

Aging farmers' health and access to healthcare in the wake of digital service provision

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Executive Summary

Farmers are often portrayed as strong, resilient, and resourceful, but the aging farming population is increasingly confronted with modern challenges such as climate change, policy and regulatory changes, and more recently the pandemic, that are putting the well-being of remote farm communities to the test. At the same time, ongoing changes are re-shaping the range of available support to farmers, as well as the way in which support is provided. Aging rural populations, such as farmers, in particular struggle to benefit from services that are provided through digital platforms and are at risk of digital exclusion.

Building on earlier research, this study aimed to develop an understanding of both the supply- and demand-side factors that mediate aging farmers' access and engagement with health and support services. In particular, it focused on understanding these in the context of digital service delivery. Based on insights from the seven interviews with farmers in Cornwall, England, the study identified a number of supply- and demand-side barriers experienced by farmers that can inform the design of future digital tools and services aimed at providing timely health and social care to aging farm populations.

On the supply-side, barriers include impersonal service delivery, long waiting times, inadequate support, information asymmetry, and direct and indirect cost implications. On the demand side, farmers highlighted low health literacy, cultural values and attitudes such as stoicism and self-reliance, autonomy and a sense of stigma attached to poor health, a tendency to only seek help as a last resort, and time and labour constraints that prevent seeking health support.

The findings further indicate that when services and support are delivered via digital platforms, aging farmers run into additional challenges that affect their ability to access these and to benefit from them. These include physical access to devices through ownership and connectivity, attitudes to digital, farmer's digital skills and capability, time and cost implications and the user-friendliness of digital platforms.

Informed by these findings, the report concludes that future services - whether in-person, hybrid or fully digital - need to be inclusive by design to effectively reach aging rural populations such as farmers. Inclusive services can be characterised as approachable, consistent, and continuous. Additionally, health support may be more effective at reaching farmers if it leverages existing services that have already built rapport with farmers and understand their needs and way of life.

However, it is not sufficient to only make services available, because older farmers need to be empowered to use them. This can be achieved by capability development to foster awareness about health and illness and to build digital skills, providing work relief to free up farmers' time, facilitating peer support, and promoting inclusion in decisions about health and the design and delivery of support services.

These findings will be of interest to anyone designing and delivering health and other support services for farmers and other ageing rural populations.

1 Health and healthcare in farming

In addition to traditional challenges associated with farming, the aging farming population is increasingly confronted with modern challenges such as climate change, policy and regulatory changes in post-Brexit Britain, and the recent global Covid-19 pandemic. These are putting the well-being of remote farming communities to the test, while they are also re-shaping the landscape of available support to farmers.

Farmers are often portrayed as strong, resilient, and resourceful, a popularised and idealised image of farming men (though women also farm), embedded in traditional agrarian values of stoicism and hegemonic masculinity norms. Although, it is increasingly recognized that farming is one of the most stressful occupations and farmers suffer from poor physical and mental health outcomes (Roy, Tremblay, Robertson, & Houle, 2017). At the same time, farmers tend to enjoy reduced access to health services. Rural communities, of which farmers are part, face several challenges when it comes to accessing and engaging with health and social care. These include the geographic distribution of health facilities and physical distance to these, as well as more subtle barriers, such as the absence of health professionals who understand the farming way of life (Vayro, Brownlow, Ireland, & March, 2020; Wheeler, Lobley, Mccann, & Phillimore, 2021). Indeed, research with rural communities, such as farmers and fishers, increasingly shows that beyond physical distance, access to healthcare is also mediated by other barriers, such as organisational and psychosocial factors (Turner, Szaboova, & Williams, 2018; Wheeler et al., 2021).

A recent study of health-related quality of life in the farming community in England and Wales provides further evidence to show that farmers suffer from poor physical health and mental health. According to this study, over half of the farming community experienced some form of pain or discomfort, about a quarter suffered from mobility problems, and one in five struggled to undertake their usual activities (Wheeler & Lobley, 2022). The same study also revealed that farming populations experience depression and anxiety at levels above the national average (Wheeler & Lobley, 2022). For example, the latest estimates for England show that males in elementary agricultural occupations, which include farming, have a suicide risk 1.7 times higher than the national average (Wheeler & Lobley, 2022). Indeed, poor mental health and high rates of suicide in the farming community are increasingly recognised and underpinned by evidence from a diversity of geographical contexts, including Ireland, the UK, Canada and Australia (Heenan, 2006; Kennedy, Adams, Dwyer, & Brumby, 2021; Kennedy, Brumby, Versace, & Brumby-Rendell, 2020; Roy et al., 2017; Wheeler et al., 2021). The policy and regulatory landscape governing farming - including regulations, compliance, inspections and changes to subsidies post-Brexit - is a key source of stress, alongside bad or unpredictable weather, and more recently Covid-19, which created a new type of uncertainty and exacerbated social isolation among farmers (Lobley et al., 2004; RABI, 2021; Wheeler et al., 2021).

Loneliness and social isolation, which are often inherent to farming lifestyles, have been linked to mental ill health (Wheeler et al., 2021). Poor mental health outcomes are also exacerbated by farmers' reluctance to seek or accept help or follow through with counselling activities for a variety of reasons (Roy et al., 2017; Vayro et al., 2020; Wheeler et al., 2021). A study with farmers in rural County Down, Ireland, showed that despite acknowledging high suicide rates as an issue, farmers are reluctant to reach out for mental health support due to perceived stigma and a lack of trust in health

and social care (Heenan, 2006). Similarly, research with farmers in England highlighted stoicism, stigma, and a general lack of understanding of available support as some of the key barriers preventing mental health related help-seeking (Wheeler et al., 2021).

In addition to well-known challenges associated with farming lives and lifestyles, rural farming populations also tend to be aging populations. This trend is reflected in the largest study to date with farmers in England and Wales, where the older age group was most represented (Wheeler & Lobley, 2022). Aging farmers are likely to be particularly vulnerable and might face additional constraints that can potentially impact their physical and mental health and wellbeing. For example, as the Covid-19 pandemic has resulted in a move towards remote and/or digital delivery of many services, the access gap between older farmers and service providers has potentially widened.

Research with rural populations suggests that older age groups are at risk of digital exclusion (Borg, Boulet, Smith, & Bragge, 2019; Correa & Pavez, 2016). This trend has also been shown to affect farmers. For example, research in Australia found that, indeed, technology-based service provision enjoys lower rates of uptake among older farmers who prefer face-to-face contact or have low rates of ICT literacy (Vayro et al., 2020). These studies highlight that digital inclusion is a complex and multi-layered issue, where multiple factors interact to shape people's access to and engagement with digital tools or resources. These include access to and availability of affordable and appropriate digital devices, absence of relevant digital skills and literacy, and attitudinal barriers stemming from a lack of desire to use digital platforms or previous bad experiences with them (Borg et al., 2019). However, if digital interventions are carefully tailored to the needs and circumstances of farmers, they can potentially support positive health behaviours, attitudes, and outcomes (Kennedy et al., 2020). For example, digital tools have the potential to enhance health in farming communities through multiple benefits such as assistance with managing long-term health conditions, improving health literacy, facilitating communication between patients and healthcare providers, and signposting.

Therefore, better understanding the unique needs and experiences of rural farmers, both in terms of health outcomes and access to and engagement with health services, is important for an evidence-based and informed design of future service delivery. As health and social care services are increasingly being offered, at least in part, through digital means, care needs to be taken that already marginalised and vulnerable groups are not further disadvantaged and excluded. This research with farmers in Cornwall, England is timely and presents an opportunity to inform a more nuanced and inclusive health service delivery model, both online and offline.

