

Supporting, Sharing, Scaling: How are Clinical Entrepreneurs and NHS Innovation Accelerator Fellows driving innovation in the NHS?

Innovate stage

Monday 11th September 2017

17:00 – 18.00

Speakers:

- Professor Tony Young, National Clinical Lead for Innovation, NHS England
- Paul Gaudin, CEO, The HealthPeople Ltd
- Liz Ashall-Payne, Founder and CEO, ORCHA
- Dr Maryanne Mariyaselvam, Clinical Research Fellow, Addenbrookes Teaching Hospitals NHS Trust
- Helen Gordon, Chief Executive, Royal Society of Medicine
- NHS Innovation Accelerator Fellows and Clinical Entrepreneurs

Tony:

Good afternoon and well done for staying to the last session of the day. Welcome to our joint session between the national innovation accelerator. We will hear from mentors and partners to both the programmes and we'll then have 11, 60 second pitches from our young entrepreneurs. Before that, two key notes from a mentor and a partner to the programme who have been supporting us as well. We will tie that all up after the pitching at the end with a little panel. I clicked on through my slides. So, first of all, I thought what I'd do is explain a little bit about these two programmes and why they are so important and how they fit together and they can help us bring new action to healthcare.

I'm still a frontline clinician; I'm a neurologist for those of you who know me.

Healthcare seems pretty tough at the moment on the frontline. We have rising

demands from our population living longer than ever before with a range of chronic conditions. More so now.

I think when the NHS was founded nearly 70 years ago the average life expectancy was 65 for men and 68, 69 for women. That has increased now to nearly 80 on average, a bit more for women. So, lots more pressures on the system than we had. We are now spending 70% of our healthcare budget on the management of chronic disease, but we have a system that was designed around acute care. So, does the system we designed nearly 70 years ago serve us as well today as it did when it was first designed or do we need to do something new about it?

We saw the Five Year Forward View come out a few years ago saying how can we deliver on prevention new models of care and improve quality and efficiency, at the same time how can we adopt the latest, greatest innovation and take them on. That's a real challenge given some of the financial constraints that we have. How can we also learn from disruption that's going on in other sectors right across our lives, whether it's banking or in the retail sectors, things are going on online, Amazon, Google, what can we learn from what they are doing and how are we equipping our clinicians with skills, knowledge and experience to help them do that.

The first thing I wanted to do was show you an example of how the world is changing and how sometimes medicine has been slow to take that change forward, but how some of our clinician entrepreneurs and fellows are making that happen. The example I like to use is the evolution of the doctor's bag.

If you look 5,000 years ago in ancient Egypt what you'll see are clippers and gougers. If you look, 4 and a half thousand years later, there is almost no difference between those two pictures. Spot the difference, 4,500 years is the ant, but the doctor's bag and what they are carrying hasn't changed. If you go to 100 years ago to the Wellcome collection it is the same. At the end of the century, alcohol, gel and gloves. What's happening and what is disrupting that?

We're seeing what I call the personalised democratised healthcare revolution. More available on this slide, more technology available to our patients today than is available in most primary and in fact some secondary care settings. I use this slide all around the world and a number of our fellows and clinical entrepreneurs feature on this. Proximate is one at the moment. What you can do is put a pair of Google glasses and you will have that medical assistant you need right next to you, whether it is an expert surgeon or if you are on a plane and you need advice from a Dr, on the frontline in Afghanistan or in a prison situation, you can get that.

I'm talking more and I have a great video tomorrow on the NHS stage and you can see a little bit more about that. One of our other there a practice nurse, an NIA fellow, a consultant finance from the south coast, thought we could do things better in COPD, how we could empower patients, it has been through our programme, and has now gone on our national innovation technology tariff and is getting the innovation taken up across the nation.

None of the entrepreneurs have developed that yet, but there are early stage things that we are taking forward. One of the groups, again on the NIA, is in a good sleep box. Good sleep is a replacement for sleeping pills. It is one of our NIA fellows and it is a telephone help line to help you get more active sleep per night. Then, disrupting the way we detect AF and taking this forward. So, these are available to patients to empower them.

