



Cross Party Group on Smoking & Health

Digitalisation and Smoking Cessation

July 2021



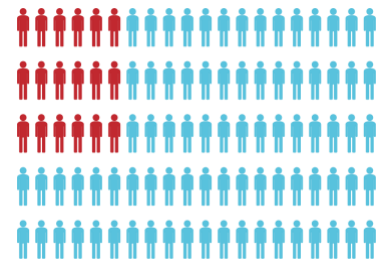
Cross Party Group:

At a Cross Party Group meeting on Thursday July 1st chaired by John Griffiths MS, we heard from experts in the field of respiratory health and digital healthcare solutions about how technology could be used to support and enhance existing smoking cessation services.

More than 50 stakeholders from across Wales and the UK took part in the event including representatives of Members of the Senedd, the third sector public health bodies, NHS Wales and private sector digital companies.

Background

There are 466,827 smokers in Wales, representing 18% of the adult population. Smoking kills over 5,000 people in Wales every year and one in four hospital admissions for respiratory diseases can be attributed to smoking.



Research has shown that 45% of smokers in Wales try to quit every year, however less than 3.4% are accessing Wales' NHS smoking cessation services while the rest are mainly going it alone.

In 2019/20 15,067 Welsh resident smokers accessed NHS stop smoking services and of these 6,500 were co-validated as quit at 4 weeks representing just 1.4% of the smoking population.

One solution to the shortfall in smokers accessing services could be to create a digital platform for the delivery of smoking cessation services which would allow smokers to access support and book appointments online.

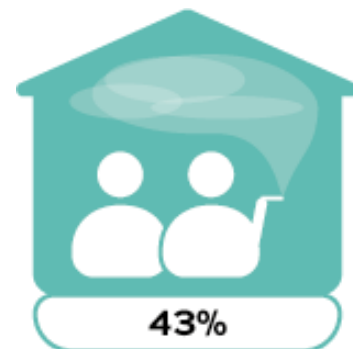
To support the progress of the digitalisation of smoking cessation services ASH Wales and Respiratory Innovation Wales have conducted a review of current smoking services in Wales and researched attitudes towards the creation of a digital platform for services.

The aim of the research was to gather feedback from smokers, ex-smokers, families and stakeholders through online questionnaires and focus groups.

Questions were asked about whether they would use this technology, which features they would find most beneficial and any challenges they could foresee.

In total 1065 respondents took part in the survey – 43% of which either smoke or live with a smoker. Almost half (46%) of the stakeholders that participated work in smoking cessation services. An additional 44 pharmacists took part.

There was a high level of acceptability among potential clients, stakeholders and service providers of proposals to create a digital app or platform for smokers. Among smokers 70% supported the idea of an online booking system.



Throughout the pandemic the NHS in Wales has embraced digital healthcare solutions and used them to transform models of NHS service delivery. Meanwhile it led the way in becoming one of the first countries in the world to implement online guidelines for clinical staff in the treatment of Covid-19 patients.

Welsh Government is committed to the use of innovation in healthcare and the NHS Wales Covid-19 Innovation and Transformation Study Report published on June 28th 2021 includes a call for all NHS Wales organisations to co-produce an Innovation Strategy with Welsh Government that is aligned with the Welsh Government's 'A Healthier Wales' plan.



There is an important opportunity to harness technological advances and the appetite for innovation in healthcare to digitalise smoking cessation services.

Key speakers:

- **Professor Keir Lewis, Consultant Physician and Director of Research & Development at Hywel Dda University Health Board and Professor of Respiratory Medicine at Swansea University:** *Keir works across multiple institutions in the NHS, Welsh and Clinical R&D sector. He works together with various university academics, clinicians and industry to research and improve the clinical and translational aspects of chronic obstructive pulmonary disease (COPD) and smoking cessation.*

"Radical change – not rebranding," Professor Keir Lewis

Professor Lewis gave an overview of smoking prevalence and smoking cessation services in Wales. Key points:

- Smoking prevalence in Wales is falling, however, number of smokers accessing smoking cessation services remains low.
- Between October to December 2020, just 0.74% of smokers accessed services.
- Support provided is "**incredibly effective**" with between 25 and 35% of smokers having quit at one year, compared to a 3% success rate for smokers that quit without support.

