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Retention of General Practitioners (GPs) in north Wales; understanding what influences GP career aspirations.

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Abstract:

This research project develops the professional understanding of work intentions and motivations of General Practitioners (GP) post qualification in North Wales and how these factors influence decision making around career aspirations. There has been an increase in GPs working in North Wales in recent years but previously a significant shortage of GPs existed. This mixed methods study addresses the personal and professional aspirations of GPs and how the local health board and professional bodies can support the retention of this professional group. The study involved an expert forum and a perceptual questionnaire. The results show significant new and positive insights into the views and behaviours of GPs over their working careers. These results show the many local advantages of North Wales as a 'preferred place of practice' for GPs to live and develop their careers.

Keywords: General Practice, General Practitioner, Primary Care, Retention.

1 Appendix A, Ethical Approval

Swansea University
Prifysgol Abertawe

Approval Date: 25/06/2025

Research Ethics Approval Number: 2 2025 13493 13163

Thank you for completing a research ethics application for ethical approval and submitting the required documentation via the online platform.

Project Title	Retention of General Practitioners (GPs) in North Wales: Understanding what influences GP career aspirations.
Applicant name	PROF NICHOLAS RICH
Submitted by	PROF NICHOLAS RICH /

Full application form link https://swansea.forms.ethicalreviewmanager.com/Project/Index/15941

The Humanities and Social Sciences ethics committee has approved the ethics application, subject to the conditions outlined below:

Approval conditions

1. The approval is based on the information given within the application and the work will be conducted in line with this. It is the responsibility of the applicant to ensure all relevant external and internal regulations, policies, and legislations are met.
2. This project may be subject to periodic review by the committee. The approval may be suspended or revoked at any time if there has been a breach of conditions.
3. Any substantial amendments to the approved proposal will be submitted to the ethics committee prior to implementing any such changes.

Specific conditions in respect of this application:

The application has been classified as Low Risk to the University.

No additional conditions.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees. It complies with the guidelines of UKRI and the concordat to support Research Integrity.

Humanities and Social Sciences Research and Ethics Chair

Swansea University.

If you have any queries regarding this notification, then please contact your research ethics administrator for the faculty.

- For Science and Engineering contact FSE-Ethics@swansea.ac.uk
- For Medicine, Health and Life Science contact FMHLS-Ethics@swansea.ac.uk
- For Humanities and Social Sciences contact FHSS-Ethics@swansea.ac.uk

Dyddiad Cymeradwyo: 25/06/2025

Rhif Cymeradwyo Moeseg Ymchwil:

Diolch am gwblhau cais moeseg ymchwil am gymeradwyaeth foesegol ac am gyflwyno'r ddogfennaeth ofynnol drwy'r platfform ar-lein.

Teitl y Prosiect	Retention of General Practitioners (GPs) in North Wales: Understanding what influences GP career aspirations.
Enwr Ymgeisydd	PROF NICHOLAS RICH
Cyflwynwyd gan	PROF NICHOLAS RICH /

Dolen i'r ffurflen gais lawn https://swansea.forms.ethicalreviewmanager.com/Project/Index/15941

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2 Appendix B, Results of sources

No	Citation	Title	Themes and theory	Source or sample	Methodology	Findings
1	(Le Floch et al., 2022)	Job satisfaction criteria to improve general practitioner recruitment: a Delphi consensus	1. Job satisfaction can lead to improved retention 3. Working in a well managed practice increases satisfaction 4. Personal development opportunities such as being a GP trainer	Le Floch, B., Bastiaens, H., Le Reste, J.-Y., Nabbe, P., Le Floch, P., Cam, M., Montier, T., & Peremans, L. (2022). Job satisfaction criteria to improve general practitioner recruitment: a Delphi consensus. Family Practice, 41(4). https://doi.org/10.1093/fampra/cmac140	Delphi consensus method and Nominal Group Technique (NGT) method to rank the factors. 32 participants, engaged through questionnaires and expert panels.	Improving job satisfaction can lead to better recruitment and retention. Eight key areas identified for job satisfaction (I) Engage in family medicine to take care of the patients; (ii) Care coordination, patient advocacy; (iii) Flexibility in work; (iv) Trying to be a person-centred doctor; (v) Involvement in healthcare organization; (vi) Benefiting from a well-managed practice; (vii) Being a teacher, a trainer; (viii) Efficient professional collaboration. Experts felt that recruitment and retention would be more successful

						if family medicine was patient centred, and GPs had the tools and means to treat patients and take care of themselves. There was no initial consensus on "Flexibility in work" and "Freedom of choice in workplace" Limitations European study from France, no UK involvement or engagement. The data for the study were collected several years ago. However, the results are unlikely to be different today in France. Implications Eight key areas represent priority areas to support GP recruitment and that Health

						Authorities could use these in their efforts to effectively improve the family medicine workforce in France.
2	(Wieland et al., 2021)	Retention of General Practitioners in remote areas of Canada and Australia: A meta-aggregation of qualitative research	Six findings identified that support retention in rural areas: 1. Need for peer and professional support in rural areas 2. Organisational support required to support GPs and implement required changes 4. Appreciation for the uniqueness of remote lifestyle and the type of work 5. Burnout	Wieland, L., Ayton, J., & Abernethy, G. (2021). Retention of General Practitioners in remote areas of Canada and Australia: A meta-aggregation of qualitative research. Australian Journal of Rural Health, 29(5), 656–669. EBSCOhost CINAHL Ultimate.	Systematic review of qualitive data. Meta-aggregation of qualitative studies of General Practitioners and general practice registrars who had worked in a remote area of Australia or Canada for a minimum of 1 year and/or were intending to stay remote long term in their current placement.	Long-term retention of doctors in remote areas of Australia and Canada is influenced by a range of negative and positive perceptions, and experiences with key factors being professional, organisational and personal. All 6 synthesised findings span a spectrum of policy domains and service responsibilities, and therefore, a central coordinating body could be well placed to implement a multifactorial retention strategy. Limitations Study focused on

						remote areas of Canada and Australia. This targeted research acknowledges the major differences of the remote context and obtains rigorous detailed qualitative data on remote retention to clearly identify negative and positive issues, including the reasons GPs may be reluctant to say or don't say in interviews.
3	(Eaton-Hart et al., 2022)	How do the working lives of general practitioners in rural areas compare with elsewhere in Scotland? Cross-sectional analysis of the Scottish School of Primary Care National GP Survey	1. Higher job satisfaction in female GPs in rural areas 2. Higher intention to leave jobs in the next 5 years	Eaton-Hart, J., Gillies, J., & Mercer, S. (2022). How do the working lives of general practitioners in rural areas compare with elsewhere in Scotland? Cross-sectional analysis of the Scottish School of Primary Care National GP Survey. Rural and Remote Health, 22(3). https://doi.org/10.22605/rrh7270	Quantitative analysis of survey data from the Scottish School of Primary Care national working lives survey. A total of 2465 GPs responded, giving a 56% response rate and a nationally representative sample of Scottish GPs.	Rural GPs were more satisfied, experienced less pressure from job stressors and were happier with most of the aspects of their job compared to non-rural GPs; yet rural GPs were more likely to intend to leave medical work entirely in the next 5

						years. Further analysis showed rural GPs' increased job satisfaction can be attributed to female rural GPs' increased job satisfaction . Limitations Focus on rural Scotland
4	(Khan, 2024)	A failure to retain GP retention schemes	1. Unknown if fellowship programmes increased GP retention, this has not been reviewed long term 2. Supportive environment is important to newly qualified GPs/ peer support 3. Flexible working 4. Ringfenced portfolio career building and education 5. Issues with short term	Khan, N. (2024). A failure to retain GP retention schemes. British Journal of General Practice, 74(740), 128–129. https://doi.org/10.3399/bjgp24x736617		GP retention is a real and imminent concern, especially among early career GPs, with 2021's GP Work life survey indicating that 16% of GPs aged <50 years were thinking of leaving face-to-face practice. In a small study of London-based GPs on a scheme similar to the New to Practice Fellowship, fellows who responded to the study felt supported in their transition to

			funding (difficulty measuring outcomes/ outputs)			working as a salaried GP, and gained more skills and confidence. The results of this study mirror other research suggesting that flexible working, peer support, and the opportunity for ringfenced portfolio career building and education all help GPs feel supported to stay in work. Limitations Grey literature
5	(Fisher & McDermott, 2023)	The battle to retain GPs: why practice culture is critical	1. Patient centred care is important (dissatisfaction with the amount of time to spend with patients) 2. Peer support 3. Working in a well managed practice	Fisher, R., & McDermott, A. M. (2023). The battle to retain GPs: why practice culture is critical. BMJ, 380, p344–p344. https://doi.org/10.1136/bmj.p344		Ultimately, many factors driving poor job satisfaction for GPs lie outside the direct control of individual practices. Challenges are magnified in socioeconomically deprived areas, where workload pressures and GP turnover are highest.

						Making general practice an attractive place to work requires national action to increase investment, reduce workload, and change rhetoric to reflect greater appreciation for the role of general practice in the NHS. Yet local action is needed too. For practices, delivering sustainable patient care means creating cultures where the job satisfaction and wellbeing of staff is prioritised —with decisions taken through this lens. Local NHS bodies should support practices in these goals. Limitations Grey literature

6	(Cleland Jennifer et al., 2021)	Won't you stay just a little bit longer? A discrete choice experiment of UK doctors' preferences for delaying retirement	1. Flexible working 2. Working in a well managed practice 3. Manageable workload	Cleland Jennifer, A., Porteous, T., Ourega-Zoé, E., Mandy, R., & Skåtun, D. (2021). Won't you stay just a little bit longer? A discrete choice experiment of UK doctors' preferences for delaying retirement. Health Policy, 126(1). https://doi.org/10.1016/j.healthpol.2021.11.004	Discrete choice experiment (DCE) methodology Interviewed 40 doctors, representing GPs, consultants and SAS (associate specialist and speciality) doctors aged between 50 and 68 years	GPs preferred reduced working hours (although a 40% reduction was not statistically significantly different from an 80% reduction), excellent personalised working conditions, mild job intensity, a 100% increase in pension tax AA and fewer additional working years. Limitations The DCE focused solely on job-related attributes since no job-focused intervention can control for the influence of personal factors, such as personal health or a spouse that has retired, on retirement decisions. Implications It would also be worthwhile to investigate

						the relationship between understaffing in a hospital or practice and retirement intentions, given working hours, job intensity and on-call are likely to be more onerous in such environments.
7	(Dhanani & Blane, 2022)	The Deep End GP Pioneer Scheme: a qualitative evaluation	1. Peer support 2. Manageable workload 3. Formalised mentorship 4. Issues with short term funding (difficulty measuring outcomes/ outputs)	Dhanani, S., & Blane, D. N. (2022). The Deep End GP Pioneer Scheme: a qualitative evaluation. Australian Journal of Primary Health, 29(2). https://doi.org/10.1071/py22162	Nine lead GPs and 10 GP fellows, working across 12 different practices, were interviewed. high response rate, with 12 out of 14 participating practices taking part. A rigorous approach to qualitative analysis was followed, with the use of theory underpinning the section on GP work motivation	There were five main themes: Recruitment to the Pioneer Scheme, Work motivation and satisfaction, Mitigating health inequalities, Retention and changes in work pattern, and suggestions for the future. The potential influence of the Pioneer Scheme on future plans was discussed by lead GPs too; however, it was clear that these decisions are complex and influenced

						by both personal circumstances and the wider context of general practice workload pressure The findings from the present study resonate with similar initiatives to address recruitment and retention..., key ingredients of protected time, sharing learning, and common values and goals are core components of the successful North Dublin City GP Training Scheme (O Carroll and O'Reilly 2019). Limitations Focus on rural Scotland A potential limitation of this study is that it took place before the second cohort had completed the Pioneer Scheme,

						but over a year after the first cohort had completed, so there may be issues of social desirability bias and recall bias, respectively.
8	(Zhou et al., 2022)	Investigating the links between diagnostic uncertainty, emotional exhaustion, and turnover intention in General Practitioners working in the United Kingdom	1. Manageable workload 2. Wellbeing/ Wellness 3. Job satisfaction 4. Peer support 5. Wider organisational support	Zhou, A. Y., Zghebi, S. S., Hodkinson, A., Hann, M., Grigoroglou, C., Ashcroft, D. M., Esmail, A., Chew-Graham, C. A., Payne, R., Little, P., Lusignan, S. de, Cherachi-Sohi, S., Spooner, S., Zhou, A. K., Kontopantelis, E., & Panagioti, M. (2022). Investigating the links between diagnostic uncertainty, emotional exhaustion, and turnover intention in General Practitioners working in the United Kingdom. Frontiers in Psychiatry, 13(13). https://doi.org/10.3389/fpsyt.2022.936067	Seventy general practices in England were randomly selected through the Oxford-Royal College of General Practitioners Research and Surveillance Centre (RCGP-RSC). A total of 348 GPs within 67 these practices completed a 10-item online questionnaire	Diagnostic uncertainty may not only negatively impact on the wellbeing of GPs, but could also have adverse implications on workforce retention in primary care. GPs have been found to experience one of the highest levels of uncertainty compared to other medical specialties). Diagnostic uncertainty is not uncommon in primary care however, the strength of this study is that it has not only explored diagnostic uncertainty but specifically explored the link between

						diagnostic uncertainty, turnover intention, job dissatisfaction, and burnout in GPs across practices in England. Alongside diagnostic uncertainty, sickness presenteeism also needs to be considered and addressed while designing GP wellness and workforce retention remedies in primary care such as addressing workload, adequate resources and a supportive environment. Limitations This was a cross-sectional study and therefore causation cannot be determined. Overall response rate of <50%, results may only reflect the perspectives of

						participating GPs rather than all GPs working in practices across the UK.
9	(Bimpong et al., 2020)	Relationship between labour force satisfaction, wages and retention within the UK National Health Service: a systematic review of the literature	1. Pay 2. Portfolio career building and education/ CPD 3. Flexible working 4. Wellbeing	Bimpong, K. A. A., Khan, A., Slight, R., Tolley, C. L., & Slight, S. P. (2020). Relationship between Labour Force satisfaction, Wages and Retention within the Uk National Health service: a Systematic Review of the Literature. BMJ Open, 10(7), 1–7.	Systematic review An extensive literature search was undertaken using seven databases and grey literature.	Close relationship between satisfaction and retention; poor satisfaction increases the likelihood of staff leaving the NHS. An increase in pay was shown to increase retention by improving satisfaction; however, the extent to which it does so varies among different groups and the cost-benefit of this approach is questionable. The literature suggests that a combination of non-monetary factors affect NHS staff intentions to leave. A cultural shift is required to improve equality matters and

						maintain staff wellbeing; a system leadership approach underpinned by data is therefore warranted. One cross-sectional study measured how satisfied General Practitioners (GPs) were with their job using the Warr-Cook-Wall scale and found that those with low job satisfaction were more likely to leave their profession. GPs who had a household income equal to or less than £70 000 in 2002 were more likely to report higher intentions to quit than those with a higher household income. Limitations This review looked at a number of professions and generalised findings may not

						include GPs.
10	(Andah et al., 2021)	Understanding the impact of professional motivation on the workforce crisis in medicine: a rapid review	1. Wider organisational support 2. Stability, in staffing and the wider organisation 3. Manageable workload 4. Working in a well managed practice 5. Peer support 6. Wellbeing	Andah, E., Essang, B., Friend, C., Greenley, S., Harvey, K., Spears, M., & Reeve, J. (2021). Understanding the impact of professional motivation on the workforce crisis in medicine. *BJGP Open*, *5*(2), BJGPO.2021.0005. https://doi.org/10.3399/bjgpo.2021.0005	A systematic search strategy was developed the search terms used were: medical professionals, retention, and NHS. The exclusions were: commentaries, non-medical professionals, non-English language, and it was limited to post-1990 Comparative thematic analysis distilled core themes explaining the reasons for leaving and their relation to the three Ms model.	Thematic analysis identified four key themes: low morale, disconnect, unmanageable change, and lack of personal and professional support. Current strategies are not tackling this effectively with more healthcare professionals still leaving the NHS. Analysis shows that low job morale, disconnect, lack of personal and professional support, and unmanageable change all contribute to demotivating a workforce. Limitations Limitations included a narrow database search (Embase, MEDLINE, and HMIC) owing to the time

						constraint on completing this piece of work. Most of the included studies were questionnaires or surveys with no clear validation tools highlighted in some of the articles, possibly introducing a risk of bias.
11	(Stutzman et al., 2020)	Support for rural practice: female physicians and the life–career interface	1. Family commitments 2. Flexibility of work 3. Life-career interface 4. Practice location	Stutzman, K., Karpen, R., Naidoo, P., Toevs, S., Weidner, A., Baker, E., & Schmitz, D. (2020). Support for rural practice: female physicians and the life–career interface. Rural and Remote Health, 20(1). https://doi.org/10.22605/rrh5341	Twenty physicians from the same rurally focused family medicine residency were interviewed over a 3-month period using a semi-structured format. Using a phenomenological approach, interviews were transcribed and then coded and analysed. Emergent subthemes and themes were discussed by the multidisciplinary team.	Rural female physicians face unique challenges in achieving a work-life balance, often relying on support networks and meaningful patient relationships to navigate their emotional labour and career satisfaction. Besides a supportive partner, help from a larger network of family members, friends, neighbours, and paid caregivers is also necessary

						Without a stay-at-home spouse, family or friends, paid caregivers become more important, and they are sometimes difficult to find and keep in rural areas. Responses to questions about what brought them to rural medicine, what brought joy to their work lives, and how they found a 'resilience point' to keep from burning out often elicited talk about self-care – beliefs and behaviours that help the physicians maintain a sense of personal health and wellbeing. In rural areas it can be difficult to establish boundaries, to create a private life and even to get out of town. Life–career

						interface varies across individuals, changes over time and is always a work in progress.
12	(Ferguson et al., 2020)	Exploring 'work–life balance' at appraisal and how this links with organisational support	1. Workload 2. Wellbeing 3. Life-career interface 4. Flexibility of work 5. Education/ CPD opportunities	Ferguson, J., Scallan, S., Lyons-Maris, J., & Ball, K. (2020). Exploring "work–life balance" at appraisal and how this links with organisational support. British Journal of General Practice, 70(697), 411–412. https://doi.org/10.3399/bjgp20x712109		017 National GP Work life Survey shows only 49.9% of GPs are satisfied with work, 92.3% report pressure from 'increasing workloads', and 46.0% of GPs plan to leave within the next 5 years. GPs with increased work stress and intensity report higher levels of anxiety, depression, and dissatisfaction, leading to poor WLB, with consequences of deterioratin g health and burnout, perfunctory patient care, and increased healthcare

						system costs. Productivity -based pay may lead to overwork and burnout. But opportunities for flexible working with a good WLB are important considerations for the new generation of GPs, combined with time for professional development in education, research, and leadership. But incentives are important throughout careers to live healthily, stimulate interests, and defer early retirement through reducing work intensity and administration, with increased time for patient care and work–life flexibility. Limitations

						Grey literature
13	(Dimitar Yordanov et al., 2023)	Mapping GPs' motivation — it's not all about the money: a nationwide cross-sectional survey study from Denmark	1. Pay not always a motivator 2. Patient centred care 3. Workload 4. Motivation based incentives	Dimitar Yordanov, Anne Sophie Oxholm, Dorte Gyrd-Hansen, & Line Bjørnskov Pedersen. (2023). Mapping GPs' motivation: it's not all about the money; a nationwide cross-sectional survey study from Denmark. British Journal of General Practice, 73(734), e687–e693. https://doi.org/10.3399/bjgp.2022.0563	Survey data were used to measure four types of motivation: extrinsic motivation, intrinsic motivation, user orientation, and public service motivation 1152 GPs completed the survey, giving a response rate of 34.5%	Five classes of GPs were identified with different work motivations: class 1 'it is less about the money' — probability of class membership 53.2%; class 2 'it is about everything' — 26.5%; class 3 'it is about helping others' — 8.6%; class 4 'it is about the work' — 8.2%; and class 5 'it is about the money and the patient' — 3.5%. Linear regression analyses showed that motivation was associated with GP, practice, and area characteristics to a limited extent only. The low correlation between the motivational

						components suggests that they measure different aspects of motivation; as such, incentive schemes may be more effective if they target different types of motivations. Although some statistically significant associations were found between GPs' motivation and their age and gender, observable GP, practice, and area characteristics seemed not to be strongly associated with motivation, as the characteristics only explained a small proportion of the variation in motivation. The authors therefore suggest that GPs' motivation is taken into consideration, in addition to these other

						observable characteristics, when designing policies, as observable characteristics alone seemed not to be good predictors for motivation. Limitations Denmark study, not all relevant for UK GPs
14	(RCGP, 2024)	Retention: Looking after the GPs of today to safeguard the workforce of tomorrow	1. Importance of strategic workforce planning 2. Wellbeing	RCGP. (2024). Retention Looking after the GPs of today to safeguard the workforce of tomorrow. https://www.rcgp.org.uk/getmedia/69baeda-c8b5-4bcb-8893-67da10b51ed1/RCGP-Retention-Report-Oct-2024.pdf		Over 40% of RCGP members considering leaving the profession within five years. Requests a review of the NHS Long Term Workforce Plan (England), asking for a National GP Retention Strategy with increased ringfenced funding. Limitations Grey literature
15	(Dimitar Yordanov et al., 2023)	Early GP Leavers Interim Report: Report to HEE & NHS England dated 4th May 2014	1. Barriers to return to work, inflexible working 2. Importance of support and mentorsh	Doran, N., Fox, F., Taylor, G., & Harris, M. (2015). Early GP Leavers Interim Report: Report to HEE & NHS England dated 4th May 2014. The University of Bath's Research Portal; University of Bath. https://researchportal.bath.ac.uk/en/publications/early-gp-leavers-interim-report-report-to-hee-amp-nhs-england-dat		Identifies key reasons for GPs leaving general practice, such as job dissatisfaction, high workload, lack of

			ip 3. Need for workload management			support, and poor work-life balance. It highlights barriers to returning, including inflexible working conditions and insufficient re-entry support. Many early leavers move to roles with better work-life balance. Limitations Grey literature
16	(Health Education Improvement Wales, 2023)	Strategic Workforce Plan for Primary Care	1. Continuous education and training	Health Education Improvement Wales. (2023, January 11). Strategic Workforce Plan for Primary Care. HEIW. https://heiw.nhs.wales/workforce/strategic-workforce-plan-for-primary-care/		Looking to create an engaged, healthy, and motivated workforce through seamless workforce models, continuous education, and professional development. The plan highlights the need for strategic workforce planning to address current and future needs, attract and recruit healthcare professionals, and develop strong leadership

						and succession planning. Limitations Grey literature
17	(Welsh Government, 2023)	National Workforce Implementation Plan: Addressing NHS Wales Workforce Challenges	1. Importance of strategic workforce planning 2. Focus on recruitment and retention 3. Continuous education and training 4. Wellbeing 5. Flexible working	Welsh Government. (2023). National Workforce Implementation Plan: Addressing NHS Wales Workforce Challenges. https://www.gov.wales/sites/default/files/publications/2023-01/national-workforce-implementation-plan.pdf		Developed following the fifth year since 'A Healthier Wales' was published. Plan has been developed in response to the additional demand and to support a whole system approach following the pandemic. Aiming to fill workforce gaps, engage support and develop and plan for the future with a number of identified actions to support these high-level outcomes. Limitations Grey literature

3 Appendix C, Expert panel interview questions

Questions for expert panel

1. Relevance

- Based on your experience, do the proposed questions reflect the true factors that influence GP retention in North Wales?
- Are there any themes or issues you've come across in your working life that are missing from these proposed questions?

2. Practicality

- Do you feel the questions reflect the day to day role and workload of GPs?
- Are there any questions that you think GPs would find difficult to answer?

3. Appropriateness

- Are there any questions that might be too sensitive to ask?
- Do you feel the language used is inclusive and appropriate for the diverse GP workforce?

4. Impact

- Will the data collected from these questions provide meaningful insights that could inform policy or workforce planning?
- Are there any questions that, in your view, won't provide useful or actionable data?

5. Improvements

- Are there any additional questions you would recommend based on your experience?
- Would you suggest any changes to how the questions are grouped or ordered?

6. Conceptual Framework Alignment

- Do you feel the questions align well with the conceptual framework and identified themes (e.g., workload, flexibility, professional development)?
- Are there any areas where the framework could be better reflected in the questions?

4 Appendix D, Final questionnaire

Retention of General Practitioners (GPs) in north Wales; understanding what influences GP career aspirations.

We are conducting research to understand the influencing factors of GP career aspirations and its impact on retention. The study is part of an MSc in Advanced Health and Care Management (Innovation and Transformation). The data will be collected by Robyn Watson, MSc Student at Swansea University's School of Management, Robyn can be contacted via email 2333639@swansea.ac.uk. The research has been approved by the School of Management Research Ethics committee. By completing this questionnaire, you are consenting to be included in this study. All data will be anonymised.

