



**AHP
Workforce
Planning**



June 2021

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Executive Summary

This report explores the challenges and opportunities of workforce planning for AHPs. It sets out the historical context of previous AHP workforce planning initiatives, describes the current national picture, and proposes actions required from NES.

In line with the recommendations in Part 1 and Part 2 of the National Health and Social Care Workforce Plans^[1, 2], NES has been requested by Scottish Government to lead on the development of a national digital platform and is the source for Official Statistics on the NHS Scotland (NHSS) workforce. This report specifically details the action required from NES to deliver on this delegated responsibility for high-quality data, analysis and modelling for Allied Health Professions in addition to education and development relating to workforce planning.

A recent report from the King's Fund^[3] cites poor workforce planning, weak policy, and fragmented responsibility as the causes of chronic, excessive workload and a staffing crisis across the UK's health and social care settings. National direction and clear accountability are required to steer the collaborative and co-operative practice required between partner organisations to bring meaningful change for AHP workforce planning. Quality workforce planning will not be achieved by one organisation or by adopting a single tool or practice. Multiagency working and willing cooperation are required across sectors to ensure the tools we use to gather the information for one aspect of workforce planning bring connectivity and value to others.

The NHS Education for Scotland (NES) Strategy 2019-2024^[4] extends the traditional education and development work of NES to include the provision of high-quality workforce data intelligence, analysis, modelling and planning. Of course, the NHS is only one employer and an understanding of all employment opportunities for AHPs in Scotland is essential to comprehensively plan for an adaptable and sustainable AHP workforce. We require a shared understanding of essential planning activities across health and social care, local authority, education, Third Sector partners and other employers of AHPs.

Workforce planning is a complex, multi-dimensional process that evolves and adapts to changing circumstances. Although workforce planning ultimately predicts the numbers and skills of staff required for the future, the process requires broad examination of multiple factors to inform workforce decisions. AHP leadership, workforce planners and employers must create better links between workforce planning, career choices, pre-registration education, available employment opportunities, post registration education and career pathways to maximise AHP impact across the system.

To deliver equity of outcomes for people and not necessarily equality of input, workforce planning requires shared decision making and shared responsibility for achieving meaningful outcomes. Clarity about outcomes is important for successful workforce planning as differences in service objectives will fundamentally change workload and create differences in the workforce needs required to support the change. Integrated workforce planning requires a realistic and representative picture of how successful

service offers and supports are designed and delivered, and how outcomes improve across populations as a result.

Compassion sits at the heart of all we do, and this must include intentional action and sustained effort to create the healthy working culture that we all deserve. Workforce planning that properly addresses wellbeing needs and values and respects all four pillars of practice will have consequences when estimating the number of AHP staff required in any service. Compassionate leadership must take responsibility for ensuring we have the tools and information to describe the current system, articulate pressure points, recognise chronic overwork, and support staff to safely work within service limitations.

Workforce planning will require education and development support in two essential areas. Firstly, AHPs may have learning needs associated with workforce planning and require support to develop knowledge about relevant legislation and policy, tools, methods of data collection, or how to lead on workforce planning. Understanding and utilising published data, adopting workforce methodology to develop local plans, and modelling the connective behaviours of compassionate leadership are all examples where education directly related to workforce planning will be required. Secondly, the NES NMAHP Development Framework, transforming roles and the education and development associated with skill utilisation will support all staff to maximise their skills and abilities and optimise the impact of the AHP workforce. Understanding the potential and impact of advanced practice, digital skills, technology enabled practice and the future of artificial intelligence in clinical practice will be key in delivering the change we need.

Without the data capabilities or workforce planning skills to undertake a systematic approach, AHP workforce planning continues to be complicated by unnecessary uncertainty. Best practice is to ensure workforce characteristics are described in the way that workload demand is captured, but NES does not currently hold or publish AHP data with the level of detail needed to comprehensively inform workforce planning in this way. Additionally, with neither centrally commissioned numbers of pre-registration education places for AHPs or any guarantee of AHP employment in Scotland, there is a lack of joined up workforce planning between numbers of pre-registration place requirements and the need for employers to create employment opportunities.

Current limitations on workforce data are the inability to differentiate AHP workforce beyond a whole profession, difficulties in differentiating AHP data from larger data sets, challenges evidencing the AHP contribution within the wider MDT, wide variation in service offers, design and performance measurement, and a lack of joined up thinking regarding workload. Building on the strengths of the larger set of workforce descriptors available for nursing and midwifery and our medical and dental colleagues, there is a compelling case for the development of a national classification of occupations for AHPs.

Additional challenges include a lack of ability to capture public health and whole population interventions, barriers to gathering complete national AHP data sets, and historic challenges in developing the required infrastructure improvements to enable the collection and processing of AHP

data. Understanding local data in the context of local services will also help identify the limitations, differences and variations of data systems, practice, and outcomes across Scotland and what this means in the context of local service objectives, resources, and pressures.

