going the right way. Yeah.

So I'm gonna basically talk around my research interest in, in, in the connection between exposure to and being in nature and and mental health. I haven't got a detailed slides about just one one project. I'm not going to go into lots of detail about methods and results that just one topic. Hope that gives you a flavor of some of the research that we're doing at York. And beyond, and I just wanted to sort of like up a survey that was done during the lockdown period during COVID just to sort of point up the.

The importance of nature and being outdoors for people's mental health and this will survey done in 2020 and it just emphasizes just how relevant being outdoors and being able to visit what we might call green spaces was during those.

Some of you might have heard of social prescribing in general.

A very much.

On the trend, innovation from NHS and sort of NHS England as it was, national programs of of connecting people to community and social assets to support their physical and mental health. But this is especially around how we think about connecting people to nature based organizations for, for, for the chance to be doing things like gardening or conservation. So I cannot just set some of those things already, green social prescribing or GSP, always known as it connects people to these activities, often from primary care.

So there's a whole new workforce that are being employed called link workers that help people to essentially identify what it is that matters to them. And if that involves being outdoors, that then is a signal that they might want to take part in nature based activities. And it's increasingly being used to support people, especially who are older adults who are socially isolated. But also the populations there are higher risk of mental health problems and indeed also children and young people.

And this is just a slide from a a handbook about green social prescribing. Just to give you a flavour of some of the things that you might end up doing if you were actually were part of a care pathway that led to nature based activities. So gardening horticultural therapies, perhaps it might be more wild than this space where you actually are building things or doing bushcraft booking, growing food, whole variety of things. And this depends on what people want. So there's an increasing opportunity depending on where you live.

To take part in these kinds of activities.

So we're now, we've all evaluating in the Humber and North Yorkshire region, one of the seven national Test and Learn science. So across England a number of the government organizations listed below from deferred to the Department of Health and Social Care and also Sport England and the national not lottery have funded across across most of England. These test sites where they're rolling out green social prescribing and we're evaluating the scheme. And in North Yorkshire.

And includes a whole variety of orange organisations and charities and social enterprises that offer the opportunity across the East Riding the north of the county all the way down to north links

Uh people being connected to nature based activities that provided by community organizations. So it's a very, very complex rich mix of.

Care for behind us and also organisations that historically weren't set up to provide care but are increasingly recognizing that what they offer has a health and well-being benefit.

So we're still going. This is only just started sort of at the early point in the summer we we're set up from the early part of the winter, but with the with the weather and with delays with funding and and the whole variety of different reasons, we didn't really get going until the summer. So we're only on.

A smallish sample size. So far we've got a target of just under 300 I think of today. I think it's 120 now and this is just a very brief overview of who these people are. It's a fairly even split, men and women.

Many British.

But increasingly, we're getting more people who are, in a sense, transitioning to an older adult age group. I think that group is actually important because it's not just about the old list, old or the older adults about people who are transitioning into preretirement and thinking about things that they might want to engage with later in their life.

A lot of the people, as I'll show in the next slide, are actually physically.

Sort of unwell so you can see from this slide that in terms of their self declared health datas, we've got quite a few people about 20% of just over 20% who are saying that they are limited substantially by their physical health. Some are limited but not substantially. So they have mobility issues, but it doesn't stop them from going outdoors and a small minority. He was saying up there, they don't have mobility issues.

And what they're doing that they're doing manly things like growing food and gardening. So that is perhaps in average flexion of the organizations like we're linking to a lot of them are providing those sorts of activities. Increasingly, we're seeing some opportunities to do green exercise. So outdoor exercise classes including.

Uh. More sort of therapeutic approaches.

Not many yet, but hopefully that will change depending on how how we do in terms of linking to services that offer or creative and.

A tile opportunities to build things.

And just before I finish, I'm away of time. I've got a couple of slides just to show you sort of headline and figures around how it's affecting people's mental health. So what we're doing is a simple before and after study, we're measuring people's health before they start 12 weeks later, we're measuring how they feel afterwards and we've got 2 scales. One is called the Owens for that measures happiness and well-being and anxiety. The first three questions, the higher the score.

Sorry, the lower the score, the worse it is because they're saying that they're not as satisfied or they're not as happy with the things that they're doing and the final score is about anxiety. So the opposite is true. With that score, the higher score represents higher levels. The because identity. That's actually all this shows is that the happiness scales and the well-being scores are gradually improving. So what we're seeing is a slight improvement in the way people are self reporting their satisfaction with their life, following engagement over three months.

In nature based activities and their anxieties marginally reduced, we're not claiming any sort of definitive evidence about this, which this is a kind of exploratory piece of work, but I think it's an important indication that people are reporting improvements in their mental health.

The same is true of our specific subscales on anxiety and depression, so we're using something called the hospital anxiety and depression scale. And again, this is self reported. People are declaring how they feel on the day, and then after they've done the activities and this is easier to interpret. The higher the score, the more unwell they feel. The level of the score, the better they feel, and again, albeit these are small numbers at the moment, because this is.

Only a third of the way through was showing a a marginal drop in staff reported anxiety and depression.

So that's good. That's what we hope for is what we expected. But it's also important to say that this is early days.

So just to sort of a flag up, just some ideas about where we'd like to take some of this work and especially in relation to the things that we're talking about today about healthy ageing and and older adults.

One of the things that I've not mentioned a lot is physical health and the review that I talked about earlier didn't really find any strong signals that doing things in nature effective, things like blood pressure or reduce weight. I think that's in part because those are things that are difficult to track over time. It's more about how you might want to measure those more objectively, using things like activity trackers.

As opposed to questionnaires. But there is there is some evidence that that doing things such as gardening and preserve things like grip strength, we know grip strength is an indicator of frailty.

And we know Frailty is a risk. Fans have had depression. So in some senses, what I'm thinking about here is how we can use nature based interventions, not just in a therapeutic context, responding to people who were presenting in primary care with existing mental health problems. This might be about how we prevent the onset of of ill health, especially in older adults who are vulnerable to things like frailty and depression. But it's about bringing people in.

To do these kind of activities before the onset of illness and importantly, how do we tailor these opportunities to meet the needs of older adults and going back to the qualitative data that I shared with you, doing things that have purpose and meaning appear to be far more engaging and far more relevant and also?

Uh offers people the chance to sort of stick the course because they want to take part in these things, is an important factor in in proposing how we might roll these out on on a much more scaled up basis.

Everything I've talked about is is sort of been more detailed on a new web page that we've got at our department. So very happy to sort of share these. I'm sure they are being shared as part of this conference goes into much greater detail about the projects that we've got online and currently in the making.

And I'll leave you with a picture of Askham Bog, which is the nature reserve that we had one of The Walking groups run by the Yorkshire Wildlife Trust. And for those of you on social media, you can connect with me and my institute at your.