It keeps advancing to this slide, down to our clinical entrepreneurs. What are they? Who are they? In year 1 we appointed 104 junior doctors to the programme. I'll show you the metrics in a moment. This is year two. We have now gone to over 220 clinicians which makes it the largest entrepreneurial training programme on the planet.

This couldn't be done in any other country in the world because you need a unified healthcare system to make that happen. Here are some of them. What have they achieved in their first year? Well, these are the output metrics. We had more than

340 jobs created. We had 5.6 million patients and professionals impacted, between them, from public and private sector routes. They raised more than 50 million to invest in their businesses and take them forward. A whole range of partnerships, they came to a whole range of educational events. And this has been running a year. It is stunning, really. What I thought I would now do is go through and introduce you to some of the people who have been involved in this programme and taking that forward. First up is Paul, one of our mentors, serial entrepreneur, he will tell you about his journey and experiences on the clinic room programme. Paul?

Paul:

So I will have to use these, when Tony asked me to help in January 2016, I really had no idea nor did he what this was going to involve. So, just 18 months later the fact that the programme has been so successful is really wonderful insight and achievement against all the odds.

Now, it has taken vision from the top of the NHS drive from Tony, resilience I think from other team that has been running it because the team has got slower and slower and smaller and smaller in what they can achieve. But I think overwhelmingly the support from the clinical entrepreneurs has allowed us to pull this together into what it is today.

Across my career which extends from start of the company, how the heck did a guy started a New York bagel company, I promoted them with the bread role with a non-fattening health centre and here I am in health care.

I did innovation and communication and health care and life style and disease. Mostly recently, found myself in the start-up environment, with care rooms, set up care rooms launches this week, where we are redeploying people's homes and granny annexes, to help with the bed blocking crisis, that is a wonderful range of innovation that is the entrepreneurs have given birth to, things we have helped to stimulate and encourage and grow.

I don't think there is anything different about the entrepreneurs and the problems they face within this environment or any other environment apart from the NHS. With the convergence, I think of while we procrastinate and deliberate and create barriers to change, the democratisation of health care is accelerating shortly I think we are going to have a world where the consumer is the patient or in your world they are called the patient, is going to be making health care decisions themselves. So, we are not going to be in control of this anymore, the customer and consumers are going to overtake what we are doing. The pace of change has to accelerate. How to do that?

With the NIA more advanced business opportunities which are allowing me to advise them on growth strategies, redeploying and restructuring their management teams, so you see problems in the start-up environment but there are similar issues within that growth environment that you see in the NIA to again to any other industry sector I am involved in.

But I think with the convergence data technology and health, and instant access culture, means if we don't get instant access to health care, then we are going to buy it, trade it, and use it.

So, the clinical entrepreneur's programme I think offers a safe structured process for innovative ideas and I think safeguarding entrepreneurs from the big organisations that could and sort of rather challenging individuals who may come into this market we have got to protect the ideas, the innovations and spread that amongst the marketplace within the NHS.

But, I think that investors tell us that they will not invest in business was businesses which are reliant on the NHS for their market and that is a big lesson as well for all of us.

This is forcing our innovations abroad and we are going to lose not just the brain power but the idea and the income so the NHS is actually losing out on some of this.

I hear many reasons for these arguments, IP battles are one of the biggest issues, who owns the IP, that is about us all sitting around the table and working that through. But I think as we move into a Brexit world we should be able to leverage what we have invested in, the investment in training the doctors, in training them to develop and have these ideas should be retained. We should be able to be proud that we are British innovators.

So, it is incumbent on our leaders to create the legal and policy framework for change, I think they are doing that.

For our innovators to have our support to innovate. For those running the system, to purchase and embrace the change.

For change is coming. Whatever, whether we like it or not. Within the next 2 years the commercial market will have overtaken this marketplace. They will have taken the lead and so will health tech and med-tech innovators have taken the lead over the NHS, whether we like it or not. It is going to happen.

How do we go with that? I think my challenge to everybody is it is up to each and every one of us to decide if we are on the innovation train, as it leaves the station or if we are left, going to be left behind because I am proud to say that I am in the first-class carriage with a bunch of crazy entrepreneurs it is great fun and a great ride. I would encourage people to look at the whole innovation opportunity.