Section 1: Demographics and Background

No	Question	Quantitative or qualitative	Answer/s	Relation to conceptual framework
1.	What is your age?	Quantitative	• 25-34 • 35-44 • 45-54 • 55-64 • 65-74 • 75+	• Personal motivations
2.	What is your gender?	Quantitative	• Woman • Man • Non-binary • Prefer to self-describe (free text) • Prefer not to say	• Personal motivations
3.	Do you live in North Wales?	Quantitative	• Yes • No	• Personal motivations
4.	Are you a Welsh speaker?	Quantitative	• Yes • Learner • No	• Personal motivations
5.	How important is speaking Welsh within your working day?	Quantitative	• 1 = Not important, 5 = Very important	• Personal motivations
6.	Did you undertake any of your GP training in North Wales?	Quantitative	• Yes • No	• Personal motivations
7.	How long have you been a GP?		• 0-5 • 6-10 • 11-15 • 16-20	• Personal motivations

			• 21-25 • 26-30 • 31+	
8.	How long have you worked as a GP in North Wales?		• 0-5 • 6-10 • 11-15 • 16-20 • 21-25 • 26-30 • 31+	• Personal motivations
7.	Have you worked in Wales your whole GP career?	Quantitative	• Yes • No	• Personal motivations
8.	What was your motivation to choose this career pathway?		• Desire to help others / make a difference in patients' lives • Interest in medicine and healthcare • Work-life balance offered by general practice • Job security and stability • Influence of role models or mentors • Opportunities for career development or specialisation • Flexibility in working hours • Financial incentives or earning potential • Previous positive experiences during training or placements • Other career paths felt too competitive or demanding	• Personal motivations • Commercial set up • Formal employment contract • Informal employment contract • Professional development • Specialist interest/ portfolio role

			• Wanted to be a partner / owner of the business • Other (please specify)	
9.	Have you ever received an incentive to work in Wales?	Quantitative	• Golden handshake • GP training incentive scheme payment • Local practice payment • Relocation expenses • Outstanding GP/ GP+ • Attractive job plan with time for professional development in an area of interest • Other	• Personal motivations • Formal employment contract • Professional development • Specialist interest/ portfolio role
10.	Taking into account all your current roles and responsibilities, how satisfied are you overall with your role as a GP in North Wales?	Quantitative	• Very satisfied • Satisfied • Neutral • Dissatisfied • Very dissatisfied	• Personal motivations Informal employment contract
11.	Do you see yourself continuing to work in North Wales in the next 5 years?	Quantitative	• Yes • No • Unsure	• Personal motivations • Formal employment contract • Professional development

Section 2: Current Role and Practice Setting

No	Question	Quantitative or qualitative	Answer/s	Rationale for inclusion
12.	What is your main job role?	Quantitative	• Partner • Salaried GP in independent practice • Salaried GP in health board practice	• Personal motivations • Informal employment contract

			• Locum in independent practice • Locum in in health board practice • GP with a Specialist Interest • GP Out of Hours • GP retainer • Other	• Formal employment contract
13.	To what extent do the following characteristics describe your current GP practice or service?	Quantitative	• Likert scale: • 1 = Not at all, 5 = Completely • Training practice • Research-active practice • Supportive team environment • Innovative or forward-thinking practice • Rural or remote practice • Multidisciplinary team practice • High patient demand or workload • Dispensing • High income generating practice	• Patient demographics • Commercial set up • Type of practice
14.	How many hours are you committed or contracted to work per week?	Quantitative	• 0-4 • 6-10 • 11-15 • 16-20 • 21-25 • 26-30 • 31-35 • 36-40 • 41+ • Locum/ variable	• Personal motivations • Informal employment contract • Formal employment contract
15.	On average, how many additional hours do you work in this role each week?		• 0-4 • 6-10 • 11-15 • 16-20	• Informal employment contract • Commercial set up

			• 21-25 • 26-30 • 31-35 • 36-40 • 41+	• Patient demographics
15.	How many sessions does this equate to?		• 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • 10 • 11+	• Personal motivations
16.	To what extent does your current role allow for flexible working arrangements that support your work-life balance? (Examples: term-time only, school hours, condensed weeks)	Quantitative	• 1 = Not at all • 2 = Slightly • 3 = Moderately • 4 = Mostly • 5 = Completely	• Informal employment contract • Formal employment contract
17.	How important is flexible working hours when you are considering/applying for a role?	Quantitative	• 1 = Not important, 5 = Very important	• Personal motivations
18.	Does your practice offer any additional benefits?	Quantitative	• Additional annual leave • Sabbaticals • Lease car • Golden handshake • GP training incentive scheme payment • Parental/career emergency leave • Bonus • Other	• Personal motivations • Informal employment contract • Formal employment contract • Commercial set up
19.	How important were these additional benefits to you when considering this role?	Quantitative	• 1 = Not important, 5 = Very important	• Personal motivations
20.	How would you describe the complexity of your patient population?	Quantitative	• High proportion of patients with multiple long-term conditions • High levels of mental health needs	• Patient demographics • Commercial set up

			• High levels of social deprivation or socioeconomic challenges • High number of elderly or frail patients • High demand for urgent or same-day appointments • High number of non-English/Welsh speaking patients or language barriers • High levels of safeguarding or complex family dynamics • Generally low complexity and stable patient population • Other • High patient expectations in an area of relative affluence	
21.	To what extent do you feel supported in your current working environment (by peers, management, or leadership)?	Quantitative	• 1 = Not supportive, 5 = Very supportive	• Commercial set up • Informal employment contract

Section 3: Practice Model and alignment with your values

No	Question	Quantitative or qualitative	Answer/s	Rationale for inclusion
22.	Do you work in a GP practice?	Quantitative	• Yes • No	• Personal motivations • Formal employment contract
23.	To what extent do you agree that the following aspects describe your current practice's structure?	Quantitative	• Likert scale • Transparent partner revenue allocation • Strong business acumen among leadership • Clear and equitable profit-sharing model	• Personal motivations • Informal employment contract • Formal employment contract

			• Practice structure supports GP autonomy and values • Focus on long-term sustainability and profitability • Patient-centred management approach • Scalable staffing model • High list size relative to staffing • Personal financial investment required from partners	• Commercial set up
24.	How important are the following factors in your decision to remain in or join a practice?	Quantitative	• Likert scale 1 = Not important to 5 = Very important • Partner revenue allocation transparency • Practice profitability • Alignment with personal values • Business leadership and acumen • Practice reputation in the community • Staffing model and workload distribution • Opportunity for financial investment or ownership	• Personal motivations • Informal employment contract • Formal employment contract • Commercial set up

Section 4: Workload and Job Satisfaction

No	Question	Quantitative or qualitative	Answer/s	Rationale for inclusion
25.	How manageable do you find your current workload across your working week?	Quantitative	• 1 = Not at all manageable, 5 = Very manageable	• Personal motivations • Informal employment contract • Formal employment contract • Commercial set up • Patient demographics

26.	How often do administrative tasks impact on your clinical work?	Quantitative	• 1 = Never, 5 = Always	• Informal employment contract • Commercial set up
27.	Are you able to use all of your annual allocated CPD time?	Quantitative	• 1 = Never, 5 = Always	• Informal employment contract • Formal employment contract • Commercial set up
28.	To what extent do informal expectations (e.g., staying late, covering for colleagues) affect your job satisfaction?	Quantitative	• 1 = Not at all, 5 = Always	• Personal motivations • Informal employment contract • Commercial set up
29.	Do you feel your practice/ workplace supports your wellbeing and mental health?	Quantitative	• Yes • No • Somewhat	• Personal motivations • Informal employment contract
30.	To what extent does the local community's perception of your practice influence your job satisfaction?	Quantitative	• 1 = Not at all, 5 = Very significantly	• Personal motivations • Welsh government policy • Professional body involvement • Public image
31.	Do you feel your identity as a GP is valued within the local community?	Quantitative	• 1 = Not at all, 5 = Very much	• Personal motivations • Welsh government policy • Professional body involvement • Public image

Section 5: Specialist Interests and Career Development

No	Question	Quantitative or qualitative	Answer/s	Rationale for inclusion
32.	Do you have a specialist interest or portfolio role?	Quantitative	• Yes • No	• Specialist interest/ portfolio role
33.	How has your specialist interest or portfolio role impacted your long-term career aspirations within general practice?	Quantitative	• 1 = Not at all, 5 = Very significantly	• Specialist interest/ portfolio role • Personal motivations

34.	Do you feel you have access to adequate professional development opportunities in your current role?	Quantitative	• Yes • No • Somewhat	• Specialist interest/ portfolio role • Personal motivations • Welsh government policy • Professional body involvement

Section 6: Secondary Roles

No	Question	Quantitative or qualitative	Answer/s	Rationale for inclusion
35.	Do you have a second job/role?	Quantitative	• Yes • No	• Personal motivations • Informal employment contract • Formal employment contract
36.	If yes, what is your second job role?	Quantitative	• Partner • Salaried GP in independent practice • Salaried GP in health board practice • Locum in independent practice • Locum in in health board practice • GP with a Specialist Interest • GP Out of Hours • Other	• Personal motivations • Informal employment contract • Formal employment contract
37.	How many hours are you committed or contracted to work per week?	Quantitative	• 0-4 • 6-10 • 11-15 • 16-20 • 21-25 • 26-30 • 31-35 • 36-40 • 41+ • Locum/ variable	• Personal motivations • Informal employment contract • Formal employment contract

38	On average, how many additional hours do you work in this role each week?		• 0-4 • 6-10 • 11-15 • 16-20 • 21-25 • 26-30 • 31-35 • 36-40 • 41+	• Informal employment contract • Commercial set up • Patient demographics
39.	How many sessions does this equate to?		• 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • 10 • 11+	• Personal motivations • Informal employment contract • Formal employment contract
40.	To what extent does your current role allow for flexible working arrangements that support your work-life balance? (Examples: term-time only, school hours, condensed hours or weeks)	Quantitative	• 1 = Not at all • 2 = Slightly • 3 = Moderately • 4 = Mostly • 5 = Completely	• Informal employment contract • Formal employment contract
41.	How important is flexible working hours when you are considering/applying for a role?	Quantitative	• 1 = Not important, 5 = Very important	• Personal motivations
42.	Does your practice/ workplace offer any additional benefits?	Quantitative	• Additional annual leave • Sabbaticals • Lease car • Golden handshake • GP training incentive scheme payment • Parental/career emergency leave • Bonus • Other	• Personal motivations • Informal employment contract • Formal employment contract • Commercial set up

43.	How important were these additional benefits to you when taking up this role?	Quantitative	• Likert scale: • 1 = Not important, 5 = Very important	• Personal motivations
44.	What were your reasons and considerations when taking up a second role? Flexible working practices – flexible working hours - change	Quantitative	• To supplement income • To pursue a specialist interest or passion • To gain experience in a different clinical or non-clinical area • To reduce reliance on a single income source • To improve wellbeing through varied work • Due to limited opportunities for progression in my main role • To maintain skills or stay engaged during career breaks or part-time work • Encouraged or supported by partners or employer • To contribute to the local community or underserved areas • To improve flexibility into my working week • Primary role had become unsustainable, sought second role to reduce pressure or improve workload balance • To peruse a role outside of partnership • Other	• Personal motivations • Specialist interest/ portfolio role • Professional body involvement
45.	Do you have any other additional roles?	Quantitative	• Yes/No	• Personal motivations • Informal employment contract • Formal employment contract

46.	How many additional roles other than the two already mentioned do you have?	Quantitative	• 1 • 2 • 3 • 4 • 5+	• Personal motivations • Informal employment contract • Formal employment contract

Section 7: Motivation and Attraction to the Region

No	Question	Quantitative or qualitative	Answer/s	Rationale for inclusion
47.	What attracted you to work in North Wales?	Quantitative	• Work-life balance • Outdoor Lifestyle Opportunities • Rural/ Community focused care • Career development opportunities • Financial incentives (relocation pages/ golden handshake etc) • Family and lifestyle reasons • Cultural and language • Previous connection to the area • Supportive work environment • Trained here and wanted to stay in the area	• Personal motivations • Professional body involvement • Welsh government policy

Exploring the Impact of Cross-Sector Peer Learning on Leadership Confidence and Change Implementation Among NHS Middle Managers in Wales: An Action Research Study

Jayne Headon

Business Lecturer and Programme Leader

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Abstract:

This action research study investigates how cross-industry peer learning influences the leadership confidence of middle managers in NHS Wales. Conducted in partnership with a North Wales based business school, the study focuses on learners within ILM Level 4 and 5 mixed sector leadership cohorts. Drawing on Kolb's experiential learning cycle, Bandura's self-efficacy theory, and Knowles' andragogical principles, the research explores how exposure to diverse professional perspectives contributes to leadership development.

A sequential mixed-methods design was employed, combining a Qualtrics survey (n=17) with six semi-structured interviews. Quantitative data revealed strong learner endorsement of cross-sector interaction, with high agreement on statements related to engagement, applied learning, and increased confidence. Qualitative findings showed that peer learning fostered reflection, challenged assumptions, and promoted behavioural change, particularly when participants were supported in applying new insights within their workplace. However, organisational barriers such as hierarchical culture and limited managerial support often constrained the translation of confidence into sustained action.

The study contributes new evidence to a limited literature base on cross-industry leadership development in health and care. It highlights that leadership confidence is not only a personal trait, but a socially constructed outcome shaped by environment, peer affirmation, and contextual support. The research has practical implications for educators, programme designers, and policymakers seeking to enhance leadership development across sectors.

Keywords: Cross-industry learning, Leadership confidence, NHS Wales, Peer learning, Adult education, Action research.

5 Appendix A: Ethics Approval

Figure A1: Swansea University Ethics Approval Screen Shot

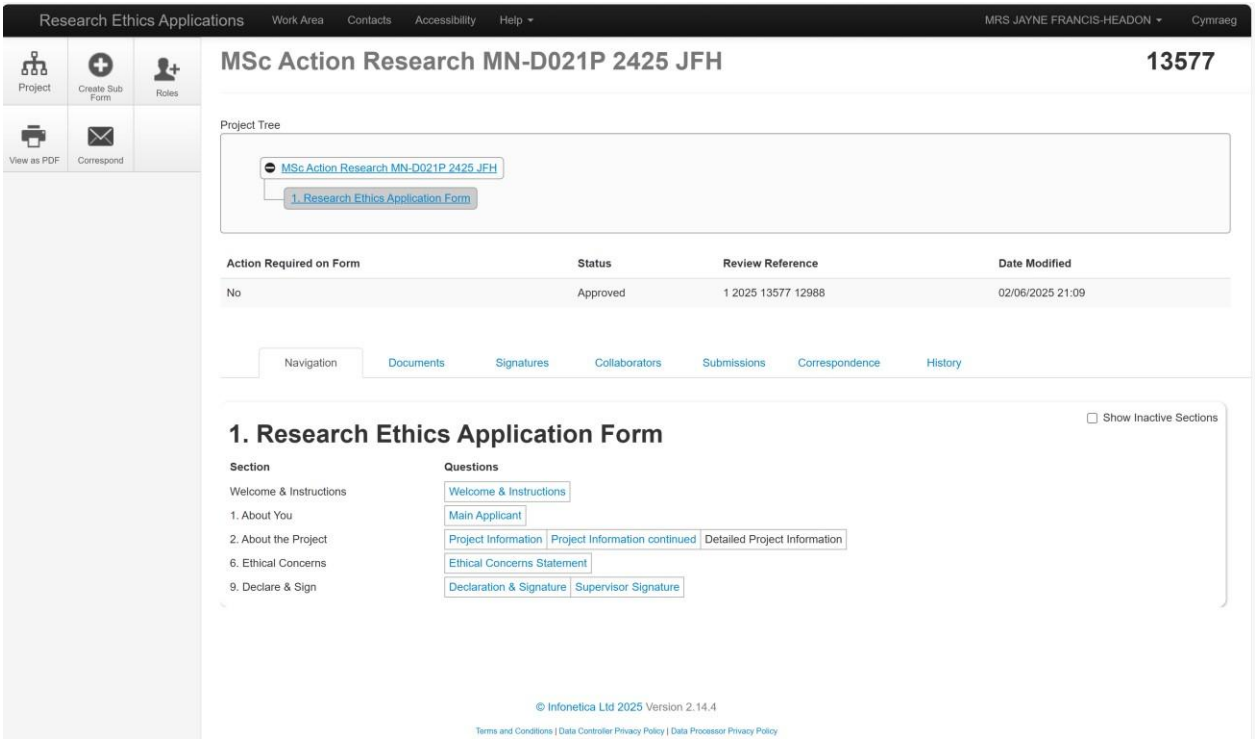
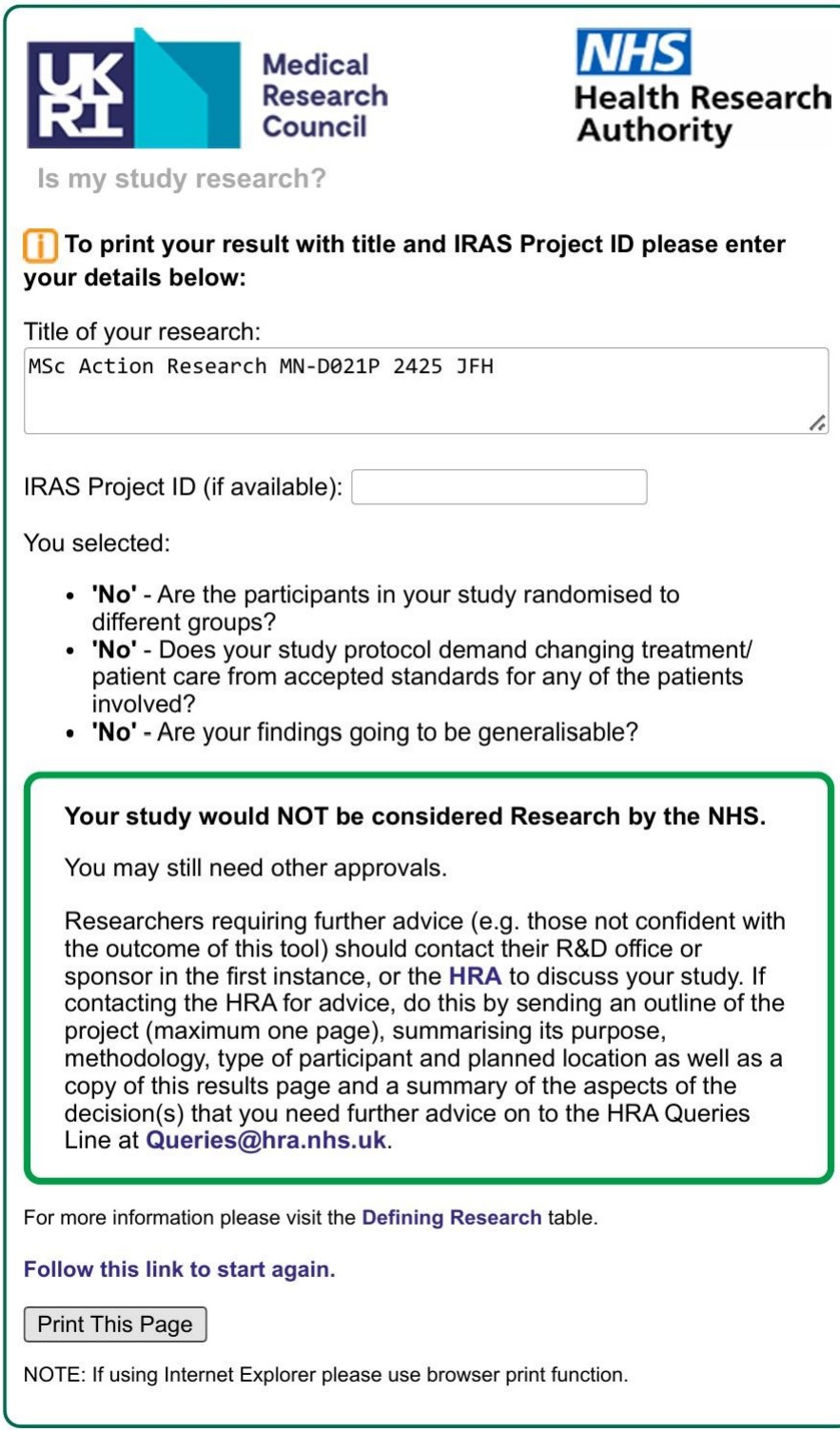


Figure A2: NHS R&D Declaration

Go straight to content.



Medical Research Council

NHS Health Research Authority

Is my study research?

To print your result with title and IRAS Project ID please enter your details below:

Title of your research:

MSc Action Research MN-D021P 2425 JFH

IRAS Project ID (if available):

You selected:

- **'No'** - Are the participants in your study randomised to different groups?
- **'No'** - Does your study protocol demand changing treatment/ patient care from accepted standards for any of the patients involved?
- **'No'** - Are your findings going to be generalisable?

Your study would NOT be considered Research by the NHS.

You may still need other approvals.

Researchers requiring further advice (e.g. those not confident with the outcome of this tool) should contact their R&D office or sponsor in the first instance, or the **HRA** to discuss your study. If contacting the HRA for advice, do this by sending an outline of the project (maximum one page), summarising its purpose, methodology, type of participant and planned location as well as a copy of this results page and a summary of the aspects of the decision(s) that you need further advice on to the HRA Queries Line at **Queries@hra.nhs.uk**.

For more information please visit the **Defining Research** table.

Follow this link to start again.

Print This Page

NOTE: If using Internet Explorer please use browser print function.

About this tool **Feedback** **Contact** **Glossary** **Accessibility**

6 Appendix B: Consent Form and Participation Information Sheet

Figure B1: Interviewee Consent Form – Template

Consent Form – Interview

☐ I have read and understood the Participant Information Sheet.

☐ I have had the opportunity to ask questions and received satisfactory answers.

☐ I understand that my participation is voluntary and that I can withdraw at any time.

☐ I agree to the interview being audio recorded.

☐ I understand that my data will be anonymised and used for academic purposes only.

☐ I consent to participate in this research project.

Participant Name: _____

Signature: _____

Date: _____

Researcher Name: Jayne Francis-Headon

Signature: _____

Date: _____

Figure B2: Participants Interview Information Sheet

Participant Information Sheet – Interview

Thank you for your interest in participating in this MSc research study. This project forms part of a dissertation for the MSc in Advanced Management Innovation and Transformation at Swansea University. The study explores how cross-industry peer learning influences the confidence of health and care middle managers to lead change in the workplace.

What will taking part involve?

If you agree to take part in the interview, you will be asked to join a 20–30 minute informal discussion to share your reflections on the classroom learning experience, cross-sector collaboration, and the impact on your leadership confidence. The interview can take place face-to-face at Coleg Cambria Business School or via Microsoft Teams. With your permission, the session will be audio recorded for transcription and analysis purposes.

Do I have to take part?

Participation is entirely voluntary. You may withdraw at any time before, during, or after the interview, without giving a reason. If you choose to withdraw, your data will not be used in the analysis and will be securely deleted.

How will my information be used?

The recordings and transcripts will be stored securely and only accessed by the researcher. Data will be anonymised and no individual will be identified in the final report. All data will be handled in accordance with Swansea University's data protection policies and GDPR.

Who is conducting the research?

This research is being conducted by Jayne Francis-Headon as part of her MSc at Swansea University. If you have any questions, you can contact her directly at jayne.headon@cambria.ac.uk.

7 Appendix C: Survey Questionnaire x 54 Questions

I felt confident in my leadership abilities before attending this training.

I now feel more confident in my ability to lead people.

I believe I can influence change in my workplace.

I regularly take the lead in team discussions.

I can make leadership decisions even under pressure.

I am confident communicating with senior leaders in my organisation.

I am confident managing performance or giving feedback to staff.

I feel capable of inspiring others to support change initiatives.

I felt comfortable sharing ideas with my peers during training.

I felt respected by my peers, regardless of their industry or sector.

I was encouraged to speak openly during group tasks.

I was not afraid to admit when I was unsure or struggling.

The learning environment felt inclusive and supportive.

I learned from listening to how others approached leadership.

I felt safe to challenge ideas during peer discussions.

Working with managers from other sectors helped me reflect on my own practice.

I gained valuable insights from leaders working outside of health and care.

Cross-sector peer learning challenged me to think differently.

I found the cross-industry aspect of the course engaging.

Hearing about other industries helped me identify creative solutions to workplace problems.

Exposure to different leadership styles expanded my own approach.

I would recommend cross-sector learning to other middle managers.

I feel equipped to lead change within my team or department.

I feel able to overcome resistance when implementing new ideas.

I understand how to influence others to support workplace change.

I feel confident applying what I've learned to real situations.

I have already started to make changes based on my learning.

I believe I can sustain change initiatives over time.

I feel confident navigating change across different teams or departments.

I participated in structured activities where I could practise leadership skills.

Experiential learning tasks helped me develop practical strategies I now use in the workplace.

Leading group-based tasks during the programme improved my confidence.

Learning through experience helped me better understand leadership theory.

I gained more from practical activities than from theory-based instruction.

The experiential elements of the programme were the most impactful part of my learning.

Reflecting on my own leadership was a valuable part of the experience.

Group tasks gave me real opportunities to lead.

I learned more through discussion than through lectures alone.