2 Conceptualising access to healthcare

Research on access to healthcare, including within fishing and farming populations, highlights the importance of understanding the multitude of factors that shape both the supply- and demand-side of access in health settings (Heenan, 2006; Turner et al., 2018). These determine whether potential access to a service, such as free healthcare under the NHS, is reflected in realised access, or the actual use and uptake of services. Goddard and Smith (2001) conclude that supply and demand factors interact in a complex way and in combination lead to variations in healthcare utilisation. In

addition to the distribution of available services, it is also important to look at the social and health needs of different social groups (Levesque, Harris, & Russell, 2013).

Therefore, incorporating demand-side factors into analyses of healthcare access and utilisation are key to making services inclusive (Turner et al. 2018). This requires integrating an understanding of the needs and characteristics of diverse populations (demand-side access) with understandings of the characteristics of the health system (supply-side access). Demand-side access is often mediated by social and cultural factors that determine whether service availability is converted into service utilisation. Levesque and colleagues' (2013) patient-centred access framework identifies five dimensions of supply-side access and matches these with corresponding dimensions of demand-side access (Table 1), which are in effect the abilities of people to interact with and effectively utilise available services.

Table 1. Patient centred access framework: supply-side factors and corresponding demand-side factors as mediators of access to healthcare. Adapted from: Levesque et al. (2013).

Supply-side factors	Demand-side factors
Approachability <ul style="list-style-type: none"> • Services being visible and easy to identify • Information about services and outreach 	Ability to perceive <ul style="list-style-type: none"> • Health literacy, knowledge of health issues • Beliefs about health and sickness
Acceptability <ul style="list-style-type: none"> • Service delivery is perceptible to cultural norms and values • Equitable and inclusive delivery 	Ability to seek <ul style="list-style-type: none"> • Personal autonomy and capacity to seek help • Knowledge about healthcare options • Personal and social values and norms
Availability and accommodation <ul style="list-style-type: none"> • Being within physical reach and accessible in a timely manner • Characteristics of the facility (building accessibility, opening hours), the providers (presence of qualified health professionals), and mode of service delivery (booking procedure, mode of delivery) 	Ability to reach <ul style="list-style-type: none"> • Personal mobility, availability of transport • Occupational flexibility • Knowledge about health services
Affordability <ul style="list-style-type: none"> • Time and resource costs of service utilisation • Opportunity costs (foregone income) 	Ability to pay <ul style="list-style-type: none"> • Personal finances and ability to pay for healthcare • Poverty, social isolation and indebtedness as constraints
Appropriateness <ul style="list-style-type: none"> • Technical and interpersonal quality of services provided • Coordination between different providers • Continuity of service provision 	Ability to engage <ul style="list-style-type: none"> • Ability to participate in decisions about treatment • Related to the capacity to communicate, health literacy and self-efficacy

3 Study rationale and methodology

The research was conducted by Farming Health Hub with support from the University of Exeter, as an In-Residence under the remit of the Inclusivity Project. The Inclusivity Project is funded by the European Regional Development Fund and aims to promote health and inclusion in the workplace. The overall goal was to support Farming Health Hub with research that can inform the development of a digital tool that can be used with members of the farming community. According to anecdotal evidence farming communities in rural parts of England such as Cornwall are at risk of digital exclusion, which could also affect their ability to reach essential health and social care services. The agricultural labour force in the South West of England reaches nearly 65,000 people with an average age of 60 (Stewart, 2022). This demonstrates the importance of understanding farmers' access to healthcare, including via digital platforms.

The proposed digital tool would help users to assess their current health situation (physical, mental, financial) and to find and access relevant and appropriate sources of help. The aim of the In-Residence research was, therefore, to help Farming Health Hub understand potential barriers and opportunities experienced by older farmers engaging with such a tool.

To this end, the study aimed to develop an understanding of both the supply- and demand-side barriers and opportunities surrounding access and engagement with health and support services among aging farmers. In particular, it focused on understanding these in the context of the digital delivery of various health services (e.g. lifestyle checks, mental health support) or other types of services (e.g. financial advice, help with new regulations after Brexit). The overall objective of the research was to identify existing gaps as well as good practices that can inform the design of future digital tools and services aimed at providing timely health and social care services to aging farmers by asking the following questions:

- What are farmers' perceptions and experiences of health?
- How do aging farmers engage with different sources and types of information about health? What barriers and opportunities do they perceive?
- How, if at all, do aging farmers engage with digital service delivery? What barriers and opportunities do they perceive?

To answer these questions, seven semi-structured interviews were conducted with farmers across Cornwall between December 2021 and March 2022. All, apart from one, were conducted virtually (by phone or online). All farmers were above the age of 50 and have been practicing farming for all or most part of their working life (Table 2). The interviews lasted between 50 minutes and 2.5 hours and were recorded with consent and transcribed, before being coded to identify key themes. These themes were interpreted against the conceptual framework set out by Levesque et al. (2013) (see Table 1).

Table 2. Participant characteristics: demographics and farming practices.

Interview no.	Age	Gender	Relationship with farming	Type of farming
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1	65	Male	Involved in farming since childhood. Not always the main livelihood but has been for past twenty years.	Beef, cattle, cereal and sheep
2	78	Male	Used to be full-time livelihood but now farms part-time. Had other income sources too, both now and in the past.	
3	50	Male	Farms full-time. Always been a farmer but also had other jobs/income sources.	Livestock, suckler beef
4	79	Male	Always been a farmer.	Livestock, suckler beef
5	61	Male	Farms full-time. Always been a farmer.	Livestock, suckler beef
6	81	Male	Always been a farmer. Partner in a family farm.	Beef and cereals
7	58	Male	Always farmed, except time taken to pursue university education.	Beef and sheep

3 Findings

Findings are first reported on farmer's perception of and experiences of health. In particular, what they mean by health and the different dimensions of health that they perceive. This is followed by understanding how farmers access and engage with healthcare. The findings report on both supply- and demand-side factors as perceived by the farmers who were interviewed for the study. Finally, we report on perceptions about digital service provision, including health and social care services.

3.1 Farmers' perceptions and experiences of health

The World Health Organisation's (WHO) Constitution defines health as "complete physical, mental and social well-being and not merely the absence of disease or infirmity." (WHO, 1946)

Overall, when asked what good health meant for them, several of the interviewed farmers mentioned having a good work-life balance, being able to take time off to recuperate, not to be overworked and exhausted, and to have time for family and recreation. Good health was also associated with a sense of happiness and a life that is worth living. More specifically, they discussed health in terms of three domains, physical, mental, and business health, which they considered to be intertwined.

Good **physical health** was perceived as being active, mobile (being out and about), being able to work (to carry out farm work) and general physical fitness which is important in farming. Being in good physical health was seen to give people a sense of autonomy, stemming from being able to do the things one wants without hindrance. However, aging was seen as a threat to this autonomy due to a perceived decline in physical health, manifest in experiencing aches and pains and general reduced mobility.

I guess good health means being able to carry out your normal everyday work, living of life, I suppose, that's what good health means. That you can continue without any hindrance that would restrict what you would normally do. (Interview 7)

Some farmers associated the physical nature of farming, being an outdoor and active occupation, with fitness and good health. Stressing, for example, that farmers are not wanting for exercise. On the flipside, physically demanding farm work was also linked to occupational health and safety

hazards, which can undermine both physical and mental health. Some farmers recalled experiences of incidents that have happened to them personally or to someone else in their family. For instance, one farmer mentioned his wife being attacked by livestock on the farm and never fully recovering from the physical injuries, as well as now being fearful of the animals.

A couple of the farmers expressed a fatalistic view of health. They talked about good health and fitness being a matter of luck using expressions such as “luck of the draw” or “as long as you’ve got it [health], you’ve got luck on your side”. This view of health, however, means that it may be seen as something that is outside of one’s control, which could have implications for choices regarding health behaviours and help-seeking.

Farmers stressed that physical and **mental health** are intimately linked – physical ill health can result in poor mental health and vice versa.