Rather than come at it with a glass half empty approach. Say we can do this, we can innovate and buy the solution and we can support the clinical entrepreneurs and take advantage of both to save money but also to innovate and to make money from our economy as we move into this brave new world of innovation internationally as well as because of Brexit. So, thank you very much.

Tony:

Thank you, Paul. So, when Paul first approached he is a serial entrepreneur, gone

to start-up to major exit, time after time after time. When you find someone with those skills and persuade them to come with you on a journey, incredible benefits and insights to the clinicians on the journey. I have a sensitive clicker for some reason, so now it is not going the work at all. So, can we have the next slide please if that is possible?

I will introduce Liz, so Liz is one of our mentors on the clinical entrepreneur programme, recently NHS England went to partners to the world and said, would you like to partner us and help us equip our clinicians with the skills knowledge and experience, from the commercial world, help us transform health care together. So, Liz has come on board with that and she is an inspiration and I have asked her to tell us a little bit about herself but also some of her reflections on working with some of our entrepreneurs particularly those in the digital space, Liz?

Liz:

Thank you, I am Liz Ashall-Payne. I founded Orcha, I started as a speech and language therapist, working with children with complex health and care needs, I have been fortunate. Nearly, 20 years' experience of working in the NHS now. I have managed to do a lot of different things within the NHS.

Very early on in my career as a clinician, I got really frustrated with the fact that I could only have an impact on the one patient sat in front of me. I knew what their challenges were; I knew they were people waiting and waiting listing for assessment, waiting for therapy. I also knew that in the population there were people who really needed support. So very early on I got interested in innovation, transformation, although it wasn't called that then. At that time, we called it quality improvement. So that took me into the world of digital health because digital health started to become part and parcel of our day-to-day lives and I was interested in how digital could really support the challenges that our patient's populations and clinicians are finding on a day-to-day basis.

I also found out that there were lots of health apps out there. In fact, there is

currently over 300,000 health care apps, what I also found out was that there is nearly 4 million down loads of these health apps every day and clinicians and professionals think that these apps could really support patients and population health outcomes, in fact a recent survey, 97%.

Now what does this tell you? Clinicians know what the challenges are, they know there is an opportunity with these resources but what I was aware of was that there was no way for clinicians to find good health app products and use them with their patients.

So Orcha was born, out of the problems that we face at the front line. As a clinician, which apps do we choose? As a system leader, how do we govern what apps being used? As a patient and person, how do we find the products and how do they get the product to market. So, we review apps and we present that information to clinicians' populations and patients that they can find apps that would really support them or their family's needs or their patient needs.

The review process is 100% comprehensive, we go through the health care market every week. It is a 100% objective, we apply all relevant standards and best practice to apps, it is 100% sustainable because we are a commercial organisation, we are able to sustain and maintain our presence in the marketplace. You can see the way we disseminate the information, having a store with health apps that have been reviewed on there is one thing, but how to get the information out to populations, patients clinicians, the way in which we do that is by white labelling the portals, two examples here, one targets children who have mental health conditions, the other targets adults with long term conditions.

We provide the NHS with a clear compelling campaign which is pushed out to populations and we give the clinicians the ability to prescribe apps through our system to patients.

Now what is really exciting about all of this is the information that comes out of the

other end we can now see who in the population is looking at what products, which clinicians are recommending what apps to whom. Did that patient convert and download it? What was the impact? That is the biggest thing.

Now I feel so lucky that I started out my career as a clinician and I feel truly blessed to be able to work with Tony and all the clinical entrepreneurs. It is because we are clinicians that we understand the problems. It is because we are clinicians that we understand what the problems are for our patients and populations and it is because we are clinicians we have passion and tenacity to drive this forward.

I feel delighted that Orcha have been accepted as a partner, I can't wait for the next 12 months the clinical entrepreneur programme enables them all to recognise this journey is not easy. But by coming together by sharing learning and by providing each other with the bit of energy, and motivation to keep going, together we can make a difference.

Together we can make the impossible possible. Thank you so much for listening.