The course helped me build soft skills like communication and emotional intelligence.

My employer supported my participation in this training.

I was encouraged by my line manager to apply my learning at work.

My organisation values leadership development.

I have received positive feedback about my leadership growth.

There is space in my role to implement new ideas or approaches.

I feel recognised for taking leadership initiative.

I see myself as a leader more now than I did before the course.

I feel more confident in my professional identity.

The course had a positive impact on how I see my role.

I am motivated to continue developing my leadership capabilities.

What is your current job title?

How many years of leadership or management experience do you have?

What level of ILM are you currently studying?

What is your highest qualification to date?

8 Appendix D: Questionnaire Results

Q1 - Please indicate how strongly you agree or disagree with the following state...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
I feel confident in my ability to lead a team	1.00	5.00	4.12	0.90	0.81	17	70.00
I feel confident in making decisions that affect my team	1.00	5.00	4.24	0.94	0.89	17	72.00
I feel confidence initiating change in the workplace	1.00	5.00	4.18	0.98	0.97	17	71.00
I feel confident communicating my vision with others	1.00	5.00	4.18	0.98	0.97	17	71.00

Q2 - Please rate the following statements about your experience learning with pe...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
I felt comfortable sharing ideas with my peers during training	2.00	5.00	4.29	0.82	0.68	17	73.00
I felt respected by my peers, regardless of their industry or sector	1.00	5.00	4.29	1.02	1.03	17	73.00
I was encouraged to speak openly during group tasks	4.00	5.00	4.82	0.38	0.15	17	82.00
I was not afraid to admit when I was unsure or struggling	2.00	5.00	4.41	0.77	0.60	17	75.00
The Learning environment felt inclusive and supportive	2.00	5.00	4.76	0.73	0.53	17	81.00
I felt safe to challenge ideas during peer discussions	3.00	5.00	4.41	0.69	0.48	17	75.00

Q3 - Please rate the following statements about your experience learning alongsi...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
							2
Working with managers from other sectors helped me reflect on my own practice	4.00	5.00	4.75	0.43	0.19	16	76.00
I gained valuable insights from leaders working outside of health and care	4.00	5.00	4.69	0.46	0.21	16	75.00
Cross-sector peer learning challenged me to think differently	4.00	5.00	4.44	0.50	0.25	16	71.00
I found the cross-industry aspect of the course engaging	3.00	5.00	4.69	0.58	0.34	16	75.00
Hearing about other industries helped me identify creative solutions to workplace problems	3.00	5.00	4.13	0.78	0.61	16	66.00
Exposure to different leadership styles expanded my own approach	4.00	5.00	4.63	0.48	0.23	16	74.00
I would recommend cross-sector learning to other middle managers	3.00	5.00	4.69	0.58	0.34	16	75.00

Q4 - Please rate how confident you feel in applying your leadership learning to...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
I feel equipped to lead change within my team or department	4.00	5.00	4.50	0.50	0.25	16	72.00
I feel able to overcome resistance when implementing new ideas	3.00	5.00	4.13	0.70	0.48	16	66.00
I understand how to influence others to support workplace change	4.00	5.00	4.44	0.50	0.25	16	71.00
I feel confident applying what I've learned to real situations	4.00	5.00	4.56	0.50	0.25	16	73.00
I have already started to make changes based on my learning	3.00	5.00	4.56	0.61	0.37	16	73.00
I believe I can sustain change initiatives over time	4.00	5.00	4.44	0.50	0.25	16	71.00
I feel confident navigating change across different teams or departments	3.00	5.00	4.25	0.66	0.44	16	68.00

Q5 - Please rate the following statements about your experience with practical,...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
I participated in structured activities where I could practise leadership skills	3.00	5.00	4.44	0.61	0.37	16	71.00
Experiential learning tasks helped me develop practical strategies I now use in the workplace.	3.00	5.00	4.19	0.73	0.53	16	67.00
Leading group-based tasks during the programme improved my confidence	4.00	5.00	4.38	0.48	0.23	16	70.00
Learning through experience helped me better understand leadership theory	4.00	5.00	4.69	0.46	0.21	16	75.00
I gained more from practical activities than from theory-based instruction	3.00	5.00	4.00	0.94	0.88	16	64.00
The experiential elements of the programme were the most impactful part of my learning	3.00	5.00	3.63	0.78	0.61	16	58.00
Reflecting on my own leadership was a valuable part of the experience	4.00	5.00	4.56	0.50	0.25	16	73.00
Group tasks gave me real opportunities to lead	3.00	5.00	4.25	0.56	0.31	16	68.00
I learned more through discussion than through lectures alone	2.00	5.00	3.94	0.97	0.93	16	63.00
The course helped me build soft skills like communication and emotional intelligence	3.00	5.00	4.13	0.70	0.48	16	66.00

Q6 - Please rate the following statements about the support and encouragement yo...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
My employer supported my participation in this training	4.00	5.00	4.81	0.39	0.15	16	77.00

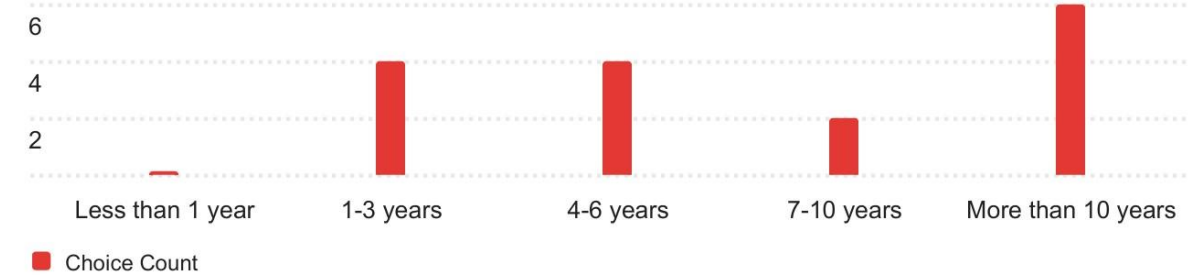
4

I was encouraged by my line manager to apply my learning at work	2.00	5.00	4.25	0.83	0.69	16	68.00
My organisation values leadership development	3.00	5.00	4.69	0.58	0.34	16	75.00
I have received positive feedback about my leadership growth	3.00	5.00	4.19	0.73	0.53	16	67.00
There is space in my role to implement new ideas or approaches	2.00	5.00	4.44	0.86	0.75	16	71.00
I feel recognised for taking leadership initiative	2.00	5.00	4.19	0.88	0.78	16	67.00

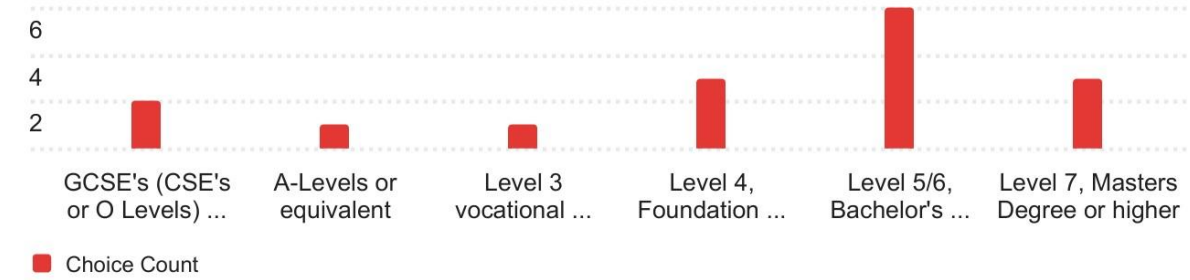
Q7 - Please rate how much the course has influenced your overall identity and de...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
I now see myself as a leader more now than I did before the course	3.00	5.00	4.25	0.56	0.31	16	68.00
I am more confident in my ability to lead others	4.00	5.00	4.50	0.50	0.25	16	72.00
I feel better equipped to take on more leadership responsibility	4.00	5.00	4.50	0.50	0.25	16	72.00
I believe this course has had a lasting impact on my leadership journey	4.00	5.00	4.81	0.39	0.15	16	77.00
The course has changed the way I think about leadership	3.00	5.00	4.50	0.61	0.38	16	72.00
I feel more credible as a leader because of my learning	3.00	5.00	4.56	0.61	0.37	16	73.00

Q9 - How many years of leadership experience do you have?



Q10 - What is your highest level of education completed?



9 Appendix E: Interview Questions

MSc Research Interview Guide

Thank you for agreeing to take part in this interview. This is a relaxed, informal conversation designed to help explore your experiences of cross-industry peer learning during the ILM Leadership & Management programme, and how it has influenced your confidence and ability to lead change in the workplace.

You can skip any question you're not comfortable answering. The interview should take about 20–30 minutes.

1. Can you tell me a bit about your role and team within BCUHB?
2. What stood out to you about learning alongside managers from other industries or sectors? 3. Can you recall any specific classroom activity, discussion, or moment that influenced your thinking about leadership or change?
4. Did being exposed to different leadership approaches affect how you see your own leadership style?
5. Do you feel more confident now in your ability to lead or support change in your workplace? Can you share an example?
6. Have you already applied any new strategies or ideas since completing the programme? 7. How important do you think the 'cross-industry' aspect of the programme was to your learning?
8. Is there anything you'd change or improve about how the peer learning experience was delivered?

Thank you so much for sharing your experiences. If anything else comes to mind later, feel free to drop me an email.

10 Appendix F: Interview Schedule

Initial	Date	Time	Platform
SMcF	30/6/25	9.30am	Online
DJ	60/6/25	10.30am	Online
KH	30/6/25	11.30am	Online
CT	1/7/25	10.30am	Online
KS	14/7/25	11.00am	Face to face
AS	16/7/25	2.00pm	Face to face

WHAT WOULD AN ADHD SERVICE IN A PRISON PROVIDE: A Review of the Prevalence, Impact and Required Provision to Support Neurodiverse (ADHD) Prisoners.

Andrew Littlejohns
Lead Nurse, HMP Parc Prison & Young Offenders Institute (YOI)
Primary & Community Service Group
Cwm Taf Morgannwg Health Board
Email: Andrew.Littlejohns@wales.nhs.uk

Abstract:

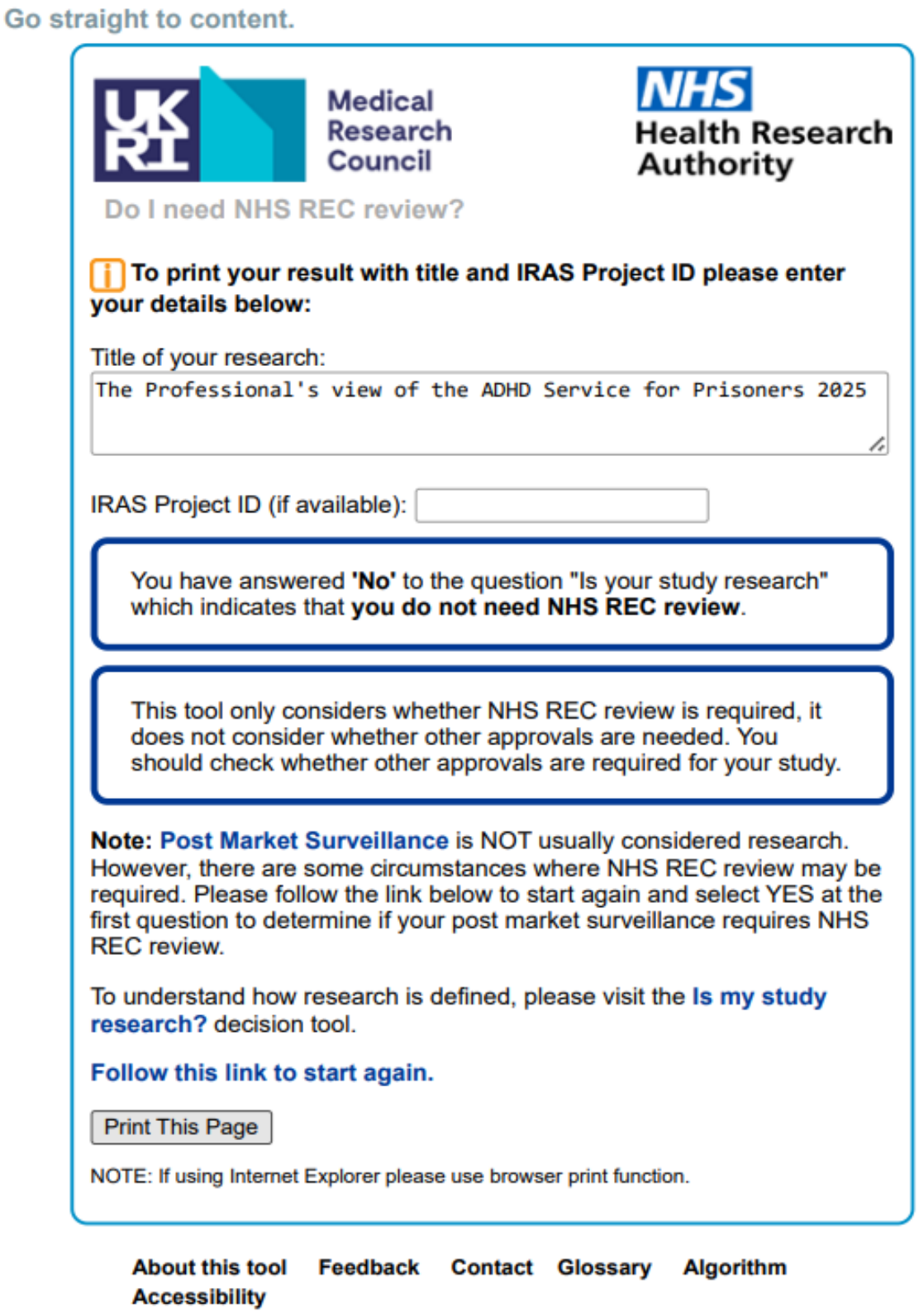
Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental condition characterised by persistent inattention, hyperactivity, and impulsivity, with significant effects on emotional regulation, executive functioning, and decision-making. While ADHD affects approximately 2.5% of adults in the general population, prevalence is substantially higher in prison populations. Despite this elevated need, ADHD remains frequently underdiagnosed and undertreated in custodial settings, contributing to emotional dysregulation, impulsivity, aggression, self-harm, and poorer rehabilitation outcomes.

In Wales, ADHD healthcare provision is embedded within the Welsh Government's Mental Health and Wellbeing Strategy 2024–2034, which emphasises neurodiversity support and multi-agency collaboration. However, access to assessment is limited, with current average waiting times from GP referral to diagnosis exceeding 95 weeks. Within prisons, early identification and tailored management are critical but often restricted, generating disparities that affect both individual outcomes and institutional stability.

This study highlights the need for a dedicated ADHD service within Welsh prisons, incorporating early screening, formal assessment, evidence-based pharmacological and psychological interventions, structured routines, and staff training. Such an approach can enhance continuity of care, facilitate transitions to community services, reduce recidivism, and alleviate pressures on NHS and probation services. Moreover, addressing ADHD in custodial settings has broader societal implications, including improved public health, employability, and housing stability. Implementing structured ADHD services, alongside a coordinated All-Wales public health and criminal justice strategy, is therefore essential for promoting individual wellbeing, institutional stability, and long-term socio-economic benefits.

Keywords: ADHD; Prison Population; Neurodiversity; Mental Health Services; Early Screening and Intervention; Rehabilitation and Recidivism

1 Appendix A: Ethical consent: The Health Research Authority



2 Appendix B: Prison and ADHD Survey: Questions and Outcomes.

ADHD+HMP+Study+
2025_June+10+2025

Understanding and managing the balance of urgent and continuity of care demand: A General Practice perspective

Amanda Whiting
Head of General Medical Services & Community Pharmacy (Contracts & Performance)
Hywel Dda University Health Board
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Abstract:

This study explores how General Practices within Hywel Dda University Health Board manage the competing demands of urgent and routine care. Post pandemic pressures, rising patient complexity and workforce shortages have intensified increasing service pressures. Using a mixed-methods approach, combining interviews and perceptual questionnaires, the study explores operational strategies, staff experiences and system-level influences. Findings reveal that while practices adopt flexible appointment systems and nurse-led chronic care clinics, urgent demand often disrupts routine care delivery, contributing to patient dissatisfaction and staff burnout. External factors such as delays in secondary care further intensify pressure on primary care. The research highlights the need for integrated service models, strategic investment in multidisciplinary teams and policy frameworks that support both urgent and preventive care. Recommendations aim to inform future policy and practice, promoting sustainable patient-centred access to General Medical Services.

Keywords: General Medical Services, Urgent Care, Routine Care, General Practice, Access, Primary Care, Chronic Conditions

1 Appendix A – GMS Contract Access Commitment 2024 to 2025

Llywodraeth Cymru
Welsh Government

Guidance for the GMS Contract

2024/25

April 2024

1.1 Background

Initiatives to support access improvement in General Medical Services (GMS) have continued to develop year on year since the introduction of Phase 1 Access Standards in 2019.

These initial phase 1 standards focused on systems and processes which would make it easier for patients to contact their GP practice. As a result of the GMS Contract agreement for 2022/23, the phase 1 access standards, transferred to Unified Services as of 1 April 2023 which were set out in the National Health Service (General Medical Services Contracts) (Wales) Regulations 2023. These came into force on 1 October 2023.

The contractor must self-declare the reported position quarterly (by the dates set out below), that the requirements have been met and if requested be prepared to provide the evidence to the Local Health Board.

Phase 2 access standards were introduced in April 2022 as a reflective phase where practices were required to make improvements to access based on patient experience and use care navigation to take a forward-looking and planned approach to appointments.

Embedding and maintaining this second set of standards will continue throughout 2024-25. Subject to evaluation, the intention is that these phase 2 standards will also move into Unified Services at a future point.

Quarterly reporting deadlines are as follows:

Q1 30th June 2024 - 22nd July 2024

Q2 30th September 2024 - 21st October 2024

Q3 31st December 2024 - 21st January 2025
Q4 31st March 2025 - 30th April 2025

1.2 Access Standards for 2024/25

The standards listed in this section were previously referred to as Phase 2 Access Standards and are now referred to only as **Access Standards for 2024/25**.

The access standards form part of the Quality Improvement Framework (100 QIF points in total) for the 2024/25 cycle. This will allow for evaluation of achievement and impact during 2024/25.

1.3 Role of the Health Board

Health Boards will continue to have a responsibility to support struggling practices through the escalation tool and sustainability framework, and they should adopt a reasonable and supportive approach to access concerns.

1.4 ACCESS STANDARDS FOR 2024/25 Service Delivery & Communication

- Where access to a service is clinically appropriate and patients require access to GMS services, they will be offered an appropriate consultation, whether urgently or through advanced booking consistent with the patient's assessed clinical need, without the need for the patients to contact the practice again.

- All patients telephoning the practice have their calls received by a standard recorded message, and subsequently calls are answered and care navigation undertaken. Where clinically appropriate, patients may be signposted to another appropriate service.

- Available appointments must be a mix of remote, face-to-face, urgent, on the day and pre-bookable to reflect the blended model of access, as determined by the practice in discussion with the patient. A more planned and forward looking approach should be taken to the scheduling of appointments throughout the day, or for future dates, meaning it is no longer acceptable for all appointments to be released at 8am for that day.

1.5 Patient engagement

- Practices will be required to take a more open and transparent approach, through an automated and standardised public facing dashboard, to the sharing of information and reporting, at a practice level, on GMS activity.

- All practices have a clear understanding of patient needs and demands within their practices and how these can be met. **Digital**

- All practices must provide a telephony service (preferably Voice over Internet Protocol solutions or sufficient incoming and outgoing lines) that fully meets the needs of patients.

- The digital platform is for non-urgent access and only to be used during core hours.

1.6 PRACTICE REQUIREMENT

Practices will be required to report quarterly and supply evidence annually (which will include but is not limited to practice's appointment system, patient experience survey outcomes and up to date data infographics) via the PCIP Access Reporting Tool.

Service Delivery & Communication

1. All existing patient facing staff who have not previously undertaken the national care navigation training package provided by HEIW in the period beginning with 1 April 2022 and ending with 31 March 2024 are required to undertake that training, as well as all new patient facing staff completing this training within 3 months beginning with their start date. Practices will supply names of new starters and date of training undertaken.

2. All patients telephoning the practice are to have their calls received by a standard recorded message, and subsequently calls are answered with appointments made available for advanced booking each day with declaration confirming that every patient contact is supported throughout the day. Patients

will be offered an appropriate consultation, whether urgently or through advanced booking consistent with the patient's assessed clinical need, without the need for the patients to contact the practice again. Where clinically appropriate, patients may be signposted to another appropriate service.

3. To maintain a planned and forward-looking approach to consultations, practices to undertake a regular assessment of their scheduling appointment system to ensure a mix of remote, face to face, urgent, on the day and prebookable. A more planned and forward-looking approach should be taken to the scheduling of appointments throughout the day, or for future dates, meaning it is no longer acceptable for all appointments for that day to be released at 8.00am.

Patient Engagement

4. Practices must confirm each quarter that they regularly maintain an automated and standardised public facing dashboard and make this available via a range of communication methods to meet the needs of their patients. (An Infographic is available via the PCIP for practices to use).

5. Practices are required to undertake the national patient experience survey which should include 25 completed questionnaires per 1000 registered patients from a range of practice population and captured through a range of methods.

Digital

6. Practices are required to undertake care navigation on digital requests in a similar and equitable fashion to telephone requests.

Practices are required to achieve all 6 standards in order to receive 40 points for this section of the commitment.

Reflective Report

Practices are required to produce a reflective report and upload it to the PCIP Access Reporting Tool on or before 31 March of the Access year. The reflective report template is attached at Annex A, and covers:

- Equality Impact Assessment (EIA): An Equality Impact Assessment to review population and access needs. National guidance and a template are attached at Annex B.

- Patient Engagement: Information regarding how the practice has made their public facing dashboard available to patients, and how often it is updated.

- National Patient Experience Survey: summary of how the National Patient Experience Survey was distributed to the practice population via a range of methods, the total number of responses received and a summary of key findings.

- Patient Survey Action Plan: demonstrate how the national patient experience survey has informed an action plan, showing how the practice will respond to patient feedback, and move forward with implementing and communicating change effectively, discussing all improvements at collaborative level.

- Digital Requests: confirmation of process of care navigation for digital requests, and that practice reflects on patient experience feedback.

- Telephone System Intelligence: demonstrate how the practices has interrogated telephone system data and evidence of call demand throughout the day. Describe how this data has been used to develop the practice appointment system, including how appointments are released throughout the day (not just 8 am), and how urgent requests and routine are managed, without advising patients to ring back.

60 points is available for submission of a reflective report, including all requirements listed in the template at Annex A

1.7 ANNEX A Access Standards 2024/25 – Reflective Report Template

Llywodraeth Cymru
Welsh Government

1.8 Introduction

This annex provides a template for practices to use in order to submit their reflective report.

Evidence required for the Reflective Report is outlined below.

1.9 Reflective Report

The reflective report must include all sub-headings as listed below. Practices will be expected to discuss the report at collaborative level. The report must be completed and uploaded to the PCIP Access Reporting Tool on or before 31 March 2025.

Practice Name	
W Code	
Date	

Equality Impact Assessment

- *The practice will need to evidence a review of population and access needs. Further guidance is available at Annex B to support practices with this. Completion of the National Patient Experience Survey, reviewing patient digital requests and utilising telephone system intelligence will enable Practices to review population and access needs and undertake an Equality Impact Assessment to include any proposed changes to access. The Equality Impact Assessment needs to link in with the practice's patient survey action plan.*

Patient Engagement

The practice will need to evidence as a minimum:

- *How the public facing dashboard is available to patients which could include social media, websites, and other non-digital methods. (Standard 4)*

Confirmation of how often it is updated to ensure information is current and/or what processes are used to decide that an update is required (e.g. discussion at practice meeting etc.).

National Patient Experience Survey

N.B. It is important that practices undertake the survey at a point which allows time to summarise the findings, create an action plan and evidence improvements. The report must be completed and uploaded to the PCIP Access Reporting Tool on or before 31 March 2025.

Practices are encouraged to discuss at collaborative level, and agree on a specific date to carry out the survey to ensure that all practices within the collaborative have comparative data to discuss and use towards their reflective report.

Links to the National Patient Experience Survey are below for practices to use, the core questions have been validated and are to be used in all NHS Wales organisations to obtain real time feedback.