But it is right to impress that mental health is hellish important. Because if that’s wrong, that will lead to physical bad health as well. (Interview 6)

Worrying about the future, stress and anxiety related to uncertainty, looming changes, the demands of farm work, the financial viability of farms and the threat of falling into debt were among the most voiced challenges that have put a strain on farmers’ mental health. Several farmers mentioned uncertainties surrounding the loss of subsidies and their lack of understanding of the system that will replace the single farm payment. Some felt abandoned and expressed a sentiment of being left to sink or swim. Staying afloat in an increasingly competitive market where they have little leverage to negotiate with large retailers, is becoming more and more difficult. Increasingly, the survival of small farms is called into question and the imbalance of power causes mental health strain for farmers who feel disempowered and abandoned.

They highlighted that these experiences are unlikely to be uniform, and not all farmers will be affected to the same extent. Instead, a variety of factors mediate how unfolding changes and uncertainties regarding the future will affect farmers, among them ownership status, socio-economic status, and age. Tenant farmers, as opposed to those who own their farms, are likely to be more vulnerable, as well as those who have less assets or finances to fall back on as a buffer. Farmers’ age and life stage was also mentioned, and participants sympathised with their younger peers who have longer working lives ahead of them and the obligation to build a legacy for their children.

Since farming is a 24/7 occupation, a way of life rather than just a job, farmers felt that it is nearly impossible to switch off mentally from worrying about the farm, about what needs to be done, and about challenges and uncertainties. When things go wrong, it can really get someone down.

I constantly think of farming. I go to bed thinking of what I’m going to do tomorrow. What haven’t I done yesterday? (Interview 3)

You were just lying awake by night, thinking now why the blazes didn’t we get on with it. And you could see a lot of money disappearing, I suppose. (Interview 6)

Some thought that whether someone will let work get them down, also depends on the person's initial disposition. Whether the person tends to focus on the negative side of things, get stuck with the challenges, or whether the person is proactive and generally a positive person and works through things.

Loneliness and social isolation were mentioned by most farmers in the study, echoing the findings of earlier studies that have also identified them as key contributing factors to poor mental health in remote farm communities (Wheeler et al. 2021). One farmer also mentioned cultural loneliness, which was also highlighted by earlier research in England (Wheeler et al. 2021). This refers to a sense of feeling different, an outsider, in the wider community. The farmer highlighted that cultural loneliness manifests in lowered public support for farming. Having family living close by can counter loneliness. A few participants mentioned how living on multigenerational farms or having employees was an important source of regular contact with other people.

Loneliness as a key cause of mental health struggles was often compounded by other problems such as financial difficulties, relationship breakdown or bereavement. Loneliness and isolation not only contribute to poor mental health but also mean that mental health issues become an invisible struggle, hidden from others, making getting timely help even less likely. Whereas lone working leaves a lot of time to think and dwell on things, and for negative self-talk, which does not help with mental health.

You know, you are working on your own a lot, that's the problem, and you've got too much time to think. Because when you are working with other people, you are chatting and thinking about other things. (Interview 4)

Suicide was discussed in all interviews, which attests to findings of earlier research regarding the high incidence of suicides in farming communities. All farmers in this study had personal knowledge of someone who took their own life - either a member of their own family, or someone they knew in the community.

Well, I had a friend of mine years ago, we were quite good friends, like we used to buy cattle and that together. He had some tests done, and the day before the test results, he went and committed suicide. But I never knew anything about it. I mean, if he'd talked to me, he could be as old as I am now. But he didn't talk to anybody. (Interview 2)

On a positive note, farmers interviewed felt that while mental health used to be a major source of stigma, something one should not talk about, attitudes are slowly changing. Younger generations of farmers are more open to discussing mental health, which can be a positive development, given the historically high suicide rates in farm communities.

Business health, which was associated with the financial integrity of the farm, and mental health were described in most interviews as closely linked. If the business is not doing well, it has an impact on the mental health of the farmer through stress and anxiety.

Financial health of the farm is being able to try and make a profit, keep your head above water and hopefully move forward to leave the farm in a better place than when you found it. (Interview 5)

If you're financially in a bad state, your wellbeing will be in a bad state as well. You're going to go to bed, you're not going to be sleeping, you're going to be arguing with your wife. These things all go... It's like a snowball effect. (Interview 3)

Participants explained that there are many financial pressures in farming and the responsibility to get things right weighs heavily on farmers. This ranges from the need to break even to compliance with rules and regulations (e.g. around single farm payments, taxes). Many, especially smaller, farms struggle financially and rely on external funds, which adds to the stress and workload of farmers who have to seek and apply for funding to stay afloat.

Yeah, you've got everything to lose and nothing to win, really. You get to the top line and if you don't fill it right, you only go one way. (Interview 4)

Adding to the stress is the complex and changing regulatory landscape, as well as a range of external factors that are beyond farmers' control yet have important implications for the financial health of their farm business. External factors such as commodity prices, other market conditions, subsidies, weather conditions all influence how well the business is doing and thus have an impact on stress and mental health.

With ongoing changes following Brexit there is a lot of uncertainty and not all understand what the future will look like or are worried about the future. Farm payments are changing, and participants foresee that especially smaller farms will struggle. Farmers are becoming more and more reliant on farm advisors and external sources of funding. There needs to be more help to support farmers through this period of transition, otherwise they will be in trouble financially, which will have a knock-on impact on their health.

When farmers are overwhelmed, they might deploy unhelpful coping strategies. Participants described this as sticking one's head in the sand when one's overwhelmed by the level of uncertainty or cannot make sense of what's coming. However, this could backfire later. Others might think that persistence, working harder, will suffice instead of keeping up with new developments, which are no longer compatible with old fashioned farming mentalities of hard work. As participants explained, it is not enough to be a good farmer. Working hard is no longer sufficient; working efficiently is more important. Farmers need to have a business mindset, but not all have it. Those who cannot engage with the business side of farming are more likely to struggle, both financially and then in other areas of life, including their mental health.

3.2 Access to healthcare: supply- and demand-side considerations

Most farmers felt that there is already a good range of health support in place, but the challenge is accessing it and engaging with it. They felt that it is not necessarily the question of putting more things in place, but a matter of making what is available more accessible to farmers. This would involve being aware of the prevailing attitudes towards health and illness in the farming community and acknowledging the time intensive nature of farming, which in combination, alongside additional factors, shape farmers' access to healthcare support and services.

There is plenty of support out there, but are they willing to access it? (Interview 7)

On the supply-side, study participants identified availability of adequate and appropriate services, approachability, and affordability as the most pressing barriers. On the demand-side, they felt that farmers' ability to perceive, seek, reach and engage with help and services are impaired by a variety of factors, ranging from more personal level characteristics and circumstances to cultural norms, values and beliefs that are intrinsic to farm communities.

3.2.1 Supply-side constraints perceived by farmers

- *Availability*

Perceived availability of support was found to be shaped by past experiences (of self or others) with regard to service delivery. Issues that were mentioned included **impersonal service delivery** that does not engage with or understand farmers' work and lifestyle, **cumbersome structures** and processes of service provision that involve difficult to navigate bureaucracies, disjointed referral pipelines and inadequate coordination between different service providers that lead to long waiting times. For example, farmers mentioned feeling like they are "just a number" or that they are "on their own".

Where services that used to be provided in person moved to digital delivery, participants expressed frustration over the loss of personal rapport and trust that in-person engagements entailed and the impersonal services they now received via the digital platform.