Respiratory Innovation Wales (RIW) has mapped out the services currently on offer and described how smokers find themselves in a complex web of interrelated, but not intercommunicating **services** each with different databases that are **not joined up**. He also believes the NHS Wales website is not user friendly and requires smokers to follow numerous links to access information.

The solution that RIW proposes is a **digital platform that pulls together data from all the different smoking cessation services and creates a seamless interface for smokers.**

Research carried out by ASH Wales in partnership with RIW demonstrated **overwhelming support among both smokers and healthcare professionals** for a digital smoking cessation in Wales with strong support for features such as the ability to book and manage appointments, personalized quit plans and referrals to smoking cessation specialists.



He proposes a digital solution that offers the following:

- Signposting and self-referral
- Booking and validation

- Behavioural and pharmacotherapy support, including nudge technology such as craving trackers and distraction games
- Clinical intervention including links to GP records, side effects trackers and interactive ask a question features

According to Professor Lewis there is an opportunity to learn from how digital healthcare solutions have been embraced during the Covid-19 pandemic. He cited the NHS Wales Covid-19 **Innovation and Transformation report** which showed how the systematic acceptance and adoption of technology has been critical to Wales' pandemic response and how it is considered essential to the stabilization and reconstruction of NHS services post-pandemic.

In conclusion he said there is a new learning opportunity and enthusiasm around the adoption of digital solutions in Wales. This appetite for change must be harnessed in order to transform the system in an ambitious way. He recommends the **setting up of a Task and Finish group that is multi-disciplinary** and includes representatives from the digital sector and not just from the healthcare sector. The group should be given specific timelines and funding. Radical change – not rebranding.



- **Ian Bond, Chief Executive, Bond Digital Health:** *Ian is a former lifelong smoker. After being diagnosed with COPD over a decade ago he began keeping a comprehensive diary of wellness points to track his health and medication. In 2016 he established Bond Digital Health to transform his idea into a system to benefit patients, practitioners and life science organisations.*

Ian Bond told his own smoking story and how he was born into a world where smoking was the norm and tobacco advertising was everywhere in what he described as a "massive, deliberate social engineering project".

He spoke of his own attempts to give up smoking and his '**soul destroying' failure** to quit the habit until he finally gave up in his 50s. He was diagnosed with COPD in his 60s and began keeping a diary of his symptoms. This taught him about his condition and enabled him to recognise when he was approaching a flare-up and understand how different medication affected him.

His business partner digitalised the concept, using it to develop what is now the COPD Pal app.

The technology Bond Digital developed for the app become the foundation for the creation of a lateral flow diagnostics tool which it is currently developing.

Ian believes it's possible to harness the same powerful tools and persuasion techniques used by tobacco companies to engage with smokers and encourage them to swap the pleasure of smoking with the pleasure of not smoking.

He recommended using **artificial intelligence (AI) generated avatars supported by machine learning to engage smokers in real time conversations** – similar to the technique used by the Velindre's Cancer Care app. He has no doubt that a digital platform would have a positive effect on smokers – particularly when combined with social media.



- **Dr Ashish Mandavia, UK Commercial Director, Quit Genius:** *Quit Genius is the world's first technology enabled digital clinic for multiple addictions. Ashish works alongside commissioners, public health teams and local authorities to increase their reach to smokers.*

Dr Mandavia described how Quit Genius was set up in 2015 by a team of medics based at Imperial College in London. Its digital platform uses the principles of gamification to bring about behaviour change in those with addictive behaviours.

The team was inspired to develop the platform after identifying a lack of personalised and readily available support to help clients to overcome their addictions. They felt a simple solution was needed that would be readily available and accessible anytime from users' phones.