English Version:

Framework For Assuring Service User Experience (nhs.wales)
Framework For Assuring Service User Experience (Easy Read) *Welsh Version:*

Fframwaith profiad defnyddwyr gwasanaeth calonogol (GIG Cymru)

Fframwaith profiad defnyddwyr gwasanaeth calonogol (Hawdd ei Ddeall) The practice will need to evidence as a minimum:

Confirmation that National patient experience survey has been undertaken to include number of responses and distribution methods (25 completed questionnaires per 1000 registered patients from a range of practice population and captured through a range of methods) [Standard 5]

- *How the practice have considered / reflected on the results of the national patient survey (at practice and collaborative level) and demonstrate any resulting changes, including how they have been implemented and communicated to patients.*

Patient Survey Action Plan

- *The practice will need to evidence their action plan in this section of the report.*

Digital Requests

The practice will need to evidence as a minimum:

- *Care navigation is undertaken on digital requests in a similar and equitable fashion to telephone requests [Standard 6].*
- *Patients are able to access the practice digitally and that the practice has reflected on patient experience of using this method.*

Telephone System Intelligence

The practice will need to evidence as a minimum:

- *Appointments are available for advanced booking each day with declaration confirming that every patient contact is supported throughout the day. (Patients will be offered an appropriate consultation, whether urgently or through advanced booking consistent with the patient's assessed clinical need, without the need for the patients to contact the practice again) [Standard 2].*

- *A regular assessment of the Practice scheduling appointment system to ensure an appropriate mix of remote, face to face, urgent, on the day and pre-bookable. [Standard 3].*

- *Call demand comparisons, and a brief summary of intelligence taken from their telephone system. Practices should see changes in demand at 8am, as more people may ring throughout the day.*

***URGENT** is defined as those people who are clinically triaged as requiring an on-the-day assessment are offered a same day consultation (could be face to face, telephone, video call or a home visit).*

***PRE-BOOKABLE** is defined as an offer of an appointment which should routinely be within 2-3 weeks. However, it could be available up to 6 weeks in advance.*

1.10 Annex B - Primary Care Equality Impact Assessment Guidance and Template

Supporting notes and guidance

The following guidance note and template has been produced to support practices to undertake an Equality Impact Assessment (EIA).

The Access Standards for 2024/25 include a requirement for practices to complete a reflective report. The completion of an Equality Impact Assessment forms part of the reflective report requirement.

This supporting note and associated template can be used to complete other EIAs and is not specifically linked to the Access Standards, therefore some of the examples for consideration in the guidance may not be applicable to a particular EIA the practice is undertaking, however will be a useful reference tool for future EIAs a practice may undertake.

Following the completion of the National Patient Experience Survey, reviewing patient digital requests and utilising telephone system intelligence will enable Practices to review population and access needs and undertake an Equality Impact Assessment to include any proposed changes to access. The Equality Impact Assessment needs to link in with the practices post survey action plan.

Any organisation providing a public function is subject to the general duty under the Equality Act 2020. This therefore includes Primary Care Independent Contractors in relation to their public functions.

In summary, those subject to the general equality duty must have had due regard to the need to:

a) Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act.
b) Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.
c) Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Equality Impact Assessments **must** be carried out for all new policies, strategies, service plans, new services and service change proposals.

Generally speaking, the majority of new policies, strategies, and plans, will be developed with the intention of improving conditions for members of staff and the public. They usually promote equality and seek to have a positive impact. The EIA template may prompt you to make further improvements to your document which you may not have considered previously. It could also highlight any possible omissions or issues which you may need to address before implementation of new service plans/service chance proposals.

Significant new service proposals and service change will require a more in-depth consultation and engagement procedure and will require a more detailed EIA.

The following guidelines provide a simple template to help primary care independent contractors consider the general equality duty in relation to the services they provide, and particularly in relation to any plans for changes in the ways those services are provided.

It is good practice to engage with service users and other stakeholders (e.g. Practice Participation Group) in the development and ongoing review of your equality impact assessment. For example, by asking them what they think the impact might be, working with them to agree mitigation actions to address adverse impact, and continuing your dialogue to check that your actions are having the desired effect.

In addition to the statutory duties under the Equality Act and the nine protected characteristics it is also good practice for independent contractors to also consider the impact on:

- Welsh Language
- Carers
- People living in Socio Economic Disadvantage

Preparing your EIA document

1. Service Change Proposal / Strategy / Policy

You should state the title outline the nature of what you are equality impact assessing here.

2. Background / Introduction:

Use this section to give context to the EIA. You should introduce the EIA outlining the details of the proposal. This section should also include details about the nature of your service, the area it covers and the population it serves.

For example, consideration should be given to the following:

- General information on the primary care service – which areas does it cover? Who does it serve? It would be good to include some basic information about the local population and your service users if they are available to you, e.g. age range of service users / how many have a registered disability / any social deprivation / rural challenges, etc.
- Description of the proposal / Background situation e.g. why are you undertaking an EIA? What changes to services are you making? What do you propose? Why are you making these changes? How have demands on the primary care service changed and what changes are needed to incorporate them? What is your current capacity to deliver the required changes? What resources are available to meet the needs of your service users and implement the required changes? Is there any data / statistics / graphs to illustrate the type of services accessed over a set period of time to demonstrate any trends / changes in access to services? Is there any data that you can share to demonstrate how you have reached your decision to make the proposed changes?

3. Description of the EIA undertaken

What did you do? You should provide details about the level of consultation/ engagement you have undertaken. The feedback obtained from the consultation/engagement needs to inform your EIA, so giving details about the type of engagement you have done is paramount.

You should include precise details – dates, timescales, how people were invited to respond, etc.

You should provide more specific details of the consultation/engagement which took place e.g., give details of any public meeting events, social media engagement, letter correspondence, posters, notices, local press announcements, patient surveys etc. Did you consider any other form of consultation and engagement? Were there any restrictions such as COVID-19, inclement weather, etc, and what impact did this have?

How many responses were received? How were they received? How have you analysed them?

Do you have plans for any continued engagement / communication with service users?

What was the expected outcome of the EIA? Did this differ to the actual outcome?

Was there a mix of positive and negative responses to the proposals?

4. Common Themes

You should acknowledge and analyse any common themes arising from the responses received. It is important to demonstrate that you have listened and reflected on concerns/issues raised and have explored mitigating actions. What discussions have taken place after the consultation/engagement? How have you analysed the responses? Have you sought advice from external organisations? For example, sought support from Service Improvement Manager for Equality, 3rd Sector organisations, etc.? Do you intend to seek advice from other organisations to help put mitigating actions in place? Examples could be. Local Councils, , RNIB, local action groups, patient stakeholder groups, etc?

5. Lessons Learned / Mitigating Actions

You should look at each of the common themes identified and explain how you have or will address any concerns/issues.

For example, if a key theme appears to be miscommunication a mitigating action would be to develop clear communication channels between the primary care service and its service users in order to alleviate concerns. For example, you could work with Local Councils, other primary care services, 3rd sector organisations, the Citizen Voice Body etc, to help promote further communication to patients to help clarify your proposals and what this will mean to avoid any future misunderstanding and misinterpretation.

6. How does your service promote equality?

The protected characteristics under the Equality Act which must be considered, and other groups and individuals to consider as best practice are as follows:

Equality Protected Characteristic

- Age
- Disability
- Gender Reassignment
- Pregnancy and maternity
- Race

- Religion, belief and non-belief
- Sex
- Sexual orientation
- Marriage and civil partnership

Impact on other groups and individuals

- Welsh Language
- Carers
- People Living in Socio Economic Disadvantage

You should provide details of the procedures you have in place to deal with the specific individual needs of your service users, for example, how is your service accessible to those with a physical disability? How do you promote this accessibility? Does your service have alternative methods for communicating with individuals who have a sensory loss? Do you use interpretation services, emailing and text services for those who are hard or hearing? Do you use interpretation services for individuals whose first language is not English? Is your signage and documentation available in Welsh and English? Do you have any Welsh speaking staff? If you do not have any systems in place to cater for individual needs, you should state how you will mitigate these risks, and outline the actions you will take. You should approach this thinking about the protected groups as a whole but also take into consideration the specific comments received from individuals.

For example, if an individual has made comments on physical access to buildings, you could refer to any mitigating actions that you already have in place, or will put in place to resolve this issue. You should outline any further steps you could take e.g. methods of promoting accessibility to buildings. This could be included under the disability section of the EIA template.

Another example could be how your service deals with services users who have a sensory loss. You should state your intention to work with relevant 3rd sector organisations to introduce and promote available support such as the use of live sign / Relay UK, Type Talk, or establish an email / text system for Deaf/deaf patients. You could also look to source sensory loss awareness training for staff and specialist advice in the future to help improve accessibility to your services for those with sensory loss.

7. Conclusions

You should summarise all of the above and state your intentions whether you wish to continue with your proposed changes or not.

You should summarise what you feel the impact of the proposals will be upon your service users, in particular those who may face additional challenges due to a protected characteristic.

You should acknowledge any challenges which remain and how you will continue to address them. What impact should the mitigating actions have? How will you improve service delivery?

Did you consider any alternative service change proposals? Could they have had a worse impact upon service users than those which you propose?

You should reinforce your reasons for the proposed changes and outline how you intend to monitor the changes and how it will impact upon your service users in the future. Will you review the

situation within a set timescale? Will you continue to monitor the impact the changes have upon those with a protected characteristic? For example, establish a service user stakeholder group? Work with local action groups? Repeat engagement activity at regular intervals etc?

Equality Impact Assessment Template

For:	*(Insert title of Service Change Proposal / Strategy / Policy/ Decision etc - (see guidance note reference 1)*
Date form completed:	
Completed by:	
Background / Introduction: *(see guidance note reference 2)*	
Description of the EIA undertaken: *(see guidance note reference 3)*	
Common Themes: *(see guidance note reference 4)*	

Lessons Learned / Mitigating Actions *(see guidance note reference 5)*

How does your service promote equality? *(see guidance note reference 6)*

Equality Protected Characteristic	Impact				Briefly describe what the impact is, and what steps you can take to address any negative impact
	Will it have an impact		Is the impact positive or negative		
	Yes	No	(+ve)	(-ve)	
Age					
Disability					
Gender Reassignment					
Pregnancy and maternity					
Race					
Religion, belief and non-belief					
Sex					
Sexual orientation					
Marriage and civil Partnership					
	Impact				

Impact on other groups and individuals	Will it have an impact Is the impact positive or negative				Briefly describe what the impact is, and what steps you can take to address any negative impact
	Yes	No	(+ve)	(-ve)	
Welsh Language					
Carers					
People Living in Socio Economic Disadvantage					

Any other comments, evidence, assessments, or information that relates to the impact of this proposal?

Conclusions *(see guidance note reference 7)*

2 Appendix B – Semi Structured Interview Questions

I consent to participate in this study Yes/No

About You
Role:
- General Practitioner
- Practice Manager
- Practice Nurse
- Non-Medical Prescriber
- Administrator/Receptionist
- Other – please state:

Your Length of service in General Practice:
- Less than 5 years
- 6 – 10
- 11 – 20
- 21+

About Your Practice
What is the list size for your practice? Less than 5K 5k – 10k 10k plus

How many FTE GPs do you have in the Practice?

How many FTE Nurses/NMP do you have in the Practice?

Which role in your practice sees urgent appointments?
- General Practitioner
- Practice Nurse
- Non-Medical Prescriber
- Other – please state:

Questions
How would you define urgent care?

Does your Practice have dedicated appointment slots for both urgent and routine care?

How long (in days) is the average wait for a routine appointment in your Practice?

On average, what percentage of your weekly appointments are for urgent care in comparison to all appointments?

Does your Practice have a formal process in place for distinguishing between urgent and routine requests? If yes, please briefly outline the process:

What triage methods do you use to manage incoming requests eg clinically led, reception led or digital?

How do you prioritise care when urgent demand exceeds appointment availability?

In what ways does managing urgent care demand impact on your practice's ability to provide routine care?

Are you seeing a difference in the age profile or disease profile of patients requesting urgent appointments?

Have you noticed any trends in patient outcomes or patient satisfaction related to delays in routine care due to urgent pressures?

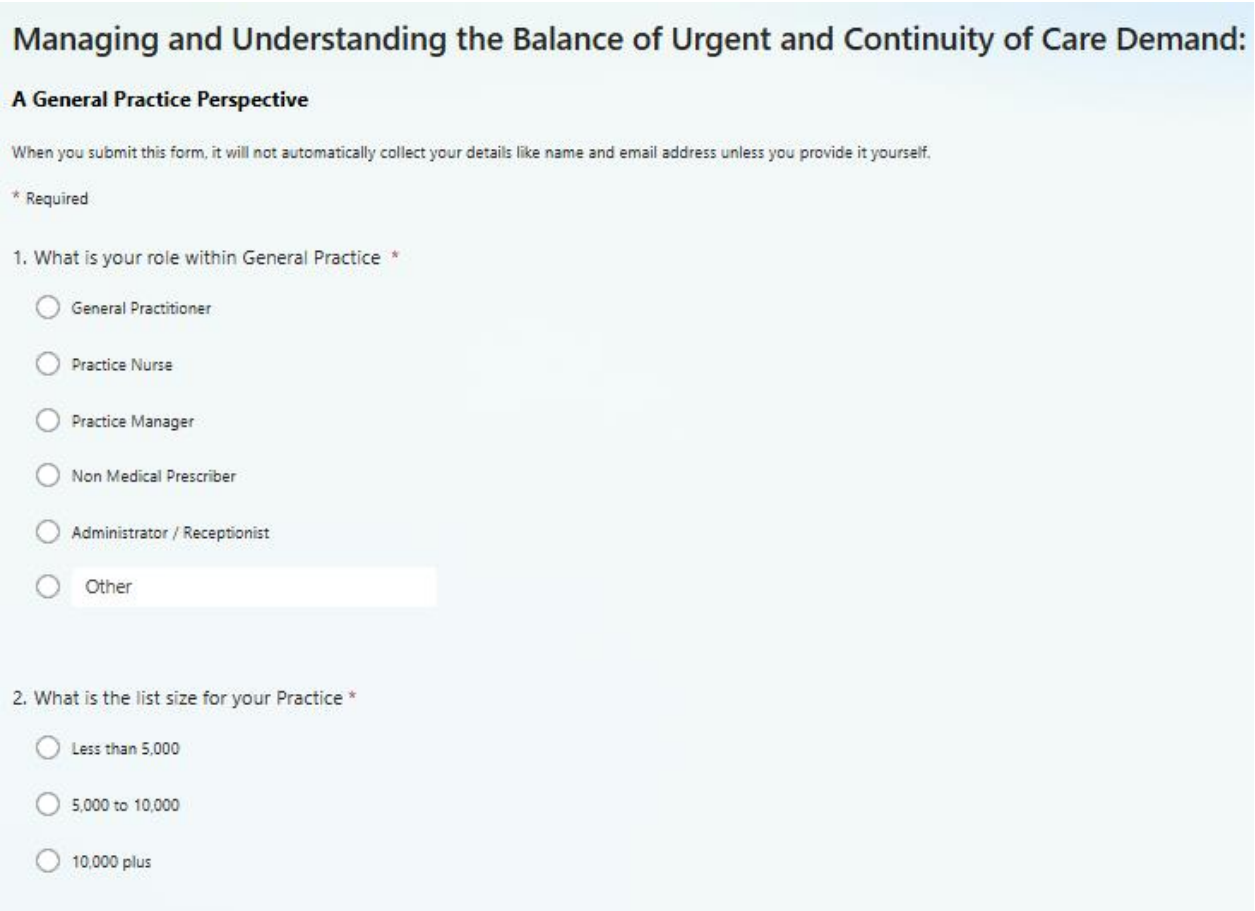
From your perspective, what are the most significant challenges in managing urgent care alongside all your other day to day responsibilities within Practice?

What do you feel is the most significant risk in prioritising urgent care over routine care?

What has worked well in your Practice to protect time for routine care or chronic conditions management?

Have you implemented any changes in the last 12 months which have helped maintain the balance between urgent and routine care? If yes, please briefly outline changes:

3 Appendix C – Perceptual Questionnaire



Managing and Understanding the Balance of Urgent and Continuity of Care Demand:

A General Practice Perspective

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

* Required

1. What is your role within General Practice *

- General Practitioner
- Practice Nurse
- Practice Manager
- Non Medical Prescriber
- Administrator / Receptionist
- Other

2. What is the list size for your Practice *

- Less than 5,000
- 5,000 to 10,000
- 10,000 plus

3. Please select the relevant position that best suits your view *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
Demand for urgent care is increasing	○	○	○	○	○
Demand for routine care is increasing	○	○	○	○	○
Urgent demand frequently exceeds appointment availability	○	○	○	○	○
The length of wait for a routine appointment has grown in my Practice	○	○	○	○	○
Managing urgent care demand affects a Practice's ability to provide routine care for patients	○	○	○	○	○
Managing urgent care demand affects a Practice's ability to maintain effective chronic conditions management for patients	○	○	○	○	○
Patients with long term conditions receive adequate follow up and review under the current demand pressures	○	○	○	○	○
Current staffing levels within the Practice are sufficient to manage both urgent and routine care	○	○	○	○	○
We are overloaded with urgent care demand	○	○	○	○	○
We have the capacity to meet patient demand easily	○	○	○	○	○
Routine appointments often get rescheduled due to urgent demand	○	○	○	○	○

4. Please select the relevant position that best suits your view: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Where appropriate the Practice regularly signposts patients to Community Pharmacy	○	○	○	○	○
Signposting patients to Community Pharmacy to access Clinical Community Pharmacy Services has reduced demand in GMS	○	○	○	○	○
Patients are being signposted back to GMS by Community Pharmacists	○	○	○	○	○
More services should be developed with Community Pharmacy to reduce the demand on GMS	○	○	○	○	○
Implementing the Unified Contract Access Standards has improved access to care for patients	○	○	○	○	○
The Unified Contract Access Standards help streamline triage or care navigation within the Practice	○	○	○	○	○
The wider strategic direction of moving care from hospital settings to the community is impacting on access to General Practice	○	○	○	○	○
There has been a decrease in patient satisfaction in relation to access the practice and / or the wait for a routine appointment	○	○	○	○	○
Innovation is required within primary care rather than just improvement	○	○	○	○	○
I am aware of the Health Equity and Inclusion Toolkit for Primary Care in Wales	○	○	○	○	○

5. What are three priorities that would help improve the current system? *

Enter your answer

4 Appendix D – Participation Information Sheet

PARTICIPANT INFORMATION SHEET

Understanding and Managing the Balance of Urgent and Continuity of Care Demand: A General Practice Perspective

You are being invited to take part in some research. Before you decide whether to participate, it is important for you to understand why the research is being conducted and what it will involve. Please read the following information carefully.

What is the purpose of the research?
I am conducting research on how GP Practices understand and manage their urgent care demand whilst balancing the need to meet the demand for continuity of care for patients who require either routine care or chronic conditions management. The purpose of the study is to ascertain whether the demand for urgent care is rising and understand, from a GP Practice's perspective, whether this rise in demand is impacting on GP Practices ability to provide continuity of care for patients requiring routine care and chronic conditions management. Your participation in this study will take approximately one hour.

Who is carrying out the research?
The data is being collected by Amanda Whiting, Head of GMS & Community Pharmacy (Contracts & Performance) at Hywel Dda University Health Board studying at Swansea University School of Management, Supervisor: Professor Nicholas Rich, School of Management, Swansea University. The research has been approved by the School of Management within the Faculty of Humanities and Social Sciences Research Ethics Committee.

What happens if I agree to take part?
The purpose of the interview is to collect data for the research collected by Amanda Whiting as part of her MSc Study at Swansea University.

The focus of the interview will be collecting opinions, insights, and information on managing and understanding urgent demand in General Medical Services and its impact on a Practice's ability to provide routine care. The interview questions will focus on gaining an understanding from general practice's perspective.

The interview will contain three sections, the first section focuses on establishing the background of the research participant i.e., job role grouping, practice size, length of service in the NHS etc. The second section focusses on open-ended questions in relation to your experience in managing urgent demand and the third and final section focusses on obtaining your agreement with a number of statements relating to urgent demand, the third section will be completed via a Microsoft forms link.

The interview will be undertaken on Microsoft Teams and be recorded. The recordings will be deleted upon the MSc graduation of the researcher Amanda Whiting. The information collected from the interview will be transcribed and documented for the purpose of the research.

Are there any risks associated with taking part?
This research has been approved by the Faculty of Humanities and Social Sciences Research Ethics Committee. There are no significant risks associated with participation.

Data Protection and Confidentiality
Your data will be processed in accordance with the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). All information collected about you will be kept strictly confidential. Your data will only be viewed by the researcher/research team.

All electronic data will be stored on a password-protected computer file on the University's One Drive. All paper records will be stored in a locked filing cabinet on the University premises. Your consent information will be kept separately from your responses to minimise risk in the event of a data breach.

Please note that the data I will collect for my study will be made anonymous upon receipt, thus it will not be possible to identify and remove your data at a later date, should you decide to withdraw from the study. Therefore, if at the end of this research you decide to have your data withdrawn, please let us know before you leave the interview.

Please note that if data is being collected online, once the data has been submitted online you will be unable to withdraw your information.

What will happen to the information I provide?
An analysis of the information will form part of our report at the end of the study and may be presented to interested parties and published in scientific journals and related media. Note that all information presented in any reports or publications will be anonymous and unidentifiable.

Is participation voluntary and what if I wish to later withdraw?
Your participation is entirely voluntary – you do not have to participate if you do not want to. If you decide to participate, but later wish to withdraw from the study, then you are free to withdraw at any time, without giving a reason and without penalty. But please note that the research data you have provided cannot be disaggregated after anonymisation.

Data Protection Privacy Notice
The data controller for this project will be Swansea University. The University Information Compliance Manager provides oversight of university activities involving the processing of personal data and can be contacted at dataprotection@swansea.ac.uk.

Your personal data will be processed for the purposes outlined in this information sheet. Standard ethical procedures will involve you providing your consent to participate in this study by completing the consent form that has been provided to you.

The legal basis that we will rely on to process your personal data will be if processing is necessary for the performance of a task carried out in the public interest. This public interest justification is approved by the Faculty Research Ethics and Governance sub-committee, Swansea University.

The legal basis that we will rely on to process special categories of data will be if processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes.

How long will your information be held?
Any personal data and special categories of data will be kept for no longer than is necessary for the purpose of this research project.

What are your rights?
You have a right to access your personal information, to object to the processing of your personal information, to rectify, to erase, to restrict and to port your personal information. Please visit the University Data Protection webpages for further information in relation to your rights.

Any requests or objections should be made in writing to the University Information Compliance Manager
University Information Compliance Manager (FOI/DP)
Swansea University
Singleton Park
Swansea
SA2 8PP
Email: dataprotection@swansea.ac.uk

How to make a complaint

If you are unhappy with the way in which your personal data has been processed, you may in the first instance contact the University Information Compliance Manager using the contact details above.

If you remain dissatisfied, then you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at -
Information Commissioner's Office,
Wycliffe House,
Water Lane,
Wilmslow,
Cheshire,
SK9 5AF
www.ico.org.uk

What if I have other questions?
If you have further questions about this study, please do not hesitate to contact us:

Amanda Whiting School of Management Swansea University Email: 2338272@swansea.ac.uk	Professor Nicholas Rich School of Management Swansea University. Email: n.l.rich@swansea.ac.uk

5 Appendix E – Ethical Approval

Swansea University
Prifysgol Abertawe

Approval Date: 25/06/2025

Research Ethics Approval Number: 2 2025 12897 13176

Thank you for completing a research ethics application for ethical approval and submitting the required documentation via the online platform.

Project Title	Understanding and Managing the Balance of Urgent and continuity of Care Demand: A General Practice Perspective
Applicant name	PROF NICHOLAS RICH
Submitted by	PROF NICHOLAS RICH /
Full application form link	https://swansea.forms.ethicalreviewmanager.com/Project/Index/15231

The Humanities and Social Sciences ethics committee has approved the ethics application, subject to the conditions outlined below:

Approval conditions

1. The approval is based on the information given within the application and the work will be conducted in line with this. It is the responsibility of the applicant to ensure all relevant external and internal regulations, policies, and legislations are met.
2. This project may be subject to periodic review by the committee. The approval may be suspended or revoked at any time if there has been a breach of conditions.
3. Any substantial amendments to the approved proposal will be submitted to the ethics committee prior to implementing any such changes.

Specific conditions in respect of this application:

The application has been classified as Low Risk to the University.

No additional conditions.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees. It complies with the guidelines of UKRI and the concordat to support Research Integrity.

Humanities and Social Sciences Research and Ethics Chair

Swansea University.

If you have any queries regarding this notification, then please contact your research ethics administrator for the faculty.

- For Science and Engineering contact FSE-Ethics@swansea.ac.uk
- For Medicine, Health and Life Science contact FMHLS-Ethics@swansea.ac.uk
- For Humanities and Social Sciences contact FHSS-Ethics@swansea.ac.uk

Dyddiad Cymeradwyo: 25/06/2025

Rhif Cymeradwyo Moeseg Ymchwil:

Diolch am gwblhau cais moeseg ymchwil am gymeradwyaeth foesegol ac am gyflwyno'r ddogfennaeth ofynnol drwy'r platfform ar-lein.

Teitl y Prosiect	Understanding and Managing the Balance of Urgent and continuity of Care Demand: A General Practice Perspective
Enw'r Ymgeisydd	PROF NICHOLAS RICH
Cyflwynwyd gan	PROF NICHOLAS RICH /
Dolen i'r ffurflen gais lawn	https://swansea.forms.ethicalreviewmanager.com/Project/Index/15231

Page 1 of 2

Mae'r pwyllgor moeseg Humanities and Social Sciences wedi cymeradwyo'r cais moeseg ymchwil, yn amodol ar yr amodau a amlinellir isod:

Amodau cymeradwyo

1. Mae'r gymeradwyaeth yn seiliedig ar yr wybodaeth a roddir yn y cais, a gwneir y gwaith yn unol â hyn. Yr ymgeisydd sy'n gyfrifol am sicrhau bod yr holl reoliadau, polisïau a deddfau mewnol ac allanol perthnasol yn cael eu dilyn.