Tony:

We are grateful to Liz to all she has done on the programme. If you are on the programme, that is structure shortest I have ever heard her speak, I never thought she would do it.

Now what we are going to do is what we are really here for, wow the slides are working! We will hear pitches from some of our young entrepreneurs we have got 10 or 11 or so, will come on to the stage. One of my colleagues from NHS England sitting over there Emma is going to time them from one minute they have all been briefed that they, one of the things you learn on this programme is how to pitch Now some of them are new to the programme and some of them been here for a while, you will see a complete different spectrum of those coming forward, you are not taught that at medical school and conveying the fundamental principles of what you need to get across for someone, when I am in a lift and Sir Bruce says, what is

the latest thing? I have got to the fifth floor.

What we will do is get about ten of them, one by one, they will come here and pitch for a minute and if they get close to the minute I will start clapping and I would like you to join me slowly and gently to warn them it is over. Practice that now okay? In America they are standing whooping, get them off in England! Very good, we will have to be more American.

Let's get our first person up, who is Malcolm Harrison. Malcolm, you have a minute once you get to the podium.

Malcolm:

I've been given using the option of a mic that doesn't work. Thank you for having me here. My innovation is a sore throat test and treatment. It is the use of a clinical scoring system based on community pharmacy. Why sore throats? In every year there are 1.2 million appointments made with GPs for sore throats. 50% of these end up in prescriptions of antibiotics. Only 10% actually need antibiotics. We believe we can drive this away and accurately diagnose people with bacterial infections.

More importantly, we can use a negative test result as a positive. Congratulations, you don't have a bacterial infection. We are looking for commissions to work with us to reduce inappropriate prescribing and changing behaviour.

Tony:

Emma, if you were to go to an auction, you would have bought everything there! Good, brilliant. With a bit of luck, next up, that was a fantastic pitch. Sergeant Paul Jennings.

Paul:

I have designed a new model of care needed in the mental health world. At the top of tree of all mental health patients there's some mentally disordered, unhappy,

chaotic, challenged patients that on their home mental health nurses and clinicians can't deal with. It is because their behaviour is so dysfunctional and are in addictive appearance of crisis behaviour.

If you bring policing into health, very delicate, we parachute the best police officers we have into mental health community care teams, we can combine behavioural boundaries, cancellation, into one model of care. Where patients, pushing against the system, against nurses, with our presence and professionalism and our skills start to get better. That's called Serenity Integrated Mentoring and I've been on the NIA10 months.

We have 13 teams in the UK, one in Holland and one in the United States above that. We have a network for the teams to talk on a digital platform, as required by the five-year review, so we can make sure everything we do is shared, integrated and professional

Tony:

That is so important. Absolutely fundamental; mental health and police

Tom:

Who here add one of these? Have you checked your emails on it today? Mobile phones have changed the world. With Dr Doctor they are changing healthcare. We integrate with existing systems to use the power of the phone in your patients' pocket. They are welcomed to hospital with a welcome message.

They can make, book and change their own appointments which improves clinical efficiency by 20 to 30%. We collect outcomes which bind with scheduling/the need for face to face follow ups. When we did this at Guys and St Thomas, within six months we were doing quarter of a million patients a month. The Trust saved 2.6 million pounds in a year.

We are now doing that for 22 other hospitals and nearly 5 million patients. If you

were to scale that up across the NHS, that would be nearly a billion pound a year saving. It is available now. So, come and see us in the end zone to understand how we can use the power of the phone in your patients' pocket to save money and delight your patients.

Tony:

Wonderful. Those are our three NIA fellows. What you are going to see, the NIA is about developed ideas that we need to scale across the nation. What you are going to see now are the more fledgling, early stage ideas. Some more advanced than others as we take them forward. I think George is up first.

George:

Thanks. Hi, I'm a GP registrar in Exeter. I want to tell you about Health Deck, our digital publishing platform for hospitals.

Hospitals have a real problem of distributing health information, specifically for different conditions. We solve that problem through our platform by taking specific hospital information and delivering it securely through a digital platform.

This brings real benefits to the organisation. For example, our latest maternity app saves £15,000 a year just in printing costs. It really improves patient experience. Not only this, the tools that we use help the NHS to get feedback about how patients are experiencing service in NHS Trusts. We can now deliver any digital pathway to the NHS through our platform.