I mean the banks now, we can't go and talk to a bank manager no more, they could talk to a bank manager about a problem, but they can't talk to nobody now. Because you've got them on the phone, but it's not the same as having a personal bank manager, you could drive into Redruth and make an appointment and have a good old chat with him." (Interview 2)

People had time to speak to each other up until recently... Yes, I mean, to know if you get through to some organisations, you might have three or four choices to start with and then you're number 12 in the queue. And my time's worth as much as anybody else's, or more or less, and you spend ages. And you want to speak to them but you can't. So the digital age is a pain in the butt for some things. (Interview 6)

In some cases, unsatisfactory nature of the service that left the farmer feeling that they had to resolve the issue by themselves, thus reinforcing their tendency of self-reliance: "I went to the doctors, and that was a waste of time. I just had to pull myself together and get over it myself" (Interview 4). They also mentioned **long waiting lists** and highlighted that support might be available in theory, but not accessible in a timely fashion (e.g. dentists). These perceptions can leave farmers thinking that help is either not available or difficult to access, and result in frustration and low service uptake.

Another aspect of perceived availability was **inadequate support** (e.g. mental health) for farmers due to the unique needs of farmers (an others involved in occupations dominated by masculine norms and behaviours, such as fishing) not being considered in policy. Farming charities fill this gap

to some extent (e.g. RABI, FSH) but interviewed farmers felt that more could be done to support farmers, especially policy support is needed.

- *Approachability*

This was linked to farmers' ability to identify the correct service. We live in an **information** age, yet very often information is not shared effectively and does not reach those who need it. For example, farmers struggle to make sense of the different types of help and support, their eligibility for them and means of accessing them. When they talked about approachability, they were not only talking about health related but also other forms of support, such as grants or financial support. This can prevent farmers from accessing and engaging with support that is available.

- *Affordability*

When farmers spoke about affordability, they referred to the **direct costs** of services, as well as to the **opportunity costs** incurred by taking time out for appointments or for treatment. Not all farmers can afford to seek help, especially where paid services or advice are concerned. Examples mentioned included bringing on board a farm advisor who can help them navigate the changing funding and regulatory landscape or paying for a private dentist when they cannot get an NHS one.

Affordability can also be a factor in accessing healthcare, where private healthcare might be a quicker or more efficient option for addressing a health issue and getting the farmer back into work. However, not all can afford to pay for these and will just try to 'ride out the storm'. However, that may not be an effective solution in the long-term and can in fact undermine their health and well-being, and that of their farm.

3.2.2 Demand-side constraints perceived by farmers

- *Ability to perceive*

According to the interviews, farmers' ability to perceive need for healthcare services or other types of support can be shaped by their lack of perceived need, awareness about health issues linked to low health literacy, and a general reactive approach to health.

They may not have sufficient **information** about or knowledge of health issues, affecting their ability to identify when there is a problem and knowing what to do about it. This might be in relation to one's own health, but also related to being able to help others. Due to the highly pressured nature of farming and the inherent uncertainties and risks, health is often perceived as the lowest priority issue compared to other issues that require farmers' attention and action. It is not uncommon that farmers only seek **help as a last resort**.

It's only when you finally are so bad that you actually make that decision sometimes.
(Interview 7)

Additionally, farmers may not perceive a need to seek help, because they feel that they can deal with any issue that arises by themselves. The latter attitude is linked to stoicism and self-reliance, which are widely recognised characteristics of farmers.

- *Ability to seek*

Stoicism, or working through illness or injury without complaining or seeking help is a common attitude in farming and requires farmers to be hardy and to persist in the face of challenges. This attitude translates into other areas of life, including farmers' attitude towards health. They display a degree of resistance to admitting something is not right, which in turn delays help seeking. Very often, help seeking is a last resort.

Probably the biggest challenge is realising that your health isn't as it should be and doing something about it. It's the putting-off mentality, isn't it? (Interview 7)

And it's difficult with farmers, because some of them, you know, you've got a hell of a job getting anything out of some farmers. You know, they could be worrying themselves sick and you wouldn't even know it. (Interview 2)

Self-reliance is closely linked to stoicism, and it informs how farmers deal with health issues. They see these as part of the job, something else they need to deal with and manage while carrying on. Also expressed in interviews as being the "master of one's own fortune" and "we are all responsible for ourselves", which in some cases can even lead to the self-management of illness, either in addition to, or instead of, seeking medical advice.

I can sort things out for myself. (Interview 4)

I think it's because of our independent nature, what we do in our job is on the whole, we look after ourselves. We look after our business, and we are very protective of what we do and how we do it. It's a struggle to allow people to come in and to help. (Interview 7)

They've always done everything their own way and they don't like interference too much. (Interview 2)

Pride and autonomy are key underlying values that clearly emerge from farmers' narratives and drive the attitude of self-reliance and stoicism. They prefer to deal with things on their own terms, making decisions based on what they perceive to be their needs, and a dislike of interference.

Because farmers are quite proud; they don't like to go to ask for help. (Interview 4)

There is also a sense of **shame or stigma** associated with illness and admitting that something is wrong that together preclude farmers from disclosing health issues and mediate the uptake of available health support.

Yes, and then again people are embarrassed as well aren't they, when they've got something wrong with them. Some people are embarrassed if they've got something physically wrong with them, let alone mentally, but they've no need to be. (Interview 6)

[T]hey don't like to think they are doing worse than anybody else. (Interview 4)

In addition to deep-seated cultural factors, some participants believed that people's **personality traits and dispositions** also play a role in shaping their help-seeking attitudes and behaviours. One farmer mentioned that for some, social isolation is not only a consequence of external factors such as changing communities but also a matter of how they are, preferring to keep themselves to themselves and not engaging with others.

- *Ability to reach*

Time is a major barrier mentioned in most interviews and it is part of the reason why farmers tend to practice a reactive approach to health and put off help seeking. They find it difficult to take time out from a job that they describe as 24/7. This can result in leaving it too late to seek help only when they have no choice.

Closely tied to time is the **availability of labour**. If farmers are absent, there is no one else to do the work, hence help seeking is put off as long as possible, often until a health issue interferes with their ability to carry out their farm duties. Having staff on farms is increasingly unaffordable, which puts more strain and pressure on farmers who end up doing everything by themselves, working long hours and struggling to take time off. This is also interlinked with isolation - farmers are working alone more and more.

Social isolation was mentioned in the context of declining rural societies, dissipating farm communities and a subsequent breakdown of social cohesion. There are diminished opportunities for social interaction with the decline of certain traditions and activities (also exacerbated by Covid-19), such as trade shows or weekly farmers markets. Indeed, earlier research showed that farmers markets are more than just marts. They are places of social interaction and support and can have a beneficial effect on farmers' mental health and well-being (Nye, Winter and Lobley 2020).

...the old way where you'd meet at the market and like you say, there was a strong pastoral support; churches and things like that, chapels, there was more Harvest Festival and more of that sort of life; that's eroded over the last ten years really, hasn't it? (Interview 1)

This house in particular, on a Sunday morning there were usually five or six all came here to pick up butter or eggs or cream, and they'd sit down at the kitchen table, they'd have coffee and a yarn while they were here. So, that's another social activity that's long since gone. (Interview 1)

Modern ways of life, such as increasing reliance on digital connectivity and interactions, highlight a generational gap between younger and older farmers. While some older farmers embrace digital technology as a way of interacting, others might feel excluded and isolated for their lack of skills and access to digital mediums of communication. Farmers acknowledged that there is a social penalty associated with a move towards digital and virtual interactions as alternatives for old-fashioned in-person and spontaneous encounters. Social isolation also gets worse with age when farmers become less mobile or have less motivation to travel to events.

- *Ability to engage*

When support is delivered through channels that farmers are not familiar with or **lack the skills** to use (such as digital platforms for booking appointments), this can lead to low uptake. For instance, some farmers mentioned having very low IT literacy (in one case, never having sent an email or text) and relying on family members to help with things that had to be done on a computer. This was also seen as a generational issue - older farmers might struggle more with IT, or they might be put off by online healthcare provision and automated provision (e.g. automated messages instead of someone picking up the phone at the other end).