- Gall y prosiect hwn gael ei adolygu gan y pwyllgor o bryd i'w gilydd. Gellir atal neu ddirymu'r gymeradwyaeth ar unrhyw adeg os bydd yr amodau'n cael eu torri.
- Caiff unrhyw addasiadau sylweddol i'r cais a gymeradwywyd eu cyflwyno i'r pwyllgor moeseg cyn i'r faith newidiadau gael eu rhoi ar waith.

Amodau penodol ynghylch y cais hwn:

Barnwyd bod y cais yn risg Low i'r Brifysgol.

Dim amodau ychwanegol.

Datganiad o gydymffurfiaeth

Penodir y pwyllgor yn unol â'r trefniadau llywodraethu ar gyfer pwyllgorau moeseg ymchwil. Mae'n cydymffurfio â chanllawiau Ymchwil ac Arloesi yn y DU (UKRI) a'r concordat i gefnogi uniondeb ymchwil.

Cadeirydd Ymchwil a Moeseg, Humanities and Social Sciences

Prifysgol Abertawe.

Os oes gennych unrholiadau ynghylch yr hysbysiad hwn, yna mae croeso i chi gysylltu â gweinyddwr moeseg ymchwil eich cyfadran.

- Ar gyfer Gwyddoniaeth a Pheirianneg, e-bostiwch FSE-Ethics@abertawe.ac.uk

- Ar gyfer Meddygaeth, Iechyd a Gwyddor Bywyd, e-bostiwch FMHLS-Ethics@abertawe.ac.uk
- Ar gyfer y Dyniaethau a'r Gwyddorau Cymdeithasol, e-bostiwch FHSS-Ethics@abertawe.ac.uk

Can ARQ be SMART: Overcoming barriers to poverty through innovation and transformation in Pakistan's third sector.

Huma Stone

Operations Director and Partner

Newmedica, UK

Email: huma.stone@yahoo.com

Abstract:

Addressing poverty, safeguarding vulnerability, and improving wellbeing require innovative and system aware approaches within health, social care, and the third sector, particularly in low- and middle-income contexts. This report examines the Arshad Qazi Foundation as a live case study to explore whether a small, lean organisation can deliver meaningful and sustainable impact through innovation and transformation in Pakistan's third sector. Drawing on mixed methods, including literature review, stakeholder surveys, interviews, document analysis, and field observations, the study analyses how innovation management tools and principles were applied across community led projects. These include food welfare, women focused income generation through Project Satrangi, education initiatives, animal welfare, and environmental action. Frameworks such as prudent health care, coproduction, the Plan Do Study Act cycle, Kano analysis, PESTLE analysis, and social networking are used to examine barriers related to trust, corruption, funding, gender inequality, digital exclusion, and governance complexity. Findings demonstrate that while resource constraints and socio-cultural barriers remain significant, adaptive leadership, community engagement, and continuous learning enable small organisations to operate as effective innovation platforms. The report highlights how aligning social innovation with wellbeing, safeguarding, and system resilience can strengthen health and social care outcomes. It offers practical insights for policymakers, practitioners, and innovation leaders seeking to leverage grassroots models to deliver inclusive, scalable, and sustainable change.

Keywords: Social Innovation and Poverty Alleviation, Third Sector Transformation, Community Led Innovation, Sustainable Wellbeing Systems.

1 Appendix

Reports – Pakistan Youth Crisis Summary and searches databases for reports.

- 64% of Pakistan's population is under 30, making it the youngest nations in the world
- Pakistan has 31% youth unemployment and 22.8 million out of school children
- Comparatively India and Bangladesh, have implemented successful youth training programs
- Pakistan initiatives 'the Kamyab Jawan Programme' (translates Successful Youth Programme) had minimal impact.
- Public sector jobs often require bribes
- Education receives 1.7% of the national budget
- 1.5 million people emigrated in 2022 – reflecting a loss of talent
- Urgent reforms needed, such as vocational training for youth
- Suicide is a major global health issue with 800000 deaths annually
- 75% of suicides occur in low- and middle-income countries
- Pakistan as a low middle income country has limited data on suicide

Optimising Multidisciplinary Team Meetings in Welsh Cancer Care: Exploring AI-Driven Innovations

Johanna Brown
Business Change Manager, National Cancer Recovery Programme
NHS Wales Performance and Improvement
Email: johanna.brown2@wales.nhs.uk

Abstract:

Multidisciplinary Team Meetings (MDTMs) play a central role in patient cancer care in Wales. Concerns, however, are being raised about their safety and efficiency due to increasing demand, administrative pressures and inconsistent processes. Artificial Intelligence (AI) has been proposed as a tool to enhance workflow, triaging processes and decision-making but there is limited knowledge about the readiness of Welsh healthcare systems to adopt such innovations.

This research examines the ethical and practical integration of AI into cancer MDTMs across NHS Wales using a mixed-methods approach. This approach combines the findings from surveys conducted with MDTM members and interviews with strategic and policy stakeholders across Wales. These findings reveal operational challenges, including patient rollover, inadequate pre-meeting triage, fragmented IT systems and insufficient time for thorough patient case discussions. Despite these issues, there is cautious optimism about the potential benefits of AI.

Both the MDTM members and strategic participants identified the need for trust, robust governance, interoperability and training to support the adoption of AI. The research also highlights contrasts between ambitions of national policymakers and the realities of frontline operational pressures, emphasising the need for a dual-level strategy that combines central coordination with local preparedness and delivery.

This study provides new insights into the barriers and enablers of AI adoption within Welsh cancer services and offers evidence-based recommendations for safe, ethical and effective implementation.

Keywords: Artificial Intelligence (AI), Cancer, Multidisciplinary Team Meetings (MDTMs), NHS Wales, Digital Health, Governance, Innovation Adoption

1 Appendix 1: Participant information sheet issued to interview candidates

PARTICIPANT INFORMATION SHEET

Optimising Multidisciplinary Team (MDT) Meetings in Welsh Cancer Care: Exploring AI-Driven Innovations

You are being invited to take part in some research. Before you decide whether to participate, it is important for you to understand why the research is being conducted and what it will involve. Please read the following information carefully.

What is the purpose of the research?

We are conducting research on the role of artificial intelligence (AI) in improving the effectiveness and efficiency of cancer multidisciplinary team (MDT) meetings in NHS Wales. This study focuses on the practical, ethical, and organisational factors influencing AI integration into clinical decision-making.

The purpose of the study is to:

- Explore how AI tools might be adapted or developed to support MDT workflows in the Welsh NHS.
- Understand clinical and strategic attitudes, concerns, and expectations regarding AI in MDT meetings.
- Identify potential enablers and inhibitors to AI adoption in practice.
- Co-produce practical recommendations to support safe, ethical, and feasible implementation.

Your participation in this study will take approximately 30 minutes, in the form of an individual, semi-structured interview.

Who is carrying out the research?

The data are being collected by Johanna Brown, an MSc student in Advanced Health Care Systems (Innovation and Transformation) at the Faculty of Humanities, School of Management, Swansea University. This research is conducted as part of my final MSc dissertation. The project is supervised by Professor Nicholas Rich, also within the Faculty of Humanities, School of Management The research has been approved by the Faculty of Humanities Research Ethics Committee

What happens if I agree to take part?

If you agree to take part, you will be invited to participate in a one-to-one interview (online, by phone, or in person, depending on your preference). You will be asked questions about your views on the use of AI in MDT meetings, including potential enablers, barriers, safety-netting, and the future direction of AI in Welsh cancer care.

If preferred, there will also be an option to receive the interview questions in writing (e.g. by email) and submit your responses in your own time. This is to ensure the process is flexible and respects your availability and communication preferences.

You will also be asked for some basic background information (such as your role or organisation type) to help contextualise the findings. Participation is entirely voluntary, and you may skip any questions you prefer not to answer.

Are there any risks associated with taking part?

This research has been approved by the Faculty of Humanity Research Ethics Committee. There are no significant risks associated with participation.

Data Protection and Confidentiality

Your data will be processed in accordance with the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). All information collected about you will be kept strictly confidential. Your data will only be viewed by the researcher/research team.

All electronic data will be stored on a password-protected computer file University's OneDrive. No paper records will be created Your consent information will be kept separately from your responses to minimise risk in the event of a data breach.

Please note that the data we will collect for our study will be made anonymous shortly after the interview is transcribed and verified, typically within 2 weeks. Once anonymised, it will not be possible to identify or remove your data. Therefore, if you later decide to withdraw, please notify us before this anonymisation process is completed.

If the data is collected online, once the interview data has been submitted, withdrawal will not be possible after anonymisation.

What will happen to the information I provide?

An analysis of the interview findings will form part of the MSc dissertation. It may also be presented to relevant NHS stakeholders (e.g. cancer programme leads) and submitted for academic publication. All reported findings will be anonymised and unidentifiable. No personally identifiable information will be included in any public outputs.

Is participation voluntary and what if I wish to later withdraw?

Your participation is entirely voluntary. You do not have to participate, and you can withdraw from the study at any time up to **two weeks after your interview**, without giving a reason and without penalty. After that point, the data will be anonymised and cannot be disaggregated.

Data Protection Privacy Notice

The data controller for this project will be Swansea University. The University Information Compliance Manager provides oversight of university activities involving the processing of personal data and can be contacted at dataprotection@swansea.ac.uk.

Your personal data will be processed for the purposes outlined in this information sheet. Standard ethical procedures will involve you providing your consent to participate in this study by completing the consent form that has been provided to you.

The legal basis that we will rely on to process your personal data will be if processing is necessary for the performance of a task carried out in the public interest. This public interest justification is approved by the Faculty Research Ethics and Governance sub-committee, Swansea University.

The legal basis that we will rely on to process special categories of data will be if processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes.

How long will your information be held?

Identifiable data (such as signed consent forms or interview recordings) will be securely stored until the end of your MSc candidature plus three years, approximately until September 2028, after which it will be securely destroyed. Anonymised data may be retained for longer for academic publication or archiving purposes.

What are your rights?

You have a right to access your personal information, to object to the processing of your personal information, to rectify, to erase, to restrict and to port your personal information. Please visit the University Data Protection webpages for further information in relation to your rights.

Any requests or objections should be made in writing to the University Information Compliance Manager

University Information Compliance Manager (FOI/DP)

Swansea University

Singleton Park

Swansea

SA2 8PP

Email: dataprotection@swansea.ac.uk

How to make a complaint

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Information Commissioner's Office,

Wycliffe House,

Water Lane,

Wilmslow,

Cheshire,

SK9 5AF

www.ico.org.uk

What if I have other questions?

If you have further questions about this study, please do not hesitate to contact us:

Johanna Brown	Professor Nicholas Rich
School of Management	School of Management
Swansea University	Swansea University.
2340367@SWansea.ac.uk	N.L.Rich@Swansea.ac.uk

2 Appendix 2: Ethics Approval

Swansea University
Prifysgol Abertawe

Approval Date: 23/09/2025

Research Ethics Approval Number: 2 2025 13618 14071

Thank you for completing a research ethics application for ethical approval and submitting the required documentation via the online platform.

Project Title	Optimising Multidisciplinary Team (MDT) Meetings in Welsh Cancer Care: Exploring AI-Driven Innovations
Applicant name	PROF NICHOLAS RICH
Submitted by	PROF NICHOLAS RICH /
Full application form link	https://swansea.forms.ethicalreviewmanager.com/Project/Index/16096

The Humanities and Social Sciences ethics committee has approved the ethics application, subject to the conditions outlined below:

Approval conditions

1. The approval is based on the information given within the application and the work will be conducted in line with this. It is the responsibility of the applicant to ensure all relevant external and internal regulations, policies, and legislations are met.
2. This project may be subject to periodic review by the committee. The approval may be suspended or revoked at any time if there has been a breach of conditions.
3. Any substantial amendments to the approved proposal will be submitted to the ethics committee prior to implementing any such changes.

Specific conditions in respect of this application:

The application has been classified as Low Risk to the University.

Conditions as per Declaration form.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees. It complies with the guidelines of UKRI and the concordat to support Research Integrity.

Humanities and Social Sciences Research and Ethics Chair

Swansea University.

If you have any queries regarding this notification, then please contact your research ethics administrator for the faculty.

- For Science and Engineering contact FSE-Ethics@swansea.ac.uk
- For Medicine, Health and Life Science contact FMHLS-Ethics@swansea.ac.uk
- For Humanities and Social Sciences contact FHSS-Ethics@swansea.ac.uk

3 Appendix 3: Data collection and processing adhered to UK GDPR standards

https://www.swansea.ac.uk/about-us/compliance/data-protection/data-protection-policy/

Background

The EU General Data Protection Regulation (EU GDPR) is designed to harmonise and strengthen data protection law and practice across the EU. The UK GDPR is the UK General Data Protection Regulation. It is UK Law which came into effect on 1st January 2021. It sets out the principles, rights and obligations for most processing of personal data in the UK. It is based on the EU GDPR with some changes to make it work more effectively in the UK.

The UK GDPR is supplemented by the Data Protection Act 2018 (DPA 2018) which sets out the framework for data protection law in the UK. It was amended on 1st January 2021 to reflect the UK's status outside the EU.

The UK GDPR sets out rules and standards for the use of information about living, identifiable individuals and applies to all organisations in all sectors, both public and private. It doesn't apply to anonymous information or to information about the deceased. The UK GDPR's rules and standards are based around the data protection principles and individual rights.

Purpose

Swansea University holds personal data about job applicants, employees, workers, students, suppliers and other individuals for a variety of purposes.

This policy sets out how the University seeks to protect personal data and ensure staff and students understand the rules governing their use of personal data to which they have access in the course of their work and/or studies.

4 Appendix 4: Retention of Personal Data

https://www.swansea.ac.uk/about-us/compliance/data-protection/privacy-notice-index/research-privacy-notice/

Retention of your personal data

The UK GDPR requires that personal data should be kept for no longer than is necessary for the purposes for which the personal data are processed (except in certain specific and limited instances).

The University expects that its researchers will not keep your personal information for longer than is necessary for the purposes of the research and that data will be anonymised or pseudonymised, by removing identifying information and replacing this with an artificial identifier or code, where possible. The duration of time we will store your data is dependent on a number of factors, such as the requirements of the research funder or the nature of the research.

You will usually be provided with information about how long your personal information will be kept within the aforementioned Participant Information Leaflet.

5 Appendix 5: Survey Questions MDTM Members

Background

1. Could you briefly describe your current role and involvement in MDT meetings?
2. Have you encountered any AI or decision-support tools in your clinical or operational work?

Barriers / Inhibitors

3. What do you see as the main barriers to adopting AI in MDT workflows, technical, ethical, or cultural?
4. Are there concerns around professional autonomy or accountability when AI tools are introduced?
5. In MDT settings, safety netting often involves colleagues informally double-checking each other's decisions. How do you think AI might affect that process?

Enablers / Opportunities

6. What factors do you think would help support AI adoption in MDTs?
7. Are there current practices, technologies, or leadership styles that could help enable safe implementation?

Attitudes & Practical Considerations

8. What are your own views or feelings about the role of AI in cancer care? Hopeful? Cautious? Concerned?
9. How might AI impact trust or communication within MDTs?
10. Do you see any specific use cases (like triaging or clinical trial matching) where AI could add real value?

Future Outlook

11. Where do you see MDTs heading over the next 5–10 years, and how might AI feature in that evolution?
12. What would need to be in place, ethically or operationally before AI tools could be safely scaled?

Wrap-Up

13. Is there anything we haven't covered that you think is important?
14. Would you be happy to receive a summary of the research findings later in the year?

6 Appendix 6: Semi- Structured Interview Questions Strategic Stakeholders

Background & Role Context

1. Could you briefly outline your role in relation to cancer services or digital transformation within NHS Wales?
2. What level of involvement have you had with MDT development, innovation, or AI-driven initiatives?

Policy Environment & Strategic Priorities

3. What are the key strategic priorities for MDT optimisation over the next 3–5 years?
4. How does AI currently feature (if at all) in national or local cancer recovery planning?
5. Are there existing policies or frameworks that could enable or restrict AI adoption in MDT settings?

Opportunities & Enablers

6. What do you see as the most compelling opportunities for AI to support MDTs e.g. capacity, standardisation, trial recruitment, etc.?
7. What would successful AI implementation look like at a system level? How would you measure success?

Barriers & Challenges

8. What are the biggest barriers to AI integration in MDT workflows operational, ethical, cultural, or technical?
9. From a strategic standpoint, how important are issues like safety netting, transparency, and clinician trust in AI tools?
10. Are current digital infrastructure and workforce capacity in NHS Wales ready for AI-supported clinical decision-making?

Governance, Risk & Ethics

11. What kind of governance structures or accountability mechanisms would need to be in place to support AI adoption?
12. How should we approach patient and public trust in relation to AI in cancer care decision-making?

Vision & Future Direction

13. How do you envision the future role of AI in cancer care pathways and MDTs across Wales?
14. What role do you see for national agencies (e.g. Digital Health & Care Wales, WCN, etc.) in coordinating or scaling AI use?

Wrap-Up

15. Are there particular organisations, pilot sites, or innovations you think are worth looking at as part of this research?
16. Is there anything else you'd like to add or emphasise that we haven't discussed?

What are the inhibitors and the enablers of an efficient and effective referral pathway into the Level 2 Weight Management Service: A Welsh Perspective

Joseph Cox

Clinical Lead for the Level 2 Weight Management Service

Powys Teaching Health Board

Email: Joseph.cox3@wales.nhs.uk

Abstract:

Obesity remains a pressing public health challenge in Wales, placing growing demand on weight management services. The Level 2 Weight Management Service (L2 WMS), which provides community interventions, has been hindered by rectifiable systematic inefficiencies and limitations such as high referral failure rates, and administrative shortcomings. This study explores the inhibitors and enablers of an effective referral pathway into L2 WMS, drawing on qualitative interviews with booking staff, service deliverers, referrers, and service leads across NHS Wales. Findings reveal that key enablers include clear patient understanding and expectation management, accessibility, hybrid booking systems, and ongoing promotion of services. On the contrary, insufficient staffing, disengaged patients referred on their behalf, reliance on paper-based systems, and poor service awareness act as major inhibitors. The study highlights the importance of lean management principles including eliminating waste, streamlining referral processes, and prioritising patient engagement to redesign pathways that are both efficient and patient-centred. Recommendations include adopting hybrid digital/non-digital systems, strengthening communication, and co-producing pathway design with patients to ensure sustainable improvements in service delivery.

Keywords: Obesity, Referral pathway, Weight management, Lean management, NHS Wales, Level 2, Self-referral, Service design.

1 Appendix A: Participant information sheet

PARTICIPANT INFORMATION SHEET

What are the inhibitors and the enablers of an effective and efficient referral pathway into the L2 Weight Management Service: A Welsh Perspective

You are being invited to take part in some research. Before you decide whether to participate, it is important for you to understand why the research is being conducted and what it will involve. Please read the following information carefully.

What is the purpose of the research?

I am conducting research on the insights and opinions of stakeholders of the Level 2 Weight Management referral pathway in Wales. The purpose of the study is to understand what the inhibitors and enablers of an effective and efficient referral pathway into the Level 2 Weight Management Service are, with the aim of being able to take the findings forward with service development in mind. Your participation in this study will take approximately 30 minutes.

Who is carrying out the research?

The data is being collected by Joseph Cox, an MSc student at the Swansea University School of Management as supervised by Professor Nick Rich and Alan Price, also of Swansea University School of Management. The research has been approved by the Swansea School of Management Research Ethics Committee.

What happens if I agree to take part?

You will be asked a set of questions as part of an interview to establish your thoughts and opinions on the inhibitors and enablers are of an effective Level 2 Weight Management Service taking into consideration all stages of a referral including but not limited to a patient considering access to a weight management service in the first instance, being referred, being booked, and then the initial appointment. You will also be asked to establish yourself with some basic background information asking you to state at which stage you are involved in the Level 2 Weight Management referral pathway.

Are there any risks associated with taking part?

This research has been approved by the Swansea School of Management Research Ethics Committee. There are no significant risks associated with participation.

Data Protection and Confidentiality

Your data will be processed in accordance with the Data Protection Act 2018 and the General Data Protection Regulation (GDPR). All information collected about you will be kept strictly confidential. Your data will only be viewed by the researcher/research team.

All electronic data will be stored on a password-protected computer file within a password protected laptop. No paper records will be stored. Your consent information will be kept separately from your responses to minimise risk in the event of a data breach.

Please note that the data collected for this study will be made anonymous which takes place at the point of transcription and data collection as the data collected is not stored using any identifiable information. It will not be possible to identify and remove your data at a later date should you decide to withdraw from the study. Therefore, if at the end of this research you decide to have your data withdrawn, please let us know before you leave the interview.

What will happen to the information I provide?

An analysis of the information will form part of our report at the end of the study and may be presented to interested parties and published in scientific journals and related media. *Note that all information presented in any reports or publications will be anonymous and unidentifiable*.

Is participation voluntary and what if I wish to later withdraw?

Your participation is entirely voluntary – you do not have to participate if you do not want to. If you decide to participate, but later wish to withdraw from the study, then you are free to withdraw at any time, without giving a reason and without penalty. But please note that the research data you have provided cannot be disaggregated after anonymisation on conclusion of the interview.

Data Protection Privacy Notice

The data controller for this project will be Swansea University. The University Information Compliance Manager provides oversight of university activities involving the processing of personal data and can be contacted at dataprotection@swansea.ac.uk.

Your personal data will be processed for the purposes outlined in this information sheet. Standard ethical procedures will involve you providing your consent to participate in this study by completing the consent form that has been provided to you.

The legal basis that we will rely on to process your personal data will be if processing is necessary for the performance of a task carried out in the public interest. This public interest justification is approved by the Faculty Research Ethics and Governance sub-committee, Swansea University.

The legal basis that we will rely on to process special categories of data will be if processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes.

How long will your information be held?

We will hold any personal data and special categories of data for no later than October 2025.

What are your rights?

You have a right to access your personal information, to object to the processing of your personal information, to rectify, to erase, to restrict and to port your personal information. Please visit the University Data Protection webpages for further information in relation to your rights.

Any requests or objections should be made in writing to the University Information Compliance Manager

University Information Compliance Manager (FOI/DP)

Swansea University

Singleton Park

Swansea

SA2 8PP

Email: dataprotection@swansea.ac.uk

How to make a complaint

If you are unhappy with the way in which your personal data has been processed, you may in the first instance contact the University Information Compliance Manager using the contact details above.

If you remain dissatisfied, then you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at -

Information Commissioner's Office,

Wycliffe House,

Water Lane,

Wilmslow,

Cheshire, SK9

5AF

www.ico.org.uk

What if I have other questions?

If you have further questions about this study, please do not hesitate to contact us:

Joseph Cox
Department of School of Management

Swansea University

2338538@swansea.ac.uk

Professor Nick Rich
Department of School of Management

Swansea University

n.l.rich@swansea.ac.uk

2 Appendix B: Interview Questions

1. a. What do you consider to be the three key enablers of a successful Level 2 Weight Management Service referral pathway?

   b. Please explain your reasons for choosing these enablers and give examples if possible.

   c. Please rank your three key enablers in order of importance

2. a. What do you consider to be the three key inhibitors of a successful Level 2 Weight Management Service referral pathway?

   b. Please explain your reasons for choosing these inhibitors and give examples if possible.

   c. Please rank your three key inhibitors in order of importance

3. How do you believe that your organisation can ensure that the enablers are in place?

4. How do you believe that your organisation can ensure that the inhibitors are not in place, or negated?

3 Appendix C: Context of the interview

"Within a service there are inefficiencies and waste as not every single patient that attempts to access a service makes it to their first appointment for various reasons, whether that be patient choice or service choice. In addition, there is 'failure demand' that we create ourselves if for example a patient has to call regarding anything then this is administrative burden. Inefficiencies result in increased cost and reduced performance; it is therefore the objective of this research to improve the effectiveness and efficiency of the Level 2 service by understanding what matters to different stakeholders.

You will be asked a set of questions as part of this interview to establish your thoughts and opinions on the inhibitors and enablers are of an effective Level 2 Weight Management Service taking into consideration all stages, processes, and actions of a referral pathway including but not limited to; a patient considering access to a weight management service in the first instance, being referred or self-referring, being booked onto the service and any associated admin, and finally leading up to the initial appointment. This research does not include the service and service offerings itself, but the process of accessing the service."

Can the use of immersive technology support healthcare practitioners in increasing the awareness and confidence of vaccinations?

Llŷr Lloyd
Senior Principal Public Health Practitioner,
Swansea Bay University Health Board
Email: Llyr.lloyd2@wales.nhs.uk

Abstract:

This research explores the potential of immersive technologies to support healthcare practitioners in increasing confidence and awareness of vaccinations. Despite global progress in disease prevention, vaccine uptake remains a concern due to barriers such as accessibility, literacy, and complacency. The study aligns with Welsh Government strategies and the National Immunisation Framework (NIF), aiming to deliver equitable, digitally enabled public health interventions.