There are four key components to Quit Genius:

- **One-to-one support from trained smoking cessation advisors**
- **Personalised CBT exercises**
- **Remote CO monitoring**
- **Door-to-door delivery of NRT**



One-to-one access to a human stop smoking advisor is an important component of the programme. Clients have access to their advisor throughout their quit journey. Ashish said the evidence on the effectiveness of AI is not yet available. Millions of data points would be required to enable machine learning to deliver the level of support required.

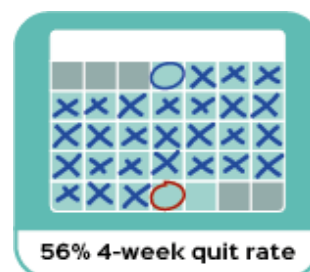
The mobile app provides users with a fully personalised CBT programme that is tailored around their smoking triggers. Notifications and nudges are sent out to clients at certain times to support them to avoid smoking.

The Remote CO monitoring device acts as an important motivational tool for clients. Their progress is plotted on a chart so they can see their levels decrease.

Quit Genius works with local authorities and public health teams through direct commissioning, as part of a tender process or through a sub-contractor with an incumbent service provider. It also works directly with the NHS through Clinical Commissioning Groups.

Success rates include:

- 56% 4 week quit rate (Nottinghamshire)
- 11% loss to follow up rate among smokers that accessed the platform (average across all contracts)
- 80% of quitters who took part in Greenwich came from the borough's top areas of deprivation. Quit Genius achieved a higher quit rate, lower loss of follow up rate and 45% lower cost per quitter than the smoking cessation service already commissioned in the area.



The aim is to deliver a service that supports existing stop smoking services and optimises existing referral pathways. Quit Genius connects with local stop smoking services but uses their own inhouse marketing teams to create tools that are appealing to clients. They deliver monthly Russell standards reporting metrics to ensure they align with figures coming in from other stop smoking services.

What did we learn?

- There is evidence of strong support for the digitalisation of smoking cessation services in Wales among both smokers and healthcare professionals.
- Healthcare professionals and the public have embraced the use of digital healthcare solutions during the Covid-19 pandemic. This has created the right environment in which to introduce further innovation in healthcare including the digitalisation of smoking cessation services.
- Existing smoking cessation services in Wales are underused but highly effective.
- Any digital solution must be developed to support and enhance existing services – not to reinvent them.
- Technology has been developed in the private sector to digitalise smoking cessation services and it has proven successful when adopted by health authorities.

- Knowledge around technology such as gamification, the use of artificial intelligence to provide behavioural support and nudge techniques such as notifications can be sought from experts outside the medical field such as social media companies.
- The Task and Finish Group set up to develop this project must be multi-disciplinary and include experts from the tech sector alongside healthcare representatives.

Recommendations

- **Prioritise the use of innovative digital solutions within national strategies to reach an Endgame target of less than 5% of the population smoking.**
- **Set up a multi-disciplinary task and finish group with robust political backing, funding and two-year timeline.**
- **Smoking cessation to be a key element of every NHS organisation's Innovation Strategy**
- **Commission research into;**
 - **Quit methods of smokers and how digital solutions can support their choices**
 - **How digital solutions can provide additional support and reach more smokers**
 - **New intervention technology**
- **Task public service leads in driving transformational change to deliver an integrated and seamless smoking cessation service that optimises the use of digital solutions.**
- **Improve data flow and collection, to include the creation of a single client record which documents quit attempts and intervention methods and can be transferred between cessation services.**
- **Create and deliver digital solutions that wrap around the preferences of smokers with options tailored to their needs.**
- **Develop digital solutions which can work across support services outside of the NHS.**

If you have any comments, queries, or recommendations on the subjects covered during this Cross Party Group meeting, or would like to be involved as part of the Task & Finish Group, please contact ASH Wales by emailing julie@ashwales.org.uk or call **029 2049 0621**.