To ring up your doctor's surgery, they want you to make your appointment online. All I want to do is to speak to somebody and say can I make an appointment to see my doctor please.
(Interview 6)

...because that communication is digital, if you haven't got the digital, how do you still have your voice heard when it's really valid... (Interview 1)

3.3 Access to digital services

While accessing various services, farmers are increasingly confronted with the need to use digital tools and platforms. This extends to services relating to farming more broadly, as well as health and social care services specifically. Interviews with the seven farmers revealed that access to and use of digital services was mediated by similar factors to those that were identified regarding farmer's uptake of health services. However, with many of the health services moving online - a trend that accelerated during the Covid-19 pandemic and lockdowns – farmers are facing an additional layer of access constraints stemming from digital service delivery. These include ownership of technology, cost, time, attitudes to digital tools, and the skills and capabilities to use digital.

3.3.1 Physical access

Based on the interviews, physical access to digital devices consists of the physical availability of a reliable connection and the ownership of technology, such as personal computers, tablets, or other digitally enabled devices. All interviewees in the study had access to a computer and a mobile – either directly or indirectly through a family member - but there was variation in the type of technology owned (table 1).

Table 3. Ownership of technology that can facilitate access to digital services.

Technology	Interviewee ownership	Notes
Laptop	5	1 interviewee did not classify themselves as owning a laptop but mentioned that their wife owns one.
Desktop Computer	5	1 interviewee did not classify themselves as owning a desktop but mentioned that their wife owns one.
Smart Phone	4	3 <65 1 >80
Non-smart Phone	3	3 65-80

Tablet	3	2 interviewees did not classify themselves as owning a tablet but mentioned that their wife owns one.
Smart Speaker	3	2 <65 1 65-80
Smart Watch	0	

All interviewees owned a laptop or desktop and five had access to both. None of the farmers mentioned they had lack of internet access as a barrier leading to the conclusion that all interviewees had physical access to the internet and any digital tools on it. All interviewees also had access to a mobile phone. However, only four had a smartphone and these tended to be the youngest out of the group we interviewed.

Nonetheless, access to the internet through these digital devices is not always guaranteed. A survey on digital connectivity conducted by the National Farmers Union (NFU) in 2020 found only 46% of NFU members believed their signal was sufficient for the needs of the business. There were significant gaps in coverage and speed. This study was conducted nationally so rural digital connectivity could have an even greater impact on farms in the South West where there are topographical and infrastructural challenges to internet connectivity.

One of the big problems we've got here in the valley, and you probably know many have is connectivity. There are lots of areas where you don't get a signal at all. (Interview 5)

While there was reasonable level of access to digital technology within our sample, there may have been some bias towards interviews that owned digital devices as those that agreed to do an interview on the topic may have been more likely to own one. From discussion on technology use in the wider farming community it appears that there are still a significant number of farmers who do not own a device capable of accessing the internet.

There's a lot of people that we know, they wouldn't even have a computer in the house, or what they've got is so outdated it doesn't give them that opportunity, so they're going to be more excluded and then they're going to have financial pressures and then all of a sudden, it's actually "Now, I've worked hard all my life on this farm. I haven't got a home." And that's what is looming around the corner, and that's very real. (Interview 1)

A further consideration is interoperability between different digital platforms such as web-based tools and mobile devices. An example was the multi-factor authentication process, which is now required by many service providers for accessing their services (e.g. banks, government websites). One farmer explained that these services do not take into consideration network and data coverage in rural areas, making access especially difficult for remote populations.

...in the office I cannot get a signal because of the thick granite walls, so many things now are asking for extra security where they will send you a security code, through on your mobile, and then you've got to activate it in about two seconds or something stupid. So I have to go out in the yard, wave the phone around a bit to get the signal, come back in, and then find I've been timed out or something stupid. I know you have to have greater security for all sorts of reasons, but they haven't thought it through because they're just thinking of easy towns or office spaces, good connectivity. It's another little issue we've got when it comes to farms and farm offices. (Interview 5)

3.3.2 Attitude to digital tools

The interviews showed variation in their attitude to digital tools from one interviewee who showed total disinterest (e.g. Interview 1) to another who saw it as an essential and enjoyable part of running a farm business (e.g. Interview 3). However, on average farmers enjoyed using technology (4 out of 7). All identified technology as being an integral part of running a business in the future.

It's an evil necessity, and I will tolerate it to a point. (Interview 1)

That's why I like the office, because in here is where you make your money. It's not out there. (Interview 3)

If anybody says they're not computer savvy now, they're left behind, it's the only way you can run a business. The only way. (Interview 3)

So, you've got to run with knowledge and advancement, because that's what people have been doing for centuries. (Interview 6)

Interestingly, disinterest or frustration in technology often seemed to be linked to a feeling that they lacked control (e.g. Interview 1). It would be interesting to explore this further as feeling a lack of control over the business was regularly mentioned as a key challenge in agriculture and the desire for personal autonomy came out strongly in preferences for health service provision.

[If a computer breaks] you can't do anything about it, no, whereas if I've got something tangible and I've got it there, I can deal with that. (Interview 1)

3.3.3 Digital capability

Digital skills were a regular barrier to digital engagement. All the interviewees over 60 (5/7) had experienced digital skills preventing them completing a task.

I haven't got no apps. I wouldn't know how to work an app. (Interview 2)

Yeah, I can work a computer, but not... I couldn't work the farm with a computer. (Interview 4)

Some interviewees tended to stick to specific tasks they knew they were able to do. For example, respondent 1 from Interview 1 felt comfortable sending email so would do so regularly yet showed little interest in social media or video calls. In comparison, the farmer in Interview 2 did not use email but regularly used e-commerce and had connected to distant family members through social media. The interviewee from Interview 4 was unable to use email but enjoyed Google.

I think that's [newsletters via email] a way in, a very simple way that lands in your email that can actually open you up." (Respondent 2, Interview 1)

Some of my associates now have meetings with their accountants and so on that way [video call]. I don't, I still pick up the phone and have a conversation, and if necessary, go and see

them. [Sigh] It's not me, not really. As I say, I'd far rather have that personal interaction and get more out of it. (Respondent 1, Interview 1)

My wife's got an email. She's good at that. I don't do no email. My wife's just got her email address. (Interview 2)

Basically, I've never sent an email in my life. (Interview 4)

There appeared to be a belief that across agriculture digital skills are improving even in older demographics. Some interviewees suggested that moving online during the Covid-19 pandemic has a significant contribution to increased digital literacy.

You'd be surprised, I think WhatsApp is brilliant, it's fantastic. And don't forget, since COVID people have got savvy with it now, they're using all these smartphones and tablets and whatever else. People in their eighties are using it now, no problem. That's probably one of the biggest benefits of COVID. (Interview 3)

I don't think I even knew what Zoom was until the pandemic came along. (Interview 5)

Interviewees were aware that their digital devices had much more capability than the functions they were using them for. Some interviewees talked about how they had never had a formal introduction to computers as a contributor to low digital skill. It was evident there is a need and desire for access to a digital education that would enable those over 55 in rural communities to improve their digital skills and make more use of digital devices.

If you're of an age where you've been brought up with it, probably yes, but for the likes of myself, I didn't see a computer until I was over 50, certainly never had one when I was in school, in fact I didn't even have a calculator when I was in school. (Interview 1)

I've gone through that generation of pencil and paper through to the technology we've got now. It wasn't actually until the year 2000 that I had a PC or really knew how to use it, and then it was a great big television box as opposed to the flatscreens we've got now in front of us, and I did a basic and intermediate course at Duchy College, for evening classes. (Interview 5)

...as for being technical on it [smartphone] no: I'm pretty dense. What I want is a full day's tuition. (Interview 6)

3.3.4 User-friendliness

Although user-friendliness of specific tools and digital skills are linked, when a tool is not user friendly, it can still cause frustration and increase the time required to complete a task independently of an individual's digital capabilities.