A comprehensive literature review and mixed-method research (questionnaire and interviews) were conducted to assess immersive technologies effectiveness in healthcare education and public engagement. Findings indicate immersive technology enhances learning, retention, and emotional engagement, particularly among younger populations. However, challenges such as digital poverty, infrastructure limitations, and lack of training persist. The study introduces theoretical models including Constructivist Learning Theory, Technology Acceptance Model (TAM/i-TAM), and the Stimulus-Organism-Response (SOR) framework to underpin immersive technology adoption.

The research concludes that while immersive technology is not a standalone solution, it holds transformative potential when integrated with supportive policies, stakeholder collaboration, and inclusive design. Recommendations include strategic planning using frameworks to guide implementation and evaluation.

Keywords: Immersive technology, public health, healthcare practitioner, vaccinations, education, confidence, awareness

1 Appendix A: Perceptual Questionnaire

Immersive technology (e.g Virtual Reality, Augmented Reality) in vaccinations

As part of my MSc Research Project, I would like to scope if there is an opportunity to explore and review alternative methods of how healthcare practitioners can engage and deliver informative and educational information on vaccinations? My research questions is 'Can Immersive Technology support healthcare practitioners in increasing awareness and confidence in vaccinations?'

If you are a healthcare practitioner, a healthcare project officer or a developer/manager of digital health education policies and strategies and/or a digital technology software developer, I would welcome your input please. In addition if you manage teams and practitioners that have the opportunity or potential to create and/or provide information and resources on vaccinations to employees and the public/patients I would be grateful if you could spend 10 minutes of your time in answering key questions in the link below.

Your input will support my research project by providing your experience, insight and also any concerns you might have in using Immersive Technology within healthcare education and delivery. Your valuable views and opinions will be essential in supporting and comparing the current findings from my literature review.

Immersive technology refers to a set of technologies that create or extend reality by immersing users in a digital or simulated environment. These technologies aim to replicate or enhance the physical world through digital means, often engaging multiple senses to create a feeling of presence or immersion.

Key types of immersive technologies are;

1. **Virtual Reality (VR)** - Fully immersive experiences where users are placed in a completely digital environment, often using headsets and controllers.
2. **Augmented Reality (AR)** - Overlaying digital content on to the real world, typically through smartphones or digital glasses (like the Pokemon GO game).
3. **Mixed Reality (MR)** - Blends real and virtual worlds so that physical and digital objects can interact in real time.
4. **Extended Reality (XR)** - An umbrella term that encompasses VR, AR AND MR.

Diolch/Thank you

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

* Required

1. Please provide your organisation. *

Enter your answer

2. Please provide your department. *

Enter your answer

3. Please provide your job role. *

Enter your answer

4. Prior to the definition and information above, did you know what Immersive Technology was? *

- ◯ Yes
- ◯ No

5. Have you heard of any of the Immersive Technology components, Virtual Reality, Augmented Reality or Mixed Reality prior to the information above? *

- ◯ Yes
- ◯ No

6. Do you currently use any of the immersive technologies mentioned in your area of work? *

- ◯ Yes
- ◯ No

7. If 'YES' then please provide in what area is Immersive Technology being used?

- ☐ Clinical education
- ☐ Public Health education
- ☐ Staff development
- ☐ Patient engagement and education
- ☐ Public engagement and education
- ☐ Other

8. If you chose 'other', please provide further details.

Enter your answer

9. In your opinion, please rate how immersive technology can support the following areas within a health and care organisation? *

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Retention of public health information.	○	○	○	○	○
Influence positive behaviour change in vaccination.	○	○	○	○	○
Increase access to digital vaccination resources.	○	○	○	○	○
Reduce vaccine literacy challenges.	○	○	○	○	○
Increase confidence in vaccinations.	○	○	○	○	○
Increase awareness of vaccinations.	○	○	○	○	○
Reduce vaccine hesitancy and complacency	○	○	○	○	○

10. In your opinion, please rate how immersive technology can support the following areas with the public? *

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Retention of public health information.	○	○	○	○	○
Influence positive behaviour change in vaccination.	○	○	○	○	○
Increase access to digital vaccination resources.	○	○	○	○	○
Reduce vaccine literacy challenges.	○	○	○	○	○
Increase confidence in vaccinations.	○	○	○	○	○
Increase awareness of vaccinations.	○	○	○	○	○
Reduce vaccine hesitancy and complacency	○	○	○	○	○

11. How would you rate current accessibility for digital technology for rural populations and underserved communities with protected characteristics? (1 star - very poor, 5 stars - excellent) *

☆ ☆ ☆ ☆ ☆

12. What barriers do you currently see in implementing a digital system/infrastructure for immersive technology in a healthcare organisation? *

- [ ] Accessibility to digital software/resources
- [ ] Lack of education in use of digital technologies
- [ ] Lack of acknowledgement of alternative delivery models/methods, utilising digital technology.
- [ ] Poor digital policies and strategies
- [ ] Poor internet and connectivity issues
- [ ] Other

13. If chosen 'other' please provide further details.

Enter your answer

14. If within your role, you develop or deliver services that aim to raise the awareness and confidence in vaccinations. How would you rate your confidence and ability in using immersive technology given the opportunity? (1 star - very poor, 5 stars - excellent)

☆ ☆ ☆ ☆ ☆

15. Based on your response to the previous question, please provide further details as to your chosen rating?

Enter your answer

16. Based on your answers in this survey, please provide **2 words** that reflect your views/thoughts on the opportunity in the use of immersive technology to support healthcare practitioners increase confidence and awareness of vaccinations? *

Enter your answer

17. Based on your answers in this survey, please provide **2 words** that reflect your views/thoughts on the barriers/challenges in the use of immersive technology to support healthcare practitioners increase confidence and awareness of vaccinations? *

Enter your answer

2 Appendix B: Interview Questions

1. Are you aware of immersive technology?
2. Have you heard of any of the immersive technology components VR, AR, MR or XR…?

Immersive technology refers to a set of technologies that create or extend reality by immersing users in a digital or simulated environment. These technologies aim to replicate or enhance the physical world through digital means, often engaging multiple senses to create a feeling of presence or immersion.

Key Types of Immersive Technology:

1. **Virtual Reality (VR)** – Fully immersive experiences where users are placed in a completely digital environment, often using headsets and sometimes controllers.
2. **Augmented Reality (AR)** – Overlays digital content onto the real world, typically through smartphones or AR glasses (e.g., Pokémon GO).
3. **Mixed Reality (MR)** – Blends real and virtual worlds so that physical and digital objects can interact in real time.
4. **Extended Reality (XR)** – An umbrella term that encompasses VR, AR, and MR. Making immersive technology.

3.How do you see the potential that any of the tech mentioned has in supporting healthcare practitioners' in raising public health awareness and education compared to traditional methods of current education and engagement on vaccinations?

4.In what ways do you think new digital technology could support healthcare practitioners in enhancing public engagement and retention of public health information?

5.Do you think immersive technology can influence behavioural change regarding vaccination?

6.What barriers do you see in implementing new digital programmes in the current healthcare system?

7.How accessible do you think digital technology is for different demographics, including underserved communities and rural populations?

8.Are there specific policies and strategies that you are aware of that should be included/adhered to in facilitating immersive technology adoption in public health education?

9.What collaborations (e.g., between health professionals, tech developers, educators) do you think are necessary for the successful implementation of immersive technology in public health?

10.What key messages should be included in an immersive technology programme on vaccinations that would support healthcare practitioners in increasing confidence and awareness of vaccinations?

11.What evidence or outcomes would you need to see to consider this programme a success?

12. Provide (2) key words you feel reflect this opportunity in working differently to current vaccination engaging and education model?

13. Provide (2) key words you feel reflect the barriers to working differently to current vaccination engagement and education mode

Exploring the dynamics of the Welsh Health Hack and its' contribution to Innovation.

Sophie Marr

Senior Project & Business Manager

A Regional Collaboration for Health (ARCH), Swansea Bay University Health Board, UK

Email: sophie.marr@wales.nhs.uk

Abstract:

This study explores the Welsh Health Hack (WHH) as a time-compressed, collaborative innovation methodology designed to address persistent challenges in health and social care across Wales. Using a qualitative case study approach, it examines participant experiences, motivations, and outcomes from WHH events held between 2017 and 2022. Drawing on interviews, observations, and literature, the research highlights WHH's role in fostering rapid prototyping, cross-sector networking, and early-stage innovation. While participants reported strong support for the method's value in generating patient-centred solutions and sector visibility, barriers such as limited post-event support, funding transparency, and organisational constraints were identified. The study develops a conceptual framework to map WHH's innovation process and proposes strategic improvements to enhance sustainability and scalability. Findings contribute to understanding how hack-based models can be integrated into national innovation ecosystems and inform future research, policy, and practice. This is the first study of its kind in Wales and offers a foundation for advancing agile, inclusive innovation in public services.

Keywords: Welsh Health Hack, Health and care innovation, Time-compressed innovation, Hackathon methodology, NHS Wales, Innovation ecosystem, Rapid prototyping, Cross-sector collaboration, Patient-centred innovation, Public sector innovation, Agile development, Innovation sustainability, Stakeholder engagement, Innovation funding, Healthcare transformation

1 Appendix 1: Ethical Approval

Swansea University
Prifysgol Abertawe

Approval Date: 22/03/2024

Research Ethics Approval Number: 1 2024 9358 8245

Thank you for completing a research ethics application for ethical approval and submitting the required documentation via the online platform.

Project Title	Exploring the dynamics of the Welsh Health Hack and its contribution to Innovation in Wales
Applicant name	PROF Nicholas Rich
Submitted by	PROF Nicholas Rich /
Full application form link	https://swansea.forms.ethicalreviewmanager.com/Project/Index/11375

The Humanities and Social Sciences ethics committee has approved the ethics application, subject to the conditions outlined below:

Approval conditions

1. The approval is based on the information given within the application and the work will be conducted in line with this. It is the responsibility of the applicant to ensure all relevant external and internal regulations, policies, and legislations are met.
2. This project may be subject to periodic review by the committee. The approval may be suspended or revoked at any time if there has been a breach of conditions.
3. Any substantial amendments to the approved proposal will be submitted to the ethics committee prior to implementing any such changes.

Specific conditions in respect of this application:

The application has been classified as Low Risk to the University.

No additional conditions.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees. It complies with the guidelines of UKRI and the concordat to support Research Integrity.

Humanities and Social Sciences Research and Ethics Chair

Swansea University.

If you have any queries regarding this notification, then please contact your research ethics administrator for the faculty.

- For Science and Engineering contact PSE-Ethics@swansea.ac.uk
- For Medicine, Health and Life Science contact FMHLS-Ethics@swansea.ac.uk
- For Humanities and Social Sciences contact FHSS-Ethics@swansea.ac.uk

Dyddiad Cymeradwyo: 22/03/2024

Rhif Cymeradwyo Moeseg Ymchwil:

Diolch am gwblhau cais moeseg ymchwil am gymeradwyaeth foesegol ac am gyflwyno'r ddogfennaeth ofynnol drwy'r platfform ar-lein.

Teitl y Prosiect	Exploring the dynamics of the Welsh Health Hack and its contribution to Innovation in Wales
Enw'r Ymgeisydd	PROF Nicholas Rich
Cyflwynwyd gan	PROF Nicholas Rich /
Dolen i'r ffurflen gais lawn	https://swansea.forms.ethicalreviewmanager.com/Project/Index/11375

Page 1 of 2

Mae'r pwyllgor moeseg Humanities and Social Sciences wedi cymeradwyo'r cais moeseg ymchwil, yn amodol ar yr amodau a amlinellir isod:

Amodau cymeradwyo

1. Mae'r gymeradwyaeth yn seiliedig ar yr wybodaeth a roddir yn y cais, a gwneir y gwaith yn unol â hyn. Yr ymgeisydd sy'n gyfrifol am sicrhau bod yr holl reoliadau, polisïau a deddfau mewnol ac allanol perthnasol yn cael eu dilyn.

- Gall y prosiect hwn gael ei adolygu gan y pwyllgor o bryd i'w gilydd. Gellir atal neu ddirymu'r gymeradwyaeth ar unrhyw adeg os bydd yr amodau'n cael eu torri.
- Caiff unrhyw addasiadau sylweddol i'r cais a gymeradwywyd eu cyflwyno i'r pwyllgor moeseg cyn i'r fath newidiadau gael eu rhoi ar waith.

Amodau penodol ynghylch y cais hwn:

Bamwyd bod y cais yn risg Low i'r Brifysgol.

Dim amodau ychwanegol.

Datganiad o gydymffurfiaeth

Penodir y pwyllgor yn unol â'r trefniadau llywodraethu ar gyfer pwyllgorau moeseg ymchwil. Mae'n cydymffurfio â chanllawiau Ymchwil ac Arloesi yn y DU (UKRI) a'r concordat i gefnogi uniondeb ymchwil.

Cadeirydd Ymchwil a Moeseg, Humanities and Social Sciences

Prifysgol Abertawe.

Os oes gennych ymholiadau ynghylch yr hysbysiad hwn, yna mae croeso i chi gysylltu â gweinyddwr moeseg ymchwil eich cyfadran.

- Ar gyfer Gwyddoniaeth a Pheirianneg, e-bostiwch FSE-Ethics@abertawe.ac.uk

- Ar gyfer Meddygaeth, Iechyd a Gwyddor Bywyd, e-bostiwch FMHLS-Ethics@abertawe.ac.uk
- Ar gyfer y Dyniaethau a'r Gwyddorau Cymdeithasol, e-bostiwch FHSS-Ethics@abertawe.ac.uk

2 Appendix 2: Interview Questions

Experience and Motivation – EVERYONE
Tell me about your motivation for taking part in the Hack NARRATIVE
Personal Gain – Likert Scale 1 Strongly Disagree to 5 Strongly Agree
Personal connection (e.g. I or family suffer from diabetes)
Money
Power
Esteem (Peer recognition)
Promotion
Diversification (creating opportunities for personal growth)
Patient Gain – Likert Scale 1 Strongly Disagree to 5 Strongly Agree
Altruism
Better Outcomes
Healthier (less likely to become unwell)
Happier / Wellbeing
Organisation Gain – Likert Scale 1 Strongly Disagree to 5 Strongly Agree
Saving money
Gaining Money (commercial)
Efficiency
Safety
Quality
Effectiveness
Diversification (creating opportunities for organisational growth)
What expectations did you have of the Hack? NARRATIVE
To what extent did the Hack meet your expectations? – Likert Scale 1 Strongly Disagree to 5 Strongly Agree
To what extent did the Hack meet your expectations? NARRATIVE
Industry Winners / Industry Collaborator / Other
Tell me about your winning Hack idea NARRATIVE
NHS and Social Care winners

Tell me about the challenge or opportunity you thought the Hack could help you resolve? NARRATIVE
What was your perceived solution to the challenge or opportunity? NARRATIVE

EVERYONE **Technology Transfer (1-9)**
How far has your idea progressed? Technology Transfer (1-9) NUMBER Over what length of time: 'Discover Develop Deploy' Question
How far has your idea progressed? NARRATIVE Over what length of time: 'Discover Develop Deploy' Question
Tell me about your post event experiences of developing the Hack . What went well? What didn't? **• Support from Hack Partners (Bevan Commission, LSH Wales, Innovation Leads, AgorIP, Accelerate, MSParc), Academic Partners** **• NHS Partner collaboration** **• Organisation / Team engagement and support NARRATIVE**
Were there benefits from your participation in the Hack? NARRATIVE
I will recommend future Hack events to colleagues – Likert Scale 1 Strongly Disagree to 5 Strongly Agree
I will recommend future Hack events to colleagues NARRATIVE

EVERYONE
What are the strengths of the Hack? NARRATIVE
What are the weaknesses of the Hack? NARRATIVE
The Hack method generates greater innovation in Welsh health and care **– Likert Scale 1 Strongly Disagree to 5 Strongly Agree**

The Hack methodology adds value to Innovation in Health in Wales **– Likert Scale 1 Strongly Disagree to 5 Strongly Agree**
The Hack method should be employed more widely to stimulate innovation **– Likert Scale 1 Strongly Disagree to 5 Strongly Agree**
The Hack method should be employed more widely to stimulate economic growth **– Likert Scale 1 Strongly Disagree to 5 Strongly Agree**
Other reflections - NARRATIVE

Which resources could be invested in to divert demand from Adult Services' front door in Swansea?

Jessica Fitzpatrick
Adult Services Project Manager,
Swansea Council,
Email: Jessica.fitzpatrick@swansea.gov.uk

Abstract:

This research examines which resources could be invested in to divert demand from the front door of Adult Services in Swansea, in response to a change in demographics and funding pressures. Through a mixed-methods approach, this study evaluates the effectiveness of the Community Wellbeing Officer role which has been introduced to provide early help and preventative support in the community for individuals where their needs do not meet statutory thresholds. Analysis of quantitative data and qualitative case studies from January to June 2025 demonstrates that 75% of individuals supported by the Community Wellbeing Officers did not require further statutory intervention, with most needs met through community-based services. The research identifies the value of a coordinated approach and highlights the importance of robust community resources. However, challenges were identified in terms of sustainability, funding, and service capacity of these community services. Recommendations include expanding the Community Wellbeing Officer team, clarifying roles within an expanded and robust early help model, and considering commissioning key community services to ensure stability. The findings provide an evidence base for Swansea Council to further develop cost-effective, preventative strategies that promote independence and reduce long-term demand on Adult Services ensuring individuals can live well for longer in their own communities as well as alleviating the financial pressures on the Council.

Keywords: Community, Early Help, Prevention, Adult Social Care

1 Appendix A: Ethical Approval

Swansea University
Prifysgol Abertawe

Approval Date: 25/06/2025

Research Ethics Approval Number: 1 2025 13649 13190

Thank you for completing a research ethics application for ethical approval and submitting the required documentation via the online platform.

Project Title	What resources can be invested in to divert demand from Social Services' front door?
Applicant name	MS JESSICA FITZPATRICK
Submitted by	MS JESSICA FITZPATRICK /
Full application form link	https://swansea.forms.ethicalreviewmanager.com/ProjectIndex/16129

The Humanities and Social Sciences ethics committee has approved the ethics application, subject to the conditions outlined below:

Approval conditions

1. The approval is based on the information given within the application and the work will be conducted in line with this. It is the responsibility of the applicant to ensure all relevant external and internal regulations, policies, and legislations are met.
2. This project may be subject to periodic review by the committee. The approval may be suspended or revoked at any time if there has been a breach of conditions.
3. Any substantial amendments to the approved proposal will be submitted to the ethics committee prior to implementing any such changes.

Specific conditions in respect of this application:

The application has been classified as Low Risk to the University.

No additional conditions.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees. It complies with the guidelines of UKRI and the concordat to support Research Integrity.

Humanities and Social Sciences Research and Ethics Chair

Swansea University.

If you have any queries regarding this notification, then please contact your research ethics administrator for the faculty.

- For Science and Engineering contact FSE-Ethics@swansea.ac.uk
- For Medicine, Health and Life Science contact FMHLS-Ethics@swansea.ac.uk
- For Humanities and Social Sciences contact FHSS-Ethics@swansea.ac.uk

2 Appendix B: Example Wellbeing Plan

Individual Wellbeing Plan (10).

2.1 Community Wellbeing Officer Case Study Examples

Case study.docx

Case studies (1).docx

Improving Flow of the Reablement Service: South Wales Case Study

Emma Anne Chandler
Re-ablement Co-Ordinator within the Vale Community Resource Service (VCRS)
Vale of Glamorgan Council
Email: eachandler@valeofglamorgan.gov.uk

Abstract:

This dissertation investigates the operational effectiveness and staff experiences within a Reablement Service in South Wales, delivered in alignment with the Discharge to Recover then Assess (D2RA) model. The study addresses systemic challenges in patient discharge and community-based recovery, with a particular focus on shift patterns, digital integration, and the equitable allocation of care tasks. Using a mixed-methods case study approach, the research combines qualitative data from semi-structured staff interviews and open-ended survey responses with quantitative analysis of service metrics and Likert-scale feedback.

Thematic analysis revealed key operational barriers, including inadequate call durations, unrealistic travel times, and inconsistent rota planning, all of which impact staff wellbeing and service quality. These findings informed a series of practical recommendations, such as the implementation of "Ladder Planning," improved digital coordination, and enhanced continuity of care. Comparative examples from other UK and international reablement services were used to contextualise and validate the proposed changes.

The study concludes that embedding staff feedback into service design is essential for delivering person-centred, efficient, and sustainable care. The findings contribute to the broader policy goals of A Healthier Wales and offer a replicable framework for other local authorities seeking to improve reablement outcomes through co-production, digital innovation, and workforce resilience.

Keywords: Reablement, Patient flow, D2RA, Service improvement, Workforce wellbeing, Digital integration.