If you are interested in talking to us, please come see us at our stand. We have a stand at 258. It would be great to speak to you about it. Thank you.

Tony:

Brilliant, George. Well done. I cut the NIA fellows some slack. Okay, Hinnah is up next.

Hinnah:

Hi. I'm a consultant, but as a junior doctor I feeder the cardiac arrest call. I would have to run to a patient's bedside where their heart had stopped, they were dead, and it was my responsibility as part of the team to save their life.

Cardiac arrest happens to 60,000 patients a year in the UK, and only 20% survive to make it home to their loved ones. It is the highest stakes. We have to follow detailed protocols under strict timings, but under pressure we forget and time blurs.

To help us at the moment we have our memories, whiteboard and pieces of paper. That's not good enough. We developed Team Screen thanks to a €5,000 grant we have a prototype that has been tested. Volunteers have found it to be empowering and described it as like Satnav for cardiac arrest

It takes away low-level distractions. We have partnerships with two trusts. My vision is to double survival from cardiac arrests and we are looking to take our prototype through commercialisation and out where we can make a difference.

Tony:

Thank you very much. I didn't have the heart to cut you down. I'm getting too soft. We have a series of pit stops. We intensively hot house them in a boot camp, with experts coming to see them, Media people from the BBC coming to teach them to pitch. Next up. Sola

Sola:

Hi everyone, I'm a second year at UCL. The problem we're trying to solve is one in three of us know someone or will have a family member diagnosed with cancer. the only way we can beat the disease is by clinical trial. This is sometimes based on log or depend on the geographical location of the patient. If you live in London, you have a chance to get on a clinical trial.

We have a joined-up approach, searching through multiple digital basis and cut down the time by 50%. Currently we developed the algorithm. We are looking for

collaboration with NHS Trust to test this as a concept. We are looking from collaborators as well to take the next step and looking for clinician champions to spread the word. If you want to have a chat with me, come and see me.

Tony: Match.com for clinician trials.

I'm the founder of generation medics, an award winning. ... We essentially bridge the gap between health professionals and schools and colleges. So, we're creating a pipeline of talent for the NHS. I've got two asks for you today.

If you are a health professional and want to get involved go to our new website generation medics. ORG.uk. If you are a commissioner looking for recruitment and workforce planning, get in touch with us. Thank you.

Tony:

Thank you. Ahead of time. That's what I like. Have you made an announcement about the funding you had? Is that in the public domain? Oh, it's not. Ina might have been awarded a large amount of funding to help us drive jobs in the healthcare sector across schools in England. I think she has been fantastic. Well done. You are great. One of our new year 2s is about to come up. While he is walking up I'll tell you how I know all of them. Lanrae sent me an email. I assumed he was one of the junior doctors. He said can I come see you at the end of your clinic today. I said sure. He wasn't from my clinic, but had driven out from London. He sat outside my clinic room on the off chance that he sent that email and I said I would see him. That's commitment, isn't it? Hope your pitch lives up to it!

Lanrae:

I'm an A&E doctor. Imagine if we knew why each patient comes to the department. We knew the reason why they were there before they came in. Imagine if we knew the complaint, pathological history, drug history, social history and family history before they even stepped into the door. With allege rhythmic software, that patient using their phone or iPads, this is exactly what we're doing.

We equip each A&E department with pre triage. ... before the patient is actually seen. In doing so we reduce documentation time by 50%. And the clock in time by 40%

Reducing patient waiting times and also increasing the efficiency of the hospital. Better care, better insight. We're going live in five NHS Trusts in the next few months. Thank you very much.

Tony:

It is not a waiting time; it is a time for gathering more data, having patients involved in taking it forward.

Now the next one was so committed to what he wanted to do he didn't just move himself, he moved his wife and new baby from Newcastle to Essex because he said there's more chance of me bumping into you and helping to take your innovations forward.

Thank you. Obviously the only way is Essex!