The farmers interviewed expressed frustration over the design of some tools, because they perceived them as less user-friendly, potentially excluding individuals with low digital literacy levels. A common cause of frustration appeared to be websites that lacked a clear structure or clarity.

I'm trying to think what blasted thing the other week I was on. And that, in the end I got cheesed right off with that and didn't bother with it. That was a government site again, that was. (Respondent 1, Interview 1)

Just kept coming around the same bloody loop. (Respondent 2, Interview 1)

All you want to do is take last year's, put it onto this year's, and rejig the fields, for cropping this is now, rig the fields you've put into grass or cereals. I always had to start from scratch, put every field in again, and that was the most annoying bit about it. Putting the actual fertiliser wasn't a problem but it's that length of time, just duplicating things really. (Interview 3)

Levels of digital literacy required for different tasks will vary. Companies who develop digital tools can increase their inclusivity by increasing user-friendliness. Consistency in digital tools was valued. Both in consistency in structure and style throughout the tool and temporally. Updates causing a change to the user experience of software was a source of frustration in multiple interviews. Simplicity and consistency appear to be key in developing digital tools accessible to ageing farming communities.

Yes, you just get used to it and then the bloody things changed. (Respondent 1, Interview 1)

But they keep changing. You get up to speed with something, the BPS is going now, I've just got used to that, and now something else will be coming in, so you've got to learn it all again really. I know it's a similar principle, but I think farmers find that change tricky. (Interview 3)

...if they change the system over or the layout on the screens, that can be quite confusing, because you get used to one thing and then they go and expect you to upgrade it to something else... (Interview 5)

3.3.5 Time and cost implications

As with access to healthcare, direct and indirect costs associated with accessing digital services were perceived by the interviewed farmers a constraining factor. Although, the direct cost of software subscriptions or purchasing digital devices was only mentioned once, it could still be a significant barrier for many, especially amidst the unfolding cost of living crisis.

That's the thing with IT: there's a cost to it. Broadband is really expensive. (Interview 3)

Indirect costs included the time required to acquire digital skills and to use digital technology meant a loss of hours in the yard or field which is often considered the main element of the farm business. To save time, or due to a lack of know-how, some farmers would opt to outsource tasks that needed to be completed digitally (e.g. taxes), thus representing an indirect cost.

Due to the time pressures in agriculture that were already highlighted in relation to health, it is likely that when using a digital tool requires high time investment - potentially because of low digital skill levels - , it affects farmers' willingness to use digital.

I can do my VAT returns with a pen and paper on a quarterly basis, it only takes me about an hour each quarter. As from next April, you will have to have it all online, spreadsheets and all the rest. I've tried it and it takes me about three hours, only because I can't touch-type or I'm touching two keys or something...So, that's all going to have to go over to the accountant, which is totally unnecessary really, but I haven't got three hours I could spend when an hour would do. (Respondent 1, Interview 1)

Limited available time also creates a barrier to increasing digital skills. Allocating time to learning a new digital task was often a low priority. This often led to farmers sticking to a few digital tasks that they were comfortable with and knew well.

I'm not one to start doing any fancy artwork or cutting and pasting everything because that's there if you've got time and if you need to or your job needs you to do it. But I use it for what its basic purpose is, I suppose. (Interview 5)

But it's fantastic if we can get it to work. And he said it should work. So, I just need to ring somebody, allocate some time and just make it work. It's down to me to make it work in the end. A lot of this is down to time allocation. (Interview 7)

Nonetheless, some interviewees recognised that digital tools can also have an advantage when it comes to limited time availability. A few interviews enjoyed the flexibility digital options gave when communicating.

So, I think you do want to engage, it's just... But then when you go on and check your emails and you do that, it's because you do it in a time that suits you. (Respondent 2, Interview 1)

[Livi is] easily accessible because you can book your time in your day, you can do it at eight o'clock in the evening. (Interview 7)

3.4 Existing help and support

3.4.1 Sources of support

Farmers who were interviewed highlighted different sources of support, which included support from individuals as well as from organisations (Figure 1). They have pointed out some good practices that could be taken to improve future service delivery. They also identified key gaps that need to be addressed to promote service use and uptake among farmers. The latter corresponds to some of the barriers highlighted in Section 3.2 of this report.

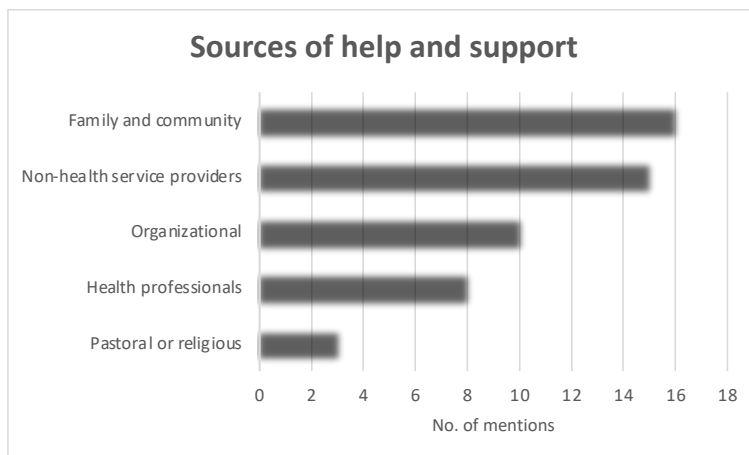


Figure 1. Sources of help and support discussed by interviewed farmers

- *Family and community*

Family and community support was the most discussed source of support, and it was mentioned across all interviews. Family members, friends, other farmers, and other community members are acting as a source of conversational support, as an outlet for discussing problems, worries and struggles. Family members also provide help with the practicalities of accessing help, especially when services are provided via digital platforms that farmers may not be familiar with or may not have the skills or time to engage with them.

Often family play a key role in recognizing if there is an issue (e.g., if someone is struggling with their mental health) and can facilitate help seeking. Family members, especially wives, are key in encouraging farmers to seek help, including organising appointments for them. Intergenerational support is also key. Younger generations are often more open to discussing health issues and can play a crucial role not only in verbal support but also in help-seeking if they detect an issue.

Talking to other farmers is a good opportunity to get things off one's chest with others who are in the same boat. However, some farmers also emphasised the importance of having non-farming friends to talk to as a good way to get away from it all and to have different conversations that do not involve farming. They found these to be an important eye-opener to realise that people in other industry sectors are in a similar situation.

...majority of farmers are like that. They go to market, farm sales, discussion groups. They don't actually get off the farm and talk to other people in other industries, and then you realise we're not alone. Because all industries are feeling this at the moment. (Interview 3)

All five farmers who had faced digital skill as a barrier to using digital tools had at some point had social support to overcome this barrier. Most of the time this was a family member, but could also be a member of the community or a professional (e.g. someone mentioned getting help with digital from their agronomist). Therefore, those designing digital tools should keep in mind that it may not be the person seeking advice on their health using the app but instead a family member.

On my farm mapping system, the agronomist dropped in and we spent the afternoon just putting all the maps up. (Interview 7)

- *Non-health service providers*

These are professionals who closely support farmers with various aspects of the farm enterprise (e.g., accountants, vets, bank managers), have regular contact and have built up rapport, often through long years of continuous relationship. Farmers trust the advice of these professionals and as such they are good entry points for signposting to support with health-related issues too. Especially, given that farmers' physical and mental health is closely linked to the business' health. A recent study found that vets, financial advisors and agronomists often act as 'accidental counsellors' and provide mental health support to farmers (Shortland et al., 2022).

One challenge is that the different service providers that farmers engage with for different things (e.g. vet, accountant, agronomist) do not tend to talk to each other. Facilitating coordination between these seemingly unrelated service providers, who can act as 'accidental counsellors' or sources of informal health support (Shortland et al., 2022), could improve the effectiveness and efficiency with which health-related support reaches farmers.