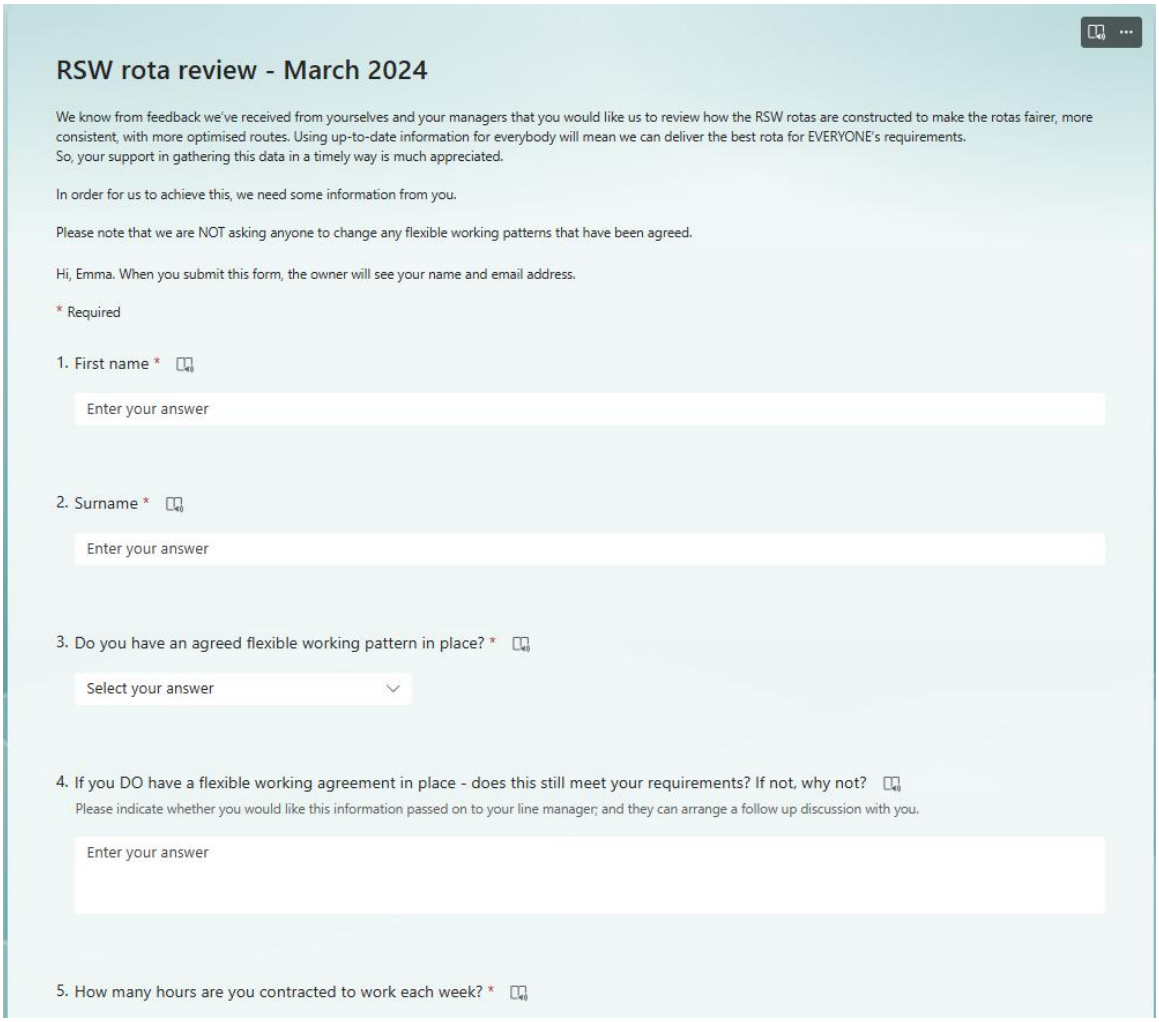
1 APPENDIX

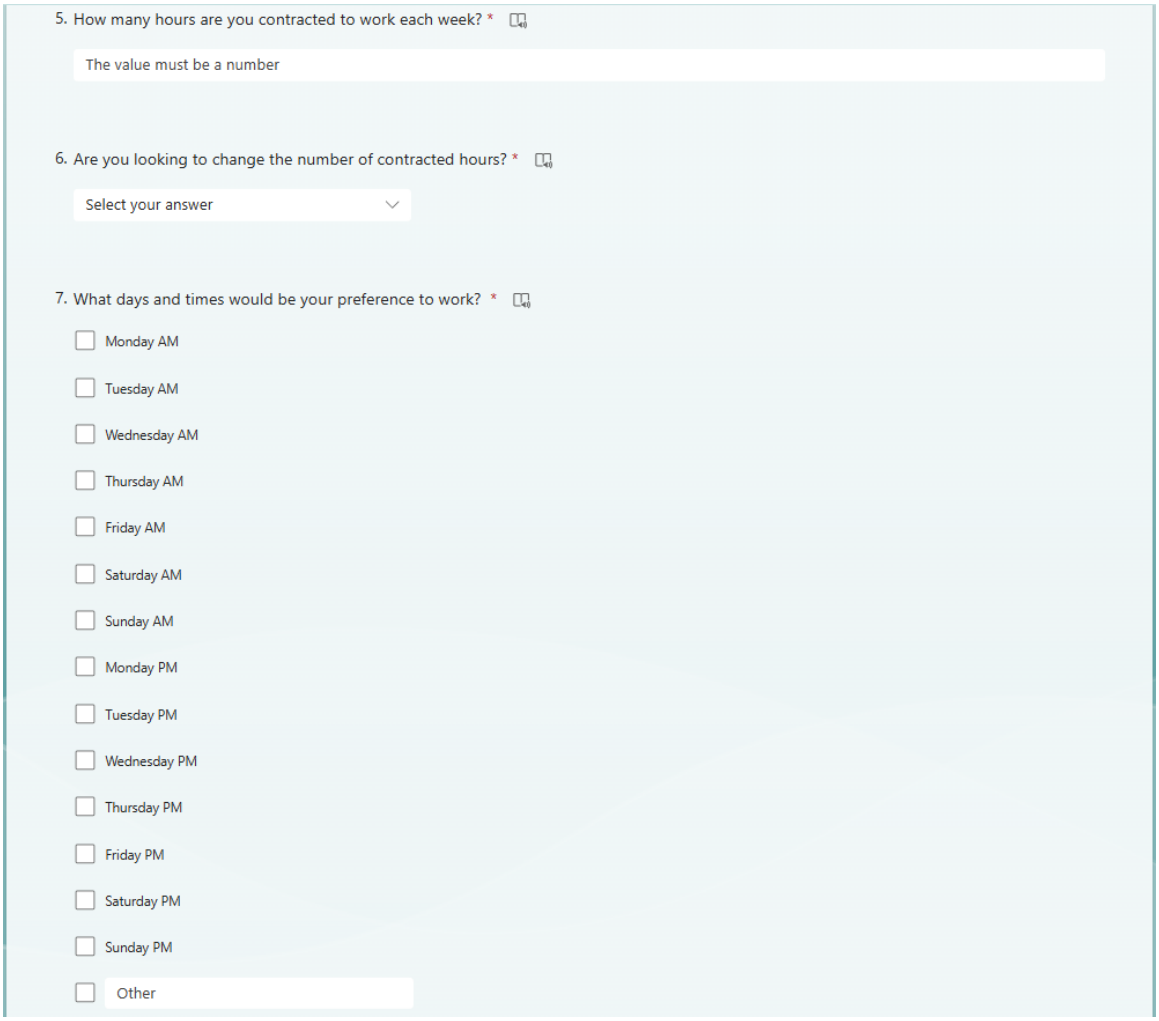
1.1 APPENDIX A: Survey Questions Used

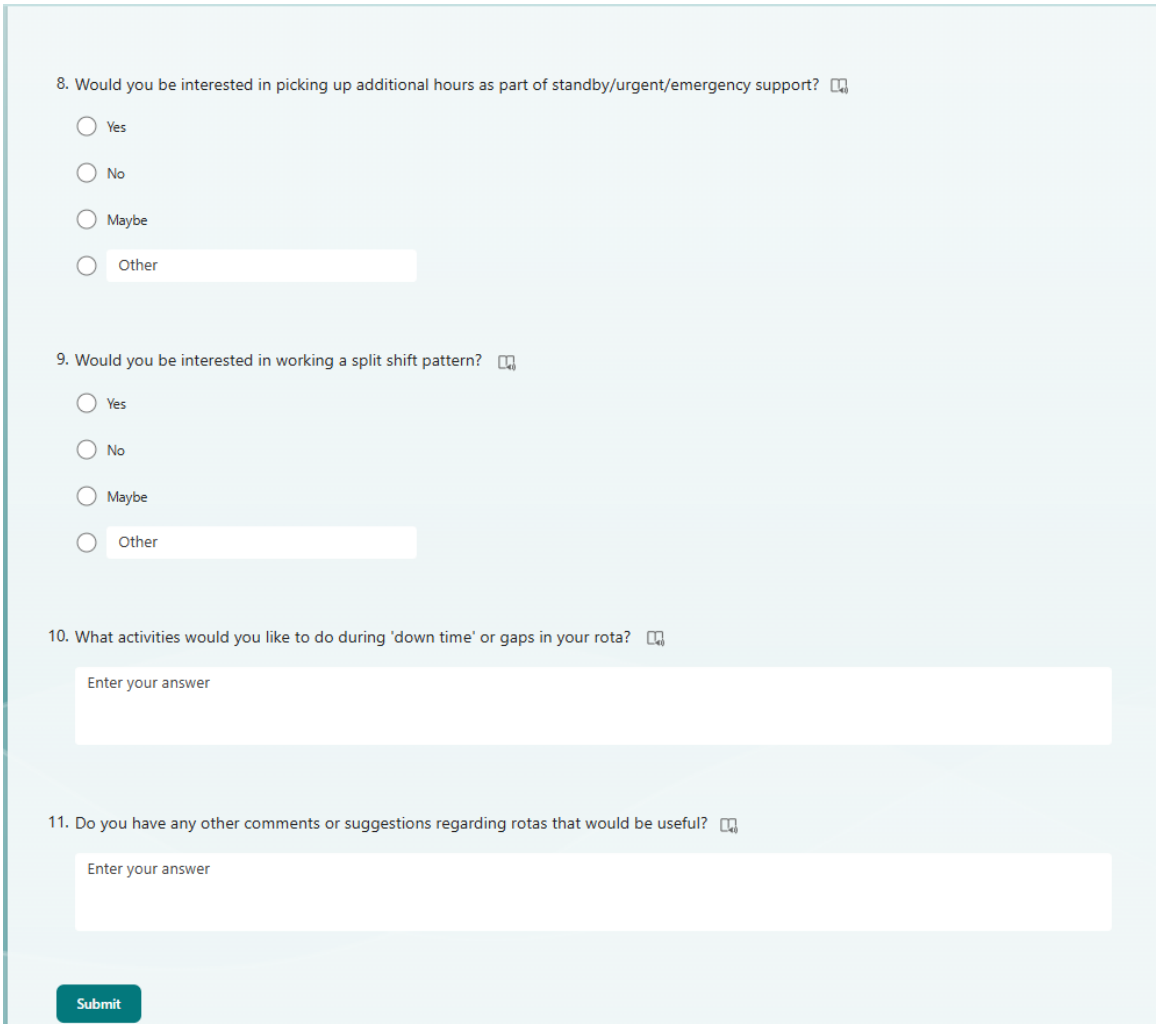
The following survey was designed to gather staff perceptions on patient flow, communication, digital tools, and service improvement within the Reablement Service. The survey includes both Likert-scale and open-ended questions to capture a comprehensive understanding of staff experiences and suggestions.

1.2 Likert-Scale Questionnaires

Figure 12. Linkert-Scale Survey Results (Multiple Diagrams)




5. How many hours are you contracted to work each week? *
The value must be a number
6. Are you looking to change the number of contracted hours? *
Select your answer
7. What days and times would be your preference to work? *
Monday AM
Tuesday AM
Wednesday AM
Thursday AM
Friday AM
Saturday AM
Sunday AM
Monday PM
Tuesday PM
Wednesday PM
Thursday PM
Friday PM
Saturday PM
Sunday PM
Other



8. Would you be interested in picking up additional hours as part of standby/urgent/emergency support?

- Yes
- No
- Maybe
- Other

9. Would you be interested in working a split shift pattern?

- Yes
- No
- Maybe
- Other

10. What activities would you like to do during 'down time' or gaps in your rota?

Enter your answer

11. Do you have any other comments or suggestions regarding rotas that would be useful?

Enter your answer

Submit

Follow up Questionnaire since February 2024 changes were implemented

Have the changes in call planning since February 2024 impacted a positive change to the Reablement Support Workers working day?

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

1. I find that I have adequate time for the calls I undertake compared to the changes implemented in February 2024.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	N/A
AM shifts	○	○	○	○	○	○
PM shifts	○	○	○	○	○	○
Both AM and PM Shifts	○	○	○	○	○	○

2. I find the length of the call times are now accurate to the tasks set.

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
○	○	○	○	○

3. Please explain your answer to Question 2.

Enter your answer

4. I have noticed that I am travelling shorter distances and staying more within a geographical area.

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
○	○	○	○	○

5. The changes over the last 18 months have improved my working day.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
○	○	○	○	○

6. Can you explain your answer to Question 4?

Enter your answer

7. Have you any suggestions for improvements to your working day and explain in the text box below?

Enter your answer

You can print a copy of your answer after you submit

Submit

Microsoft 365

Summary of Likert-Scale Survey Responses

Response Category	Adequate Time (AM)	Adequate Time (PM)	Adequate Time (Both AM & PM)	Call Time Accuracy	Shorter Travel Distances	Improved Working Day
Strongly agree	0	0	0	0	1	0
Agree	11	7	7	9	15	7
Neither agree nor disagree	8	5	6	8	4	0
Disagree	7	5	4	9	4	2
Strongly disagree	0	0	0	0	2	2
Neutral	0	0	0	0	0	15
No Response	0	9	9	0	0	0

Can mobile blood microscopy be successfully utilized by APPs in the Welsh Ambulance Service.

Jennifer Jones

Duty Operations Manager

Welsh Ambulance Services NHS Trust

Email: Jennifer.Fraser@wales.nhs.uk

Abstract:

Across the UK, the NHS is in need of major changes to ensure patients receive the right care, at the right time. With ambulance conveyances and hospital admissions at a high level, having being severely impacted by the COVID19 pandemic, initiatives are needed to reduce ambulance conveyance to emergency departments. Several research projects exist already showing that point of care blood analysis is beneficial to patients and provide a significant cost saving to the NHS, however these have been small scale projects. A nationwide pilot is required and has been suggested for Wales and the Welsh ambulance service, utilising point of care testing devices with the aim of not only reducing admissions and the financial impact on the NHS, but mainly to ensure that patients receive the correct care they require.

Keywords: Prehospital, Point of care, POC

1 Appendix A – Ethics Approval

Swansea University
Prifysgol Abertawe

Approval Date: 24/06/2025

Research Ethics Approval Number: 1 2025 13716 13161

Thank you for completing a research ethics application for ethical approval and submitting the required documentation via the online platform.

Project Title	Can mobile blood microscopy be successfully utilised by Advance Paramedic Practitioners in the Welsh Ambulance Service
Applicant name	MISS JENNIFER FRASER
Submitted by	MISS JENNIFER FRASER /

Full application form link https://swansea.forms.ethicalreviewmanager.com/Project/Index/16203

The Professional Services ethics committee has approved the ethics application, subject to the conditions outlined below:

Approval conditions

1. The approval is based on the information given within the application and the work will be conducted in line with this. It is the responsibility of the applicant to ensure all relevant external and internal regulations, policies, and legislations are met.
2. This project may be subject to periodic review by the committee. The approval may be suspended or revoked at any time if there has been a breach of conditions.
3. Any substantial amendments to the approved proposal will be submitted to the ethics committee prior to implementing any such changes.

Specific conditions in respect of this application:

The application has been classified as Low Risk to the University.

No additional conditions.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees. It complies with the guidelines of UKRI and the concordat to support Research Integrity.

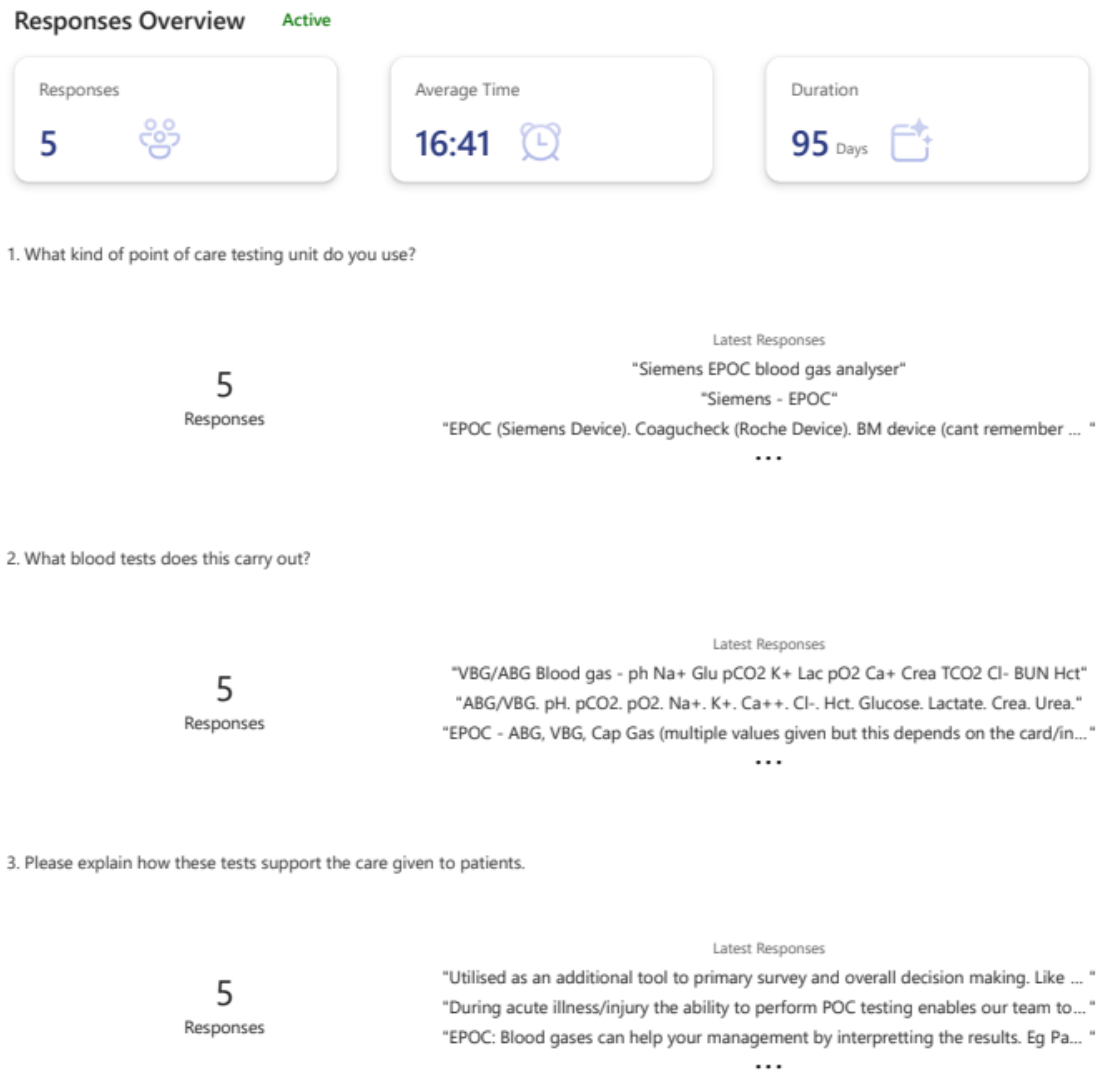
Professional Services Research and Ethics Chair

Swansea University.

If you have any queries regarding this notification, then please contact your research ethics administrator for the faculty.

- For Science and Engineering contact FSE-Ethics@swansea.ac.uk
- For Medicine, Health and Life Science contact FMHLS-Ethics@swansea.ac.uk
- For Humanities and Social Sciences contact FHSS-Ethics@swansea.ac.uk

2 Appendix B – EMRTS Survey Summary



Responses Overview Active

Responses 5

Average Time 16:41

Duration 95 Days

1. What kind of point of care testing unit do you use?

5 Responses

Latest Responses

"Siemens EPOC blood gas analyser"

"Siemens - EPOC"

"EPOC (Siemens Device). Coagucheck (Roche Device). BM device (cant remember ... "

...

2. What blood tests does this carry out?

5 Responses

Latest Responses

"VBG/ABG Blood gas - ph Na+ Glu pCO2 K+ Lac pO2 Ca+ Crea TCO2 Cl- BUN Hct"

"ABG/VBG. pH. pCO2. pO2. Na+. K+. Ca++. Cl-. Hct. Glucose. Lactate. Crea. Urea."

"EPOC - ABG, VBG, Cap Gas (multiple values given but this depends on the card/in... "

...

3. Please explain how these tests support the care given to patients.

5 Responses

Latest Responses

"Utilised as an additional tool to primary survey and overall decision making. Like ... "

"During acute illness/injury the ability to perform POC testing enables our team to... "

"EPOC: Blood gases can help your management by interpretting the results. Eg Pa... "

...

4. Have you encountered any issues with regards to these units?

5
Responses

Latest Responses
"Machine doesn't work when its cold and is temperamental when inserting sample..."
"Yes. They are very sensitive to changes in temperature. I.e. if they get too hot or t... "
"EPOC- extremes of ambient temperature."
...

5. Where in Wales are you currently based?

5
Responses

Latest Responses
"Welshpool - Mid Wales Airport"
"South Wales."
"South"
...

6. What is your current role?

7. How long have you been in this role?

5
Responses

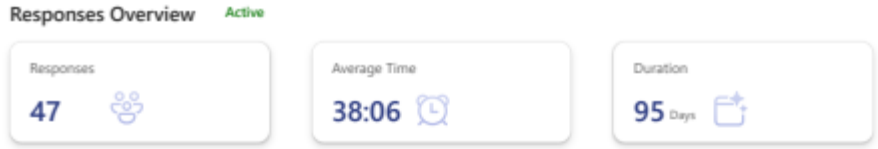
Latest Responses
"3 years"
"8 years"
"14yrs"
...

8. Is there any other input you can provide with regards to point of care blood testing and their use?

5
Responses

Latest Responses
"Beneficial for set circumstances, but distracts the team when the machine isn't wo..."
"no."
"Being able to quickly interpret the results will help. Use your critical thinking and ... "
...

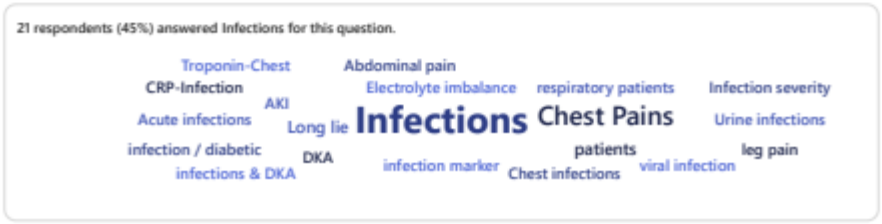
3 Appendix C – APP Survey Summary



1. Do you think point of care blood testing would be beneficial to your role?

2. What blood tests would be beneficial to assist in providing the best care pathway to patients?

3. What nature of symptoms or conditions would these tests be considered?



4. Would you intend to utilise POC testing on all of your patients, or only those you can refer to a better pathway than admission to hospita l?

47
Responses

Latest Responses
"would be used as clinical judgement for safe admission avoidance or referral to a ..."
"All those who I consider essential to alter pt disposition and to reinforce MDT con..."
"Only specific patients"
...

18 respondents (38%) answered Patients for this question.

5. How confident ate you in interpreting blood tests results?

3.36
Average Rating

6. Do you have any concerns regarding the use of point of care blood testing?

47
Responses

Latest Responses
"the person using the testing needs to have good experience in reviewing bloods i..."
"Not particularly"
"No"
...

9 respondents (19%) answered patients for this question.

7. Where are you currently based?

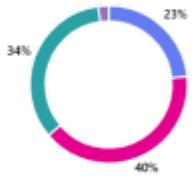
47
Responses

Latest Responses
"Dobshill MRD."
"Gelli Cwm Taf south"
"Betsi Cadwalader university health board"
...

7 respondents (15%) answered Cardiff for this question.

8. What is your current role?

Trainee APP	11
APP	19
Senior APP	16
Health Board Clinical Lead	1



9. How long have you been in this role?

47
Responses

Latest Responses
"APP-8yrs. SAPP 6 months."
"Since 2009"
"2 years"
...

27 respondents (57%) answered years for this question.

What policy and process changes would support the shift of urgent care services into a community-based model and enhance care closer to home?

Megan Owen
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Welsh Government
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Abstract:

This paper draws on key Welsh policy documents, strategic frameworks and interviews 20 experts working to deliver or enable urgent care closer to home. Evidence is synthesised and explored through a micro, meso and macro lens to identify common themes and gaps. Key findings include issues such as funding models, workforce morale, culture, accessibility and policy coherence, these themes dominated discussions, reflecting their immediacy in daily delivery. However, several lower-frequency sub-themes such as legislation, de-medicalised language, spread/scale/evaluate, and whole-system framing were retained due to their system-level leverage or role for enabling transformation. These findings highlight a dynamic tension between enabling conditions and structural barriers, with both high and low frequency themes necessary to explain the full cycle of reform. Urgent Care needs to be clearly defined as does what the 'shift' means practically in an urgent care context, it is recommended that a policy position statement clarifies the role of urgent care underpinned by a long-term strategy bridging the gap between the policy vision and system delivery.