Harry:

I'm the cofounder of Care Rooms. It is a new service which uses the sharing economy to help solve the bed blocking process in the NHS. We recruit hosts in the community and give them everything they need to rent out rooms to patients. We use a range of technologies, digital health products, tailored to the patients' needs and carers coming in to provide care

This year in the NHS about 3 million bed days are going to be lost due to bed blocking. By the end of the year we are going to scale out across the country. So, looking for any commissioners interested in using our service and anyone who wants to partner with us and join us in our mission to build a community that cares.

Tony:

I like to call it ... what a problem that could solve from that, from the front-line A&E doctor now being given the skills knowledge and experience to take it forward. Ash you are next.

Ash:

I am an Orthopaedic Registrar from London, a third of our nurses waste 2 hours every day trying to find missing equipment I and I am sure you can remember times we have been delayed by similar problems, yet our hospitals don't have official ways to report these issues, the medi shout app applies our ..., select their ward, type their problem and press send, we save £15,000 per ward every single year, so that is poly 150 million across the NHS, the data generated improves hospital performance, faster discharges and fewer medical errors thanks to the programme we are launching in several NHS Trusts we believe every NHS hospital should have it. To see it in your work place, find it after, go to the website to find out more.

Tony:

Good, less than a minute, and does he look like an orthopaedic surgeon, looks like entrepreneur, come on the programme and change your look. There is only one person who is on both programmes who started on the national innovation accelerator and then the programme, Mary Ann, what she has done, I have given her 2 minutes to tell you something about what she is doing, Mary Ann, we are in your hands.

Mary Ann:

Junior doctor, working in intensive care and researcher, undertaking a doctorate. I am a fellow ..., and my innovations are on both of the programmes. So, I have this one. This is the connector, prevents a wrong route drug administration. I have also developed the wire safe and this is a device which has now been shown to eliminate the possibility of the commonest never event in emergency medicine.

This is the new ... ventilation tube comes with electronic controller, this innovation

can save thousands of lives and over a hundred million pounds within the NHS by preventing the commonest hospital acquired infection, both these are effected cost free on NHS England's innovation and technology tariff.

The NIA and the entrepreneur programme have supported me to make this possible and with the help of these programmes they are rapidly spread across the NHS. There are still hospitals that haven't taken advantage of this so my one ask of you all, to come to the stand, clips UK, next to NICE and see the innovations and find out how we can help your hospitals take up these innovations, thank you.

Tony:

Mary Ann, take a seat you are joining us, that was nowhere near 2 minutes, she has achieved it 3 times in different areas, massive things that are going to make a difference to patients' safety, which is fantastic.

So that is the pitching done. I thought they were all really good. So - well done guys.

So now if I can also invite Helen Gordon up, who is the Chief Executive of the Royal Society of medicine to join us. We are going to have a Panel to ask questions around the programme and how they have interacted with it and helped benefit. Helen? You are all mic'ed up.

So, Mary Ann again. So, you are on, you have been on both programmes. Why did you apply to 2 programmes and what have you learned from them?

Mary Ann:

The two different programmes complete to the different pathways, the innovator programme, are for programmes, in practice and ... and the (INAUDIBLE) met the criteria, was fortunate to be selected to be on the programme, supported me. I think the clinical entrepreneur programme for me, has been for the right at the beginning and the start of that journey, developed actually a fourth innovation. In for that

innovation, the clinical entrepreneur programme has helped many e to create and set up a (INAUDIBLE) [mic cutting in and out], given me the guidance to help to do that, contributes each other for the pathway.

Tony:

What would you say, the national innovator accelerator, is fantastic established in 2015, delivered by UCL partners and The Health Foundation, taken something that was uncertain, was fledgling from start-up, grown it into something that is impressive, report coming out, independently The Health Foundation commissioned a review, economics by the University of York, coming out in September, show you the real impact it is having.

But from the NIA, first and then from the clinical entrepreneur programme, if you had to pick one thing, because you are a junior doctor you get trained in diagnosing patients and delivering the same. What have you taken away from the NIA and the clinical entrepreneur programme that you didn't know or understand before?

Mary Ann:

It is the implementation skills, how you take the innovation from one 2, 3, hospitals to 300. That is what the accelerator programme teaches you.