- *Organizational*

Most farmers discussed existing or established organizations, charities or other organized groups who are working either specifically with farmers or working in the community in some capacity (Prince's Countryside Trust, Farm Cornwall, Agriculture and Horticulture Development Board, The Farming and Wildlife Advisory Group, Local Farmers Union, The Country Land and Business Association, NGOs and other Public Bodies) as important sources of support. Farmers can reach out to them for help with various issues, including with farm business related matters but also mental health issues. Participants mentioned that some of this being done via helplines that can be contacted anonymously (e.g., Samaritans) and mentioned instances where they received help with an issue in the past.

- *Health professionals*

Most farmers mentioned reaching out to their GP when they had a problem. However, their experiences were mixed, some reported a very positive experience, efficient and timely support, while others signalled a sense of frustration with a lack of understanding of farmers' way of life and work, impersonal approach, and lack of continuity (such as seeing different doctors every time and lacking rapport), long waiting times to be seen, or difficulty of getting through to the right person.

One farmer mentioned an innovative digital GP service that provided confidential and on-demand support when needed using video calling as an alternative to in-person support that may be subject to longer waiting times. Not only was the virtual GP service perceived to be more time-efficient, but also more private. One can ask for help without being seen by others, without others in the community finding out that something is wrong.

- *Pastoral or religious*

Pastoral support also came up in a few interviews, often in the context of belonging to church groups, as well as when farmers discussed the role of markets. They mentioned that markets used to offer this kind of support, but it is disappearing as the nature of farming communities - and rural communities more broadly - is changing with modern times.

3.4.2 Mode of support

Support was received either through in-person or virtual interactions. In terms of format, participants usually received support in the following formats: conversational (verbal interaction between two or more people – e.g., workshops, meetings, webinars with a Q&A component, everyday conversations), auditory (e.g., radio or podcasts), visual (e.g., infographics, videos, newsletters, emails and a wide range of image and text-based communications), or a mixture.

Physical in-person encounters were favoured by farmers in this study. They can take place in the framework of business or social events, farmers markets, religious services, or farm visits from service providers. They offer spontaneous opportunities for social interaction and conversation where farmers can raise issues and discuss them with others. They can also include more formal settings, like discussion groups, as well as informal interactions such as social meetups through pastime activities, or at farmers markets.

While digital was not the most preferred mode of social interaction for most farmers interviewed for the study, it is increasingly utilised due to a general shift of service delivery in this direction (e.g., GP consultations via phone call), even more so during Covid-19. It can include phone (calls, text messages, voicemail), interactive digital platforms (websites, apps), digital meeting/communication platforms (Zoom, Teams, FaceTime, Skype, Whatsapp, including webinars), social media platforms (Twitter, Facebook), and other web-based (email, search engines and general internet) methods of communication to transmit and receive information about health-related and non-health related matters (e.g., animal health, farming practices, weather forecast).

4 Recommendations for future support

4.1 Overarching principle

Based on findings from the interviews with seven farmers in Cornwall, we conclude that future services targeting farmers need to be **inclusive by design**. This should be the most fundamental consideration when designing physical and digital (or indeed hybrid) services that intend to support farmers effectively and that can address existing barriers to access and associated gaps in service uptake. Inclusive services can be characterised as ones that are **flexible and adaptable** to farmers' work and timeframes, **accessible** both physically and cognitively (this can include knowledge, skills, such as digital skills), **transparent** in terms of clarity of communication, consistency, and continuity, and **user-friendly** in terms of ease of navigation and use even with minimal ITC literacy.

As one farmer explained, we live in an information society where we have huge amounts of information readily available at our fingertips. Physical availability of services is often not the greatest barrier, instead what is lacking is an *enabling environment*.

...it is about how do you create an environment where somebody who is generally fairly resistant, is willing to trust somebody to go and have that conversation? (Interview 7)

4.2 Specific considerations

We propose that the following considerations should guide the development of new services, whether these are provided in-person, digitally, or in a hybrid format. These considerations can potentially help create an enabling environment that addresses existing barriers to help-seeking and uptake of health and other support services.

- *Approachable support and services*

This includes making services physically accessible (e.g. placing them in strategic locations where farmers gather or where they might feel confident to attend them) as well as addressing cognitive and psychological factors of access (e.g. providing information in a format that is easy to understand and that builds on how farmers make decisions). Examples include, providing mobile check-ups in places where farmers regularly go, such as farmers markets, rugby clubs or other sports venues. Farmers could access these easily, without the need to take time out or make an appointment with their GP. They could screen out any health issues or risks and refer farmers for follow-up checks if needed.

A cognitive example is presenting farmers with information about potential outcomes and choices, to enable them to make informed decisions about their health, same as they do when they make decisions about farming activities. Farmers like to be in control of their destiny - as highlighted earlier in this report, they have a strong sense of self-reliance and autonomy - therefore presenting information in a way that empowers them to be in control of their health is important.

- *Consistency and continuity*

Consistency applies to both service provision and messaging. In terms of service provision, this can mean ensuring consistency between digital and physical modes of service provision, or between different service providers where the service pipeline requires the involvement of different types of professionals. In terms of messaging, this means keeping the content and language of messages communicated about a particular issue or condition consistent across different platforms to avoid confusion.

The need for continuity was stressed by most interviews, and it goes hand-in-hand with consistency. Support needs to be regular and not only delivered on an ad-hoc basis. This can take the form of regular check-ins or check-ups, MOTs, support groups meeting at regular times. Being regular makes these easier to plan for and fit into people's schedules.

Continuity also relates to the chain of referral between different services, such as GPs and specialist care. Ensuring that barriers to access are addressed throughout the entire chain of referral, not only the first point of contact with the health system. Follow-up care should also be accessible.

There's no point in having something in a marketplace that's accessible but then when they go to the next step, they arrive at another barrier and then they just stop. (Interview 7)

New services should build on what works. Often services are replaced with new ones or new forms of delivery in the name of innovation. This also applies in the context of digital service delivery - changing the visual layout of webpages or the way in which information is delivered or communicated can be confusing and may lead to disengagement. However, this makes it harder for farmers to engage with them. Or it may mean that a service that was valued and worked well disappears, and farmers may not engage with what replaces it. Rather than completely replacing old forms of support, it might be more helpful to complement them with new ones.

My worry is always when you have new interventions that the old ones go to one side, and we know that that old one works for our age group. (Interview 1)

- *Leveraging existing channels*

The uptake of health-related services can be enhanced by making more of existing platforms and channels that farmers already engage with, even if they are currently not using these for health-related matters. Given that business and personal health are interlinked it makes sense to bring advice on business and health issues under one 'roof'. For example, existing events or organised groups where farmers already meet are examples of such existing channels. The interviewed farmers mentioned that farming groups or discussion groups could bring in speakers to talk about health and wellbeing issues. Others also suggested using existing media (e.g. papers, magazines, newsletter – Farmers Weekly, Farmers Guardian, Mole Valley newsletter) that farmers already engage with.

I know when we went on the Penryn beef group, we had all sorts of speakers come in, mainly agricultural but we had a solicitor there one night and a bank manager another time. So, you can involve the wellbeing people then. (Interview 3)

Mole Valley newsletter, things like that, that's where they'll need to be. They do do those sorts of thing in there, where people pick a hard copy up over their lunch, a cup of tea, whatever, they'll flick through it. Make the headline bold, big, 'This may help you', 'This may save your life' or something like that. (Interview 3)

Delivering health support with other existing services that farmers are relying on (such as vets, accountants, or farm advisors) could increase uptake, because the information source would be an already trusted entity with whom the farmer has built up rapport. Discussing health matters in the context of other farm-related issues might also be easier for farmers, as well as it makes sense since business and personal health are intertwined.