Keywords: Urgent Care, Urgent Primary Care, Care Closer to Home, shift, community, policy, process, transformation, NHS, Wales

1 Appendix B: Thematic quotes

Table A1

Theme 1: Funding and resources	
Sub-themes	Relevant quotes & attributions
Pooled funding	"we should move toward pooled funding" P20 "Pooled funding would likely make things easier by cutting red tape I have reservations over how it would work given the historical context" P14 "pooled funding exists but it doesn't work as it should, we should encourage people to share risks and think less about funding in silos" P11 "there is an underutilisation of existing pooled budgets so work is needed to understand that" P2 "funding should follow the patient not the service" P16
Has funding shifted?	"Funding model needs changing, funding hasn't followed policy enough" P1 "Funding has shifted but not had the desired impact" P20 "Funding mirrors silos" P14 "It's one thing taking resources out of secondary care and into the community, but how do we know how much resource needs to go, which people are we targeting, why, how can we better support them and what is the choreography around that?" P20 "Need clarity over pump priming – HBs do not prepare for sustaining services established with transformational monies" P16 "Gap between what is going into secondary care is getting wider and wider, secondary has gone up and community has gone down, but we keep talking about this concept" P15
Double running	"in the absence of loads of money coming in we're going to have to double run, we're going to have to make that choice at some point" P5 "accept this can't be don't without additional funding and funding needs to support sophisticated and genuine modelling to be prepared over a long period of time" P18 "we could always do with more money" P10 "you're going to have to invest at risk, you will start to see the impact over time but it will take time" P17
Value based commissioning	"Funding is complicated, "it's not about throwing more money at it, it's about using what you got wisely" P12 "need to direct resource where there is going to be most impact" P10 "You've got to decommission the stuff that doesn't work as well, there is so much waste and duplication within our processes, we have to improve what we got.. we've got to steward public monies in a way that is of benefit and value to people" P13
Annual funding cycles	"Instead of investing in the community or prevention we go and buy a load of capacity from the private sector or we pay people to work weekends. That's very short term. So the kind of political short termism is a barrier" P18 "long term funding is a massive barrier… funding is only given annually so we can't work out any longer term planning… I find the whole funding situation very difficult. The thing that needs to happen next is the ability to strategically priortise projects over the long term through funding" P12 "running a health board and making the health board work is like trying to fly the plane and fix the engines at the same time" P9 "we always sacrifice tomorrow for the sake of tomorrow, because everything today is urgent" P9
Broader economy	"We exist in a contrast, austerity, targeted interventions, special measures, the messaging that comes out is there is no preservation of core patient facing direct services. It used to be 'do more with less' now it's 'do something with nothing'. It's disrespectful to highly trained professionals and discordant with high levels of passion and productivity… historical set up of our systems, finance and target led… control gets tighter and tighter and freedom and autonomy disapers… more people looking at compliance and reporting and less people doing the doing" P13
Physical space & equipment	"we need diagnostics in the community" P10 "Tech and IT is always a barrier, never an enabler… we're fighting a losing battle in secondary care" P16

Table A2

Theme 2: Policy coherence and service specifications	
Sub-themes	Relevant quotes & attributions
Policy integration and coherence	"Social care and health have different aims and strategic drivers – need to be brought together. Mayve AHW is the common purpose but it comes back down to what is screaming louder? The policy or operational pressures and a local level… Sometimes things don't flow down from the top to the more operational space" P11 "There is definitely a drive for change… but we work in silos and don't share good practice." P1 "We've got the infrastructure, yes, we've got the policy… but we fall down in terms of execution." P3 "trying to separate UC from primary care is a nonstarter" P4 "there is a cultural issue in terms of integration, within health boards, WAST and a lack of understanding the local authorities play and a lack od trust in WAST" P20 "if I could make one change it would be consistent, coherent and coordinated action and messaging from the centre" P18 "It's not just the population making the wrong decisions, the whole system doesn't support a unified clear strategy" P17 "Aligned language within policy vision is needed" – P2
Policy commitment	"Not to where it needs to be… health boards have done it [the shift] within the remit of what they feel they have control over." P4 "Plenty of policy, unsure of adherence to it" P18 "Welsh Government isn't consistent in priorities" P18 "There is general consensus across the system and political system that a change is needed due to ageing population and societal changes, it still take a huge amount of courage and commitment to implement that" P18 "successive governments that stick to policy, don't nuance it, don't change language, just reinforce policy" P18 "WG have got to make a plan and stick to it for 10 years – doesn't matter what political colours come in, this is what we need to do to deliver sustainable, high-quality NHS free at the point of access service in Wales" P9 "We need ministers to take bold decisions" P5 "need cross party consensus, make historical shift from waiting times and planned care to prevention and proactive care. In order to do that you need to avoid political discourse every week – need independent consensus on the difficult yards Wales is going to face over the next 10 – 15 years i.e. we need to reduce overall spend on health care, to do that we need to focus on prevention because it is much cheaper" P5 "Welsh Government sticking by HBs when they make bold decisions to align with policy intent rather than saying it is up to HBs to manage their local populations". P9 "We think our policy failed if we don't see big changes, but we didn't create the right conditions for its success" P2
Policy intent	"it is happening in pockets… partially. There is variation across health boards" P20 "Need clear directional policy for 24/7 urgent care" P5 "It is in pockets – I think we've got good urgent primary care centres… those populations benefit from a good model." P19 "it feels like the policy is there and then we drop off a cliff" P3 "Happening in places… pockets, but not at the pace it needs to." P1 "We've got the germination of something, I don't think we've got there." P4 "it starts with a real radical overhaul over the way we think about health and care and focussing on putting the person at the centre" P9 "We have a divide in terms of patients now, older and frailer people expect continuity of care whereas the younger amazon generation are much more transactional and just want to be seen and treated. So we need to address the fact we have a divide in population wants / needs" P3 "Political willingness to get into this space is another big one" P19 "we need a comprehensive urgent care policy that deals with urgent care 24/7" P5 "staff need to collaborate, have high performing teams, self organising teams, integrated alliance rather than saying 'we work together' and policies should then come out of that rather than the other way around, KPIs should follow, focus on the collective 'what matters'" P13

	"Six goals is good example of how policy can validate and enable, it is visionary and strategic but allows local nuance" P13 "Need to double shift, from reaction to prevention and proactive" P13 "All patients with urgent care needs triaged before access service via 111 (or same entry point) to reduce variability of access nationally – patients would be booked into services for treatment and then come straight back out" P15 "Social Services policy group is focused on five population groups that benefit from integration - they are taking the right direction of travel. Quality and Nursing are focussing on 'what matters to people' and person centredness. However, Planned care and UEC are still focused more on pathways" P7 "National programmes like Planned Care, Six Goals, Strategic Programme for Primary Care, Regional integration Fund are coming to an end, this is an enabler - use time to evaluate effectiveness. Do they promote siloes, learn from winter planning this year where it has been joined up." P7
Policy & practice gap	"The biggest problem we have it outflow" P6 "Where we have seen success stories is where the leadership from the hospital has actually meant that its shared responsibility to flow those patients through…not just A&E" P12 "the problem is delayed discharges and social care and lack of capacity there, lack of nursing beds, social care provisions… this is problem we cannot fix but we have to hold" P6 "integration with local authorities is also key" P7 "Put social care intervention up front (closer to GPs), if you look at the reason why people need a bed it's because they need monitoring or because they have a social need, if you saw better integration of social care with acute . urgent services, you'd see more people getting out of hospital" P4 "people turn up with urgent or acute needs but they have underlaying complex issues" P4
Specification	"New initiatives that operate 9-5 Monday – Friday do not help secondary care. Extended hours are really important" P6 "Hard to appreciate what tech could enable in the future, policy must be able to flex to that" P18 "to get around systems and geography, you need a core mandated specifications with health board nuance… difficult to balance in a policy space to allow for delivery to flex on the ground" P14 "consistency in service provision… across Wales… after you got your core specifications or principles, then you would set up what a specific local health board might need with a focus on the population they got" P12 "It shouldn't matter where you are at what time, it shouldn't change your outcome… Just because you've become unwell at midnight it shouldn't really limit your ability to have care at home" P16 "there'll need to be some guiding principles about what urgent care closer to home looks like, regardless of who you are, how old you are or what your condition is… these principles will never change but these are the different bells and whistles that will be present if you are a child or someone living with cancer or an older person… the guiding principles have to be the same for everyone" P9 "we need to work toward 7 day working" P11 "digital is the way forward, there are some professional reservations but the choice should be there… if I could access something digitally I would pick that every single time" P11 "having a 24/7 primary and urgent care service for Wales gatekeepered by 111… would be really key" P5
Legislation	"we need to use our legislative drivers" P11

Table A3

Theme 3: Language and Definitions	
Sub-themes	Relevant quotes & attributions

Aim of 'shift'	"we need a clear, concrete definition of what the shift is trying to do" P6 "we need to change the language around where our priorities sit" P5 "whatever we're measuring is what is going to push activity… there's something on data standards and definitions to prevent you being caught in a circle" P15 "being really clear about what an integrated community care service looks like" P2 "it's not about shifting care, it's about treating the patient where it is most appropriate for that patient to be treated" P16
Urgent care	"we need a definition of urgent care, what is it, to who, why, when, where" P19 "UEC definitions are a really big thing we need to be clear on" P18 "if everyone could agree on the definition of urgent care that would be a big leap forward, that's where stakeholder input would be really valuable" P19 "Health language is very different to local authority, social care… sometimes how could we do that and join together" P8 "organisational languages are different, local authorities, social care, third sector all speak different languages… we need to break it down and find commonality" P11 "Language is important for patients to understand distinction between services" P17 "We don't understand complex change, it is a complex adaptive system, we need to look at value managed health care, flow streams, eco systems commissioning, whole systems" P13
De-medicalise language	"Work ongoing to de-medicalise language so there is a shared understanding with social care and understand things in the same way" P2 "You also have different language used by different players which means there is confusion on the ground." P7 "Adopting a population health management approach requires us to think about patients as people. They're not patients all the time, that calling them patients is almost endorsing a medical model." P7

Table A4

Theme 4: Public expectations and communication	
Sub-themes	Relevant quotes & attributions
What matters to the public?	"we've got to have that really difficult conversation with the population of Wales around some fundamental decisions – what services do you want within the limitations of what we can deliver" P5 "Need to have that 'what matters to you' conversation" P12 "people are empowered to say 'this is what matters to me' personal ownership of care plan" P7
Societal shifts	"Consumerism, 'amazon generation', we need to flex to meet expectations of digital era" P3 "life is going in the direction of more consumer based about health, we need to have options but get them right" P14 "historically our communities were made up differently, you know grandmother didn't work and could look after the kids or a mother would have time to be the care giver for elderly frail people or children but things have changed and that resource has diminished" P8 "we live in an instant world with the amazon generation, need to adapt service accordingly" P1 "there is a societal shift that is definitive and we won't be going back, people want to access a service when suitable to you, around work, childcare etc." P6
Education	"we need to explain that X, Y or Z is best service and why, teach children how to navigate the system" P8 "people recognise the A&E brand – if they go they will be seen" P6 "greater communication of services is needed" P20 "better buy in from public and changing perceptions need to start at a younger age to change the generation" P1 "I think the re-education process is key… without that you won't get the change of behaviour you need" P11 "we need to get better at communicating with the public in a way they understand about what our services do and don't deliver" P17

Personal responsibilities	"we need to provide people with the facilities to manage their own health and wellness… need to get people to take personal responsibility start owning their own health and wellbeing" P17 "we need to tackle personal resilience and individuals managing their own health" P5
Behaviour change	"We have to change people's perception of hospital settings being the safer place, we have to address cwtch culture" P2 "Behaviour change is needed because people have always seen care being done in hospitals and we have a just in case and cwtch culture in Wales" P15 "ease of access is the single most important thing" P6 "not enough behaviour change is happening because people don't know what it means and still turn up at hospital" P1 "work needs to be done with public perception and behaviour change" P1 "it's about shifting behaviour and mindsets too" P3

Table A5

Theme 5: Workforce	
Sub-themes	Relevant quotes & attributions
Morale	"workforce is burnt out because current demand outstrips capacity" P17 "good will has run out" P16 "we are currently fire fighting… if we improve morale we improve productivity" P13 "the shift would free up capacity for people who require emergency care to see clinicians with specialist skill sets, utilised morale would improve due to more headroom, staff groups would feel empowered" P20 "staff morale would improve due to them being able to use the right skill set" P18 "we know the service is causing morale injury to staff and burnout" P6 "I feel like I'm doing three peoples jobs, estate is falling down, I can't get an ultrasound kit, it's computer says no all the time… things take years" P13
Culture	"Clinical and operational leadership happens in silos, doesn't seem to be enough trust across organisations or care settings" P12 "Good work isn't valued and no repercussions for doing a bad job – performance should be based on outcomes" P17 "There needs to be an absolute shift change in our thinking from pathways to systems and from Patients to people." P7 "requires a fundamental shift in the ways of working and how clinicians see themselves, don't underestimate the organisational development required to do things differently" P18 "there are cultural differences between primary and secondary care" P12 "as human beings if we feel valued we feel like we are delivering a purpose… you want to come to work when you are supported… we need compassionate leadership" P17
Change Management	"workforce takes time to train and build, there is not staff ready and waiting to slot into new services" P17 "Workforce is not just sat there, need to train up, attract and retain" P14, P6 "morale may drop initially (P4) people find change difficult." P2 "community needs to be sold more so people want to have their careers in the community, need to show them they are valued" P18 "staff need to have training in a consistent service offer nationally and have the ability to use all different systems and flex to local needs" P12 "people find change difficult but that would settle" P4 "resistance is born out of fear of change.. if you commit your future will look like this" P9 "I'd like to see much more invested into managing the change, it is a skill and busy managers might not be the best people for the job" P9 "need parity of roles between social and health care staff to recognise the role both play in the community" P2

Job Satisfaction	"I don't understand why it's acceptable to say no I'm sorry we don't have capacity in primary care but it isn't ok in other parts of the system, I find that as an emergency physician frustrating at times" P6 "care would improve because staff are not fighting the fact there is not enough resources to go around and care for patients improve as a result, outcomes improve, so it almost becomes a cycle. There is a point of no return if you don't intervene" P16 "collaborative working makes a difference" P16 "if staff have a joint vision it boosts morale" P8 "third sector staff cannot tolerate the short term funding cycles, difficult to retain good people because they leave without job stability" P9 "whenever I have been involved in community services they are extraordinarily passionate and they really believe they are making a difference, and that's because of the impact they see" P11 "my experience is community based teams delivering care, particularly when they're mixed teams are much more innovative and much more creative and tend to be more fulfilled as well" P11 "I think it will create more job satisfaction" P3 "when I visited a community service it felt like somewhere you'd want to work, it felt nice, like you were contributing" P15 "it's an integrated service and I don't know how to describe it other than it gives you just such a feel. These people are invested in working together, there's social care, occupational therapist, health care… talking together working on the same case" P2 "I understand why you would like bringing a patients care to a conclusion, I see how that is satisfactory, even if that conclusion wasn't necessarily good for the patient, knowing you've played a part in that continuity of care and seeing that the person received the best possible care they could have received… that's where you gain knowledge, stability and see innovation in the community setting" P11
Career pathways	"Rotational model provides a different perspective – exciting opportunities but requires senior leadership push and willingness from staff" P15 "rotational models of workforce" P20 "this could create new career pathways for people in both remote and clinical settings" P5 "need to upskill without deskilling in other areas, finding a balance whilst supporting staff" P1 "professional skills are missing such as advanced nurse practitioners in the community to support MDTs / GPs, we need workforce forecasting in this area" P10 "make the career attractive, create a route in, the workforce needs to be created" P14 "we've got to enable rotational models, MDT, colocation approach" P12 "walking in each other's shoes is really important to see others perspectives, it minimise that gap in service to service and allows you to wrap care around that person" P3 "I think it would be a huge advantage for primary and secondary care professionals to see the other side of the coin" P15

Table A6

Theme 6: Patient Experience	
Sub-themes	Relevant quotes & attributions

Accessibility	“life is going in the direction of people wanting more choices” P14 “anybody accessing health care should be able to have a clear idea of the journey they’ve been on” P12 “the single most important thing is ease of access, people want to access services around their lifestyles” P6 “GPs should be able to approach consultants for their speciality and expert knowledge but the GP is the expert on the patient and needs to integrate that into what matters to the patient” P4 “helping people navigate their way through the system” P19 “majority of people older or frail people struggle with transport to hospital appointments” P9 “geography is a big challenge for frail elderly people or people with poor mobility, there is a lack of confidence with transport and service provision” P11 “Services are not always accessible for people who need them” P8 “transport can be an afterthought, people assume others will be able to get there based on their own mobility or access but that is not always the case for everyone. Transport shouldn’t be the reason something happens but it should be an enabler” P11
Convenience	“we all want care closer to home” P14 “continuity of care reduced urgent care demand, it reduces admissions, it reduces referrals, it reduces a lot” P4 “quicker, more responsive to needs, smoother, slicker experience” P19 “better, quicker, digital services” P9 “digitisation piece to improve patient records… if we get a jigsaw pieces fit together your care you’ll get a better experience” P9 “if you’re somebody that wants to you should be able to access care through your smart phone or tablet or laptop to save you walking or having to catch two busses, far more comfortable and appropriate, reducing costs to you and the NHS” P9 “system should be easy to navigate” P17 “we need a unified, simplified single point of access” P5 “our culture is around timeliness and getting people turned around but if we took a little bit longer and paused for a moment to think about what is actually required, wed get a better outcome and the person wouldn’t pop up again next week” P3
Experience & Outcomes	“greater experience for some populations over others, more older, frailer people with complex needs who are at greater risk, would be supported most through proactive care but have access to urgent or emergency care services when needed” P20 “patients would get a quicker, more positive, less traumatic experience” P15 “experiences would be better” P1 “people we speak to are definitely more complex, frail and need whole system thinking rather than going in just to receive a specialist service” P12 “it is very difficult for people managing multiple medical needs, their calendars are appointment after appointment, in hospital for one, a different centre for that one and then another one somewhere else, their life becomes about managing their medical needs. It comes back to being more generalist across lots of different practices to support people, bringing services together to holistically manage care for people with comorbidities” P12 “if it’s done properly everyone’s going to be pleased” P6 “if you keep patients where they want to be it would e positive, keep the in their own home, reduce deconditioning, they want to feel care is responsive” P10 “if they live in a certain way which is safe and their choice then don’t judge… it’s about being more patient centred, mould to the patient rather than have the system mould to the system” P16 “Fundamental impact on patient outcomes and experiences, from both a health and well-being perspective” P17 “it wouldn’t take long for people to have good experience and then you could build momentum” P5 “once people have good experiences they will access the same way again” P15 “it’s never been explained to me why certain choices have been made, things should be communicated to me as the patient” P15 “100% it would be a positive impact. There are so many people we are failing with the current system. When a relative says 'somethings not quite right' with their family member who is known to the health / care system i.e. has dementia or Parkinson’s, that is an alarm bell for incoming high acuity emergency which will no

	longer be able to be managed in the community if intervention is not fast. So if we adopted a population health management and we were aware of people who were at high risk and they were starting to exhibit early concerns or niggles and we would respond there, not only does the system benefit, but actually the person benefits too from having a lengthy, un-dignifying wait and deconditioning whilst waiting or following admission. Tackles what matters to people, which is often staying out-of-hospitaland staying at home." P7

Table A7

Theme 7: Social Determinants of Health and Holistic Care	
Sub-themes	Relevant quotes & attributions
Whole-system	"Take emphasis from secondary and put into holistic care but requires a difficult conversation about finance" P14 "assess the links to deprivation in communities" P13 "looking at the impact deprivation has on access to services" P5 "Needs governance that allows local partnership and community leadership — not rigid contracts that exclude third sector/voluntary groups." P13 "there is a massive role for the alied health professional in prevention, rehabilitation and what matters to you… we haven't managed to articulate or demonstrate enough the role of the AHP, they're integral when it comes to whole system thinking and looking at the person in their entirety" P12 "The role of social care, and the third sector is cruicial to seeing across the whole system…good housing is a social determinant of health we need to consider" P5 "damp housing can be the reason for attendance or illness" P3 HBs need to let go of some control because we still operate in a very clinical medical lens. if we if we gave away some of our stuff and said actually we don't need to be doing this could be done by primary care or we don't need to be doing this in a hospital setting. This could be done by primary care. This could be done by a third sector or coalition. This could be done by Podiatry for example. When we think about the number of people that come into hospitals as a result of, through emergency routes, falls and they end up breaking a hip and then they end up getting an infection and it's all because perhaps they can't cut their own toenails. So the initial intervention is really, really simple. And doesn't need to be delivered by the NHS or by local authorities. It can be delivered on a social enterprise basis by, you know, a charity like mine or others. But I guess those preventative interventions are very, very difficult to quantify and to say categorically this intervention result absolutely stopped that person going into hospital. And unless we are we being, you know the the Health board and professionals working in the space and the decision makers unless we're prepared to relinquish some of that control then I'm not sure where that the resources that are required can follow." P9
Preventative & Proactive care	"We're very medicalised , don't address social needs, need social hub to address driver behind attendance" P1 "We cannot ignore the fact that if we invested in our children… in nutrition… in education… we could help reduce autoimmune conditions, help reduce obesity, cardiovascular conditions… We need to have policy around those areas because the shift change is going to take many, many generations, but unless we actually start switching the focus from reactive to proactive and start investing in areas that are going to make a difference in the way that we value ourselves as human bodies then then we're never going to be able to tackle the rising obesity, the rising cardiovascular health challenges, the rising urgent care needs, because that's what we're here talking about today." P17
Place based care	"Russell's approach recognises that urgent care demand is often socially driven…loneliness, poverty, housing…and must be addressed in the community, not just medically." P13 "Community assets are really important, including the third sector, but equally faith groups, church groups, community groups that aren't formally groups, if we all work together and keep each other well, then there wouldn't be such a huge demand on statutory urgent and emergency care services or social care, which is another route cause of UEC pressures." P7 "all about bringing a person to a setting but wrapping care around them" P9

	"there are some really good stats around place-based care which are not clinical interventions but are having an impact on the system… WISE in cwm taf for example look for non-medical solutions for people with long term health problems" P9
Population health management	"we need to keep people well and route them to the correct place" P10 "Stem in understanding your population base. A lot of the root causes are adults with complex needs, there is also obviously a population who don't have complex needs, but they've got simple needs that will become complex unless there is early intervention, support or advice available." P7 "We should be able to identify then escalating needs sooner and interact before they become too acute and they're therefore hitting our urgent care system. based on what matters to the person / population group." P7 "It is crucially important that we segment the population and then we stratify the population, but we cannot just manage people who are at high risk. We need to do equal focus on the well population to make sure that they keep well, people who have rising risk, so people with simple becoming complex issues and make sure that we put the right support and interventions into those populations as a whole population and across the whole system." P7 "Population groups should be fit and well, low risk, rising risk and high risk… That would be really helpful because you'd be able to understand what the needs are now and forecast what those needs are going to be going forward and then adapt the overarching policy for that population group in that way." P7 "need to target populations at risk" P8

Table A8

Theme 8: Governance & Contracts	
Sub-themes	Relevant quotes & attributions
GMS	"GMS contracts need to be reviewed, GPs and GP clusters are not fit for purpose because of the way they are run, we need to question whether they need to come back under HB ownership… how can we commit to shifting care when GPs are not contracted to do certain things that would enable the shift" (requested to be anonymous for this response) "you might need to talk to 60 practices across your health board to commission one service but only one department in your hospital, you're going to pick the easier route" P4 "HBs will do things they think they are in control of but all contracted professions are on the backbone of a contract… give health boards greater control over their commissioning of GPs, rather than a practice level, a cluster or local authority level" P4
Architecture	"need to remove silos and work together" P20 "We need to focus on existing architecture, there are mechanisms we have at present (Clusters, P6Bs etc), we need to question if they are working together effectively, are they understood, are they used, bought into. We need to accelerate commitment to collaboration are every level and that will reap dividends that don't cost money" P18 "we can only sit in an MDT hub if an MDT hub exists" P12 "Single point of access is a real thing… It's like if I want to arrange something please don't make me ring 8 different people to find a community service or someone who knows what I'm taking about… it's the bane of my life" P6 "No legal requirement or act similar to the nursing act. Royal college of physicians recommended amount of clinical practitioners per patient that comes into system but operating well under that, nothing in legislation that underpins that guidance. Need to mandate in law that you need to have this many Drs." P13 "you need to think about existing infrastructure or what else needs to be put in place… we've got integrated health boards and clusters" P3
Red tape	"Patients should be guardians of their data – they chose who their data can be shared with." P13 "our red tape is so restrictive. And actually it leaves innovators and entrepreneurs Passionate leaders, really frustrated to the point where you think, right? You know, I've given my all. I've given more than my all. I've given my soul actually. And I

	cannot physically make this a reality. So things stay as a vision or they stay as a infographic. Or they say as a strategy. But the reality is it is hell on Earth." P13 “there is a lot of red tape around engaging with GMS” P15 “Continuously have to ask for permission for things, repeatedly have to ask for money for clearance, lots of red tape” P9
Fragmentation	“there are currently too many handoffs. Patients are cycling round the system, we need to grab them, we need to stream them and deal with them. We have to avoid duplication and be prudent and add value” P10 “how do we bring back patients knowing their professionals, if they have good relationships they tend to avoid admission” P8
Structures	"SPoA is where you have the opportunity - health and social care interaction at the start. you're going to have medicine, primary care and social care in the same room, making a decision on what's best for the patient within the resources available. That is probably a fairly unique opportunity. Should also look at including planned care colleagues and discharge teams. This would prevent packages of care from running out, increase efficiencies and wrap care around that person." P16 “There's the structural arrangements for the system in terms of, you know, build it and people will come. So what is the model in which we expect people to follow? And then the second part is then do people operate in that way because we've created an Ave that is the easiest thing for them. Most people will follow a path that is the one and that is the one which they think they will be seen quickest and easiest. So if that means rocking up at Ed regardless of their nowhere near emergency level of intervention, they will follow that that route. So I think it's two parts and I think they need to be done in tandem for that to work effectively.” P19 “if we’re asking for an integrated approach to our service delivery but we’re not role modelling that at a Welsh Government strategic level… evidence tells us that you need to be a good mentor of what you’re trying to deliver” P17 “You've got the healthier Wales strategy, which is whole system and whole population. It's population health management at its core but the EDT doesn't function to deliver a healthier Wales. You have executive directors for UEC and planned care and a different executive director for primary care so it doesn't align with the golden thread through a healthier Wales or the population management approach at the core of it.” P7

Table A9

Theme 9: Measures & Accountability	
Sub-themes	Relevant quotes & attributions
Spread, Scale & Evaluate	“Wales is good at starting initiatives, not good at reviewing, stopping or scaling” P1 “Struggle to understanding success because of poor data, how do we know models of care we are developing are working” P20 “Need modelling around what urgent care demand is” P19 “…I find I’ve got funding barriers in the spread and scale” P12
Measures & Performance Management	“Targets are very restrictive and causes gaming, this worsens patient experience… targets are dangerous if you’re not well resourced, don’t have the correct skill mix, expertise, knowledge, relationships and processes within that context” P13 “WG need to get more serious about holding HBs to account on this area” P3 “We need to move away from measuring input to outcomes” P5 “what we measure drives activity” P4 “people want to ‘shift’ services but they are pushed to focus energy on secondary care” P3 “We have conversation on the transformational piece but we’re not performance managed on it” P3 “we need to measure what is having a negative impact” P20 “If you have siloed performance measures you have siloed working, we have exactly the system we measure and nothing is going to change until we measure something else” P4 “Pooled funding doesn’t work, pooled responsibility or measures work better.” P4 “Demand reduction is the holy grail, enabled through robust data” P6 “Treat measures as whole system rather than in silos” P4

Data & Digital	"All relies on systems and staff talking to each other and working collaboratively" P15 "we have so many different and archaic systems… we don't enable people to move seamlessly across boundaries… we need dynamic data and real time information" P13 "Licensing is very time-consuming task" P10 "Patient records don't allow for a holistic care approach" P17 "Digital systems are a huge barrier… one system, one log in, removes barriers – facial recognition would reduce clunky administrative time" P10 "Directory of Services is needed to know what is open and what services are available." P13 "Where did people go who did not get an appointment" P19 "lack of data sharing between organisations to enable capacity and demand planning at a local level. Real time access to information is needed to route patients to most appropriate services" P13 "Data doesn't allow us to track through patient journeys to learn from them" P11

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