From the clinical entrepreneur programme, moved me from being a clinician, to a clinical businesswoman and this is the skill I have taken away from that.

Tony:

Those are good answers I like this. So, there are, we have got new announcements we are coming forward shortly, NHS England appointed 19 new partners who we didn't offer anyone any money, we said if you are interested in this, interested in innovation and enterprise, help us take this forward and the Royal Society of medicine did exactly that, I invited Helen to join us on the stage. Helen tell us a little bit about you and the Royal Society of medicine and why you are supporting the programme and how?

Helen:

It is a pleasure to be appointed. The Royal Society of medicine is an educational charity and also member organisation as well. Our mission is to advance health through education and innovation. So, it fits really well, we should be a natural partner to help share the learning from the schemes development but critically to play a part in supporting those going through the scheme and more of that in a moment. So currently we provide wide range of learning events and we can offer those to scheme members.

Also offer designated space to work, networking with colleagues, not only medics but a wider group of health professionals in the team as well. Access to materials and learning through our library. Access to our learning events. So, all of this hopefully will support those going through the scheme access space, learning materials, people, to help them but it also helps us as well. Helps us in the cycle of looking how we can support education, around entrepreneurship and from scheme members I am sure we will learn a lot about what is needed so you will influence our programmes in the future I hope that that will be the case.

Coming from a clinical background myself and the clinical background, the spread of ideas in clinical practice at the front line is so important yet some of the hardest thing to do. I think a national body saying this is really important we want to support the scheme is you know, what we hope to do.

Tony:

Would you like because you made in your application, specifically is important. Reveal to us?

Helen:

All of the scheme members can become members, through that access to materials, library facilities and space as well. Also to our events we can offer free places for scheme members on some of our events etc. So, these are practical things we can do to.

Tony: Hot desking space in the.

Helen:

Yes, pop up idea, space near to the library, designated for the entrepreneurs so they can learn in our innovation hub I hope.

Tony:

I hope all the entrepreneurs are learning, on the public record can you make sure your firm up what the offer is, because I am, so NHS England don't give significant funding to this, we rely completely on the generosity of our partners, our ... offered an annual member Schiff for the, I think that is fantastic ... they are going to have a hot desking space, carry out business they need to do, access to the SM events and some of the educational events will be held there as well, that is a fantastic and generous offer.

So that deal is done. They say, how do you recruit all the mentors, just look at my diary, everyone I meet. You come -- good, so, Paul, any key themes lessons things you would say you have learned you have worked both with people on the NIA and the clinical entrepreneur programme, any key themes come through to you about learning things that you know, you are new to health care, from the commercial world, not seen mistakes we have commonly been making, things that people are doing again and again, lessons learned?

Paul:

The thing you should consider right up front is understanding who you are, where you as individual and skills and character type fit in a team building model where you are you are setting up a business, not everybody is an entrepreneur, many of you right minded entrepreneurs, in you were ... who are you, where do you fit in a team role and then you bring as much to us and the team as we can give you.

So, it is a team effort so sharing ideas and problems, sharing opportunities to help to promote and distribute and network and work together is a really fundamental part of

the programme, on a clinical entrepreneur's programme and to a lesser extent on the NIA which is less structured. Great opportunity to bring your problems to us, we will do our best to help you with the right people to solve them. Being an entrepreneur is a lonely existence and being part of the scheme means it is lesser.

Tony:

Very quick word, Liz, we are almost out of time?

Liz: You are going to give me no time to speak.

Tony: Anything you have been able to help them with?

Liz: Paul was saying, you can't be great at everything, find somebody who can help you with the gaps that you have.

Tony:

Brilliant, very short as well. Fantastic thank you very much. If we can put the last slide up. If someone can flip us over to that? So, that will come up in a moment the last slide. There we go and just on to the next one, so thanks all for coming, thank our speakers and that and it doesn't stop now. Because 6:00 o'clock we are going to meet over in the Novotel where we are going the meet some more of the mentors and clinical entrepreneurs we have got a great talk on design and thinking from one of the mentors, who will make you think out of the box and refreshments as well there for you, anyone is welcome to join us there.

So, hope to see you later, otherwise hope you to see you at Expo tomorrow, thank you very much.