- *Building rapport*

Farmers mentioned having built rapport and a relationship with service providers that they deal with is important for discussing things openly. They have this kind of relationship with the vet they have

been dealing with for years, or the bank manager who has been managing their finances, but they do not have this with healthcare professionals anymore. This closely relates to the consideration of leveraging existing channels for the provision of health support and the consideration of continuity, as having that ongoing relationship and trust with a healthcare professional affords a sense of continuity in the service.

The way in which modern health services are provided is more automated and impersonal nowadays, which does not allow for that rapport to be built, yet that should be an important consideration to address existing barriers to help seeking.

...in the past we've always had a GP that's lived within a short distance, and we've had a personal relationship with anyway, and if you're out of sorts in any sort of way, shape or form, you could always just pick up the phone and say "Hello, I'm not up to much, can I come and see you?" (Interview 1)

- *Capability development*

A key barrier to accessing healthcare, including via digital means, is linked to farmers' limited capability to recognise health issues and to know what to do about them. This is exacerbated when health services are increasingly delivered digitally, and farmers lack the capability and skills to engage with services in this new way.

Raising awareness about health issues can encourage a preventative approach to health as an alternative to prevalent reactive approaches in older age groups within the farming community. This can be done through information campaigns to raise awareness about common risks and illnesses, their symptoms and the action that should be taken to prevent escalation. Farmers would benefit from training in this area, any courses will need to keep in mind the time commitment required for training as farmers are very often time poor. Training can be directed at both physical and mental health support, and it should equip farmers with enough information to know what to do in a given situation and to have the confidence to help.

Some training is already taking place in the area of occupational health. However, this is not enough, because it does not cover other aspects of health that older farmers are likely to encounter, especially mental health issues which have been shown to be widespread in rural farm communities. These campaigns and trainings should aim to shift farmers' mindset about health and help-seeking, rather than merely providing them with information. Such training should start early, working with Young Farmers groups to start educating men young about these issues and to make sure that there is no stigma around speaking about health, especially about mental health struggles.

When services are moved online, farmers often must seek help from family members to access them. However, some farmers felt that relying on family for support with digital tools has made them a burden, which goes against their strong preference for autonomy. Therefore, upskilling farmers to become competent users of digital tools is a prerequisite for inclusive digital service delivery. For example, short courses designed to improve digital literacy among farmers over 55 could be beneficial.

My daughter-in-law does it [setting up video calls] for me. Yes, she only lives next door so I'm a right pain to her, aren't I? (Interview 6)

- *Inclusion in decisions*

This concerns involving farmers in decisions about their health. Conversations with healthcare professionals need to be two-way conversations. It is important to involve farmers in the decision-making process, so they can help shape the system. This was also mentioned with regard to digital delivery specifically. Inclusion can help build trust and can address psychosocial barriers to engaging with available healthcare support.

- *Providing relief*

Working long hours and not being able to get time off to recuperate is one of the main sources of poor health among farmers, whether through impact on physical and mental health or through delayed help seeking that can make a health issue worse. Providing relief to allow farmers time off would be useful. For example, having a pool of agency workers who can be called on was suggested by one farmer. There is a system like this already in place for some sectors (e.g., vegetable and dairy farming) but not for others (e.g., beef or sheep farms).

- *Facilitating peer support*

Since farmers already receive support from their family and community, peer-learning can be an effective pathway for capability development. Farmers suggested having discussion groups for farmers to come together and to get things off their chest (health-related or other) and support each other by listening. Organising meetups for farmers, and not just for men but also for women (farmer's wives can also be very lonely and isolated).

...sometimes you just need to get something off your chest and then you're back on again.
(Interview 3)

5 Conclusion

This report explored access to health-related support among aging farmers in Cornwall. In-person and digital or hybrid forms of service delivery were both considered, and seven farmers were interviewed about their experiences of accessing these. The study uncovered a range of supply- and demand-side factors that shape access to health support. The interviews revealed that farmers face additional barriers when trying to access such services via digital platforms. This is consistent with earlier studies that have warned about the increasing digital divide between service providers and aging rural populations, including farmers.

Based on findings from the interviews, which also investigated farmers' preferences for future service provision, the report concludes with a set of recommendations for creating an enabling environment that facilitates access to health-related services among aging farm communities. These recommendations stress the need for people-centred services that are attuned to social differences that shape how services are perceived, received and accessed.

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7 References

- Borg, K., Boulet, M., Smith, L., & Bragge, P. (2019). Digital Inclusion & Health Communication: A Rapid Review of Literature. *Health Communication, 34*(11), 1320–1328. <https://doi.org/10.1080/10410236.2018.1485077>
- Correa, T., & Pavez, I. (2016). Digital Inclusion in Rural Areas: A Qualitative Exploration of Challenges Faced by People From Isolated Communities. *Journal of Computer-Mediated Communication, 21*(3), 247–263. <https://doi.org/10.1111/jcc4.12154>
- Goddard, M., & Smith, P. (2001). Equity of access to health care services : Theory and evidence from the UK. *Social Science & Medicine, 53*, 1149–1162.
- Heenan, D. (2006). The factors influencing access to health and social care in the farming communities of County Down, Northern Ireland. *Ageing and Society, 26*(3), 373–391. <https://doi.org/10.1017/S0144686X06004697>
- Kennedy, A. J., Adams, J., Dwyer, J., & Brumby, S. (2021). Rural suicide risk and physical ill health: A qualitative study of the Victorian Suicide Register, 2009–2015. *Australian Journal of Rural Health, 29*(6), 927–938. <https://doi.org/10.1111/ajr.12801>
- Kennedy, A. J., Brumby, S. A., Versace, V. L., & Brumby-Rendell, T. (2020). The ripple effect: A digital intervention to reduce suicide stigma among farming men. *BMC Public Health, 20*(1), 1–12. <https://doi.org/10.1186/s12889-020-08954-5>
- Levesque, J. F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health, 12*(1), 1–9. <https://doi.org/10.1186/1475-9276-12-18>
- Lobley, M., Johnson, G., Reed, M., Winter, M., & Little, J. (2004). *Rural Stress Review: Final Report*. Exeter.
- RABI. (2021). *The Big Farming Survey*. Oxford. Retrieved from www.rabi.org.uk
- Roy, P., Tremblay, G., Robertson, S., & Houle, J. (2017). “Do it All by Myself”: A Salutogenic Approach of Masculine Health Practice Among Farming Men Coping With Stress. *American Journal of Men’s Health, 11*(5), 1536–1546. <https://doi.org/10.1177/1557988315619677>
- Shortland, F., Hall, J., Hurley, P., Lobley, M., Little, R., Nye, C., & Rose, D. C. (2022). Landscapes of support for farming mental health: Adaptability in the face of crisis. *Sociologia Ruralis, 1–25*.

<https://doi.org/10.1111/soru.12414>

Stewart, I. (2022). *Farming and food statistics: South West England. Research Briefing no. CBP 9458.*
https://doi.org/10.1007/978-3-319-75620-2_36

Turner, R. A., Szaboova, L., & Williams, G. (2018). Constraints to healthcare access among commercial fishers. *Social Science & Medicine*, 216, 10–19.
<https://doi.org/https://doi.org/10.1016/j.socscimed.2018.09.026>

Vayro, C., Brownlow, C., Ireland, M., & March, S. (2020). 'Farming is not Just an Occupation [but] a Whole Lifestyle': A Qualitative Examination of Lifestyle and Cultural Factors Affecting Mental Health Help-Seeking in Australian Farmers. *Sociologia Ruralis*, 60(1), 151–173.
<https://doi.org/10.1111/soru.12274>

Wheeler, R., & Lobley, M. (2022). Health-related quality of life within agriculture in England and Wales: results from a EQ-5D-3L self-report questionnaire. *BMC Public Health*, 22, 1395.
<https://doi.org/10.1186/s12889-022-13790-w>

Wheeler, R., Lobley, M., Mccann, J., & A, P. (2021). *Loneliness and Social Isolation in Farming Communities: Summary of research findings.* Exeter.