Defining a workforce plan that supports AHPs to articulate their contribution beyond short term targets and numbers of direct contacts will require joined up planning, delivery models, and governance. The ability to evidence the impact of doing nothing is a key consideration in workforce planning, and mechanisms to capture the disadvantage, harm, or increased requirement for input following a delay in services is crucial. There is currently no local or national mechanism to gather data on outcomes, including the impact of not accessing services and support. Without being clear how all these issues shape our workforce planning decisions, we risk producing workforce plans that only marginally adapt our existing models and limit our potential for transformation and the ability to harnesses the power of integrated services.

The NES Strategy outlines the ambitions and plans to ensure a skilled and sustainable workforce with a number of commitments to support workforce planning; to increasingly engage in developing the digital infrastructure, to extend education support that informs workforce planning and provide high quality evidence and impact assessment informed by data analysis, and to improve the employment journey, staff wellbeing and wellness. NES must continue to develop and improve the NHS AHP workforce data collection, analysis and publication capacity to confidently inform Scottish Government, NHS boards and integrated authorities on national and local AHP workforce issues.

This report recommends that NES:

- engage with Scottish Government, other national organisations, and local and national eHealth leads across sectors to drive the local infrastructure improvements required to collect and process AHP data.
- review, recommend and secure the appropriate AHP and data analyst support within NES to advance this work.
- explore the need for national and local access to data analysts, workforce planning expertise and other key roles such as health economists and social policy researchers.

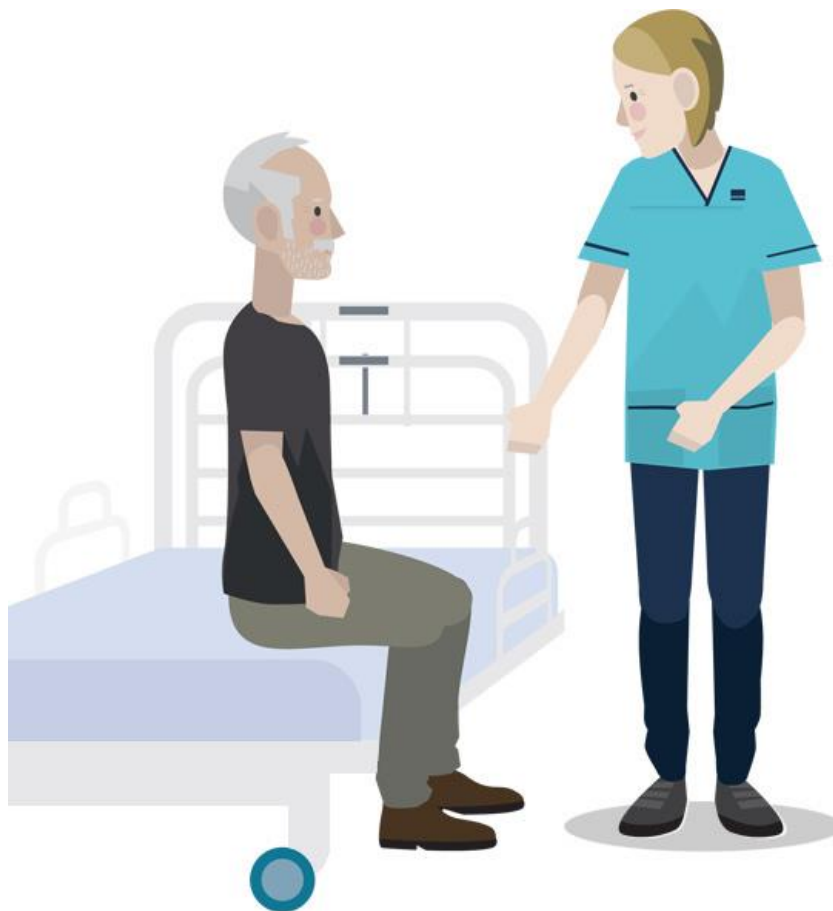
Further short-term objectives recommended in this report are a proposed way forward, not an approved or commissioned plan. Multiagency agreement and a commitment to appropriate resources are essential to progress this work and bring meaningful change for AHPs. Recommendations are for NES to work collaboratively and flexibly with a range of stakeholders to understand and develop national workforce planning principles and local capabilities.

As the source for Official Statistics on the NHS Scotland (NHSS) workforce, NES must build the best possible picture of existing AHP workforce data. Recommendations are to develop a National Occupation Classification Index for AHPs, to work with other organisations and agencies to improve data collection, analysis and publication that is also relevant for AHPs employed within other sectors and services. NES

should provide a range of education and training to support and develop the workforce planning capabilities of AHPs that utilises the Six Steps Methodology to Integrated Workforce Planning^[5].

NES should also offer education and support to increase the capacity, skills and knowledge of senior leaders and teams to interpret and best use data, understand the central role of data in everyday practice and outline the challenges and benefits of data collection that supports quality improvement and sustainable change. It is also essential that NES continues to support the development of leaders across our organisations to acquire the right range of operational and strategic skills.

Finally, NES cannot and should not seek to resolve the challenges of AHP workforce planning alone. To make these recommendations become a reality, significant thought, coordinated planning and deliberate action will be required at the highest level. Leaders must seek to minimise, and not underestimate, the potential for disruption across the system in addressing the challenges of AHP workforce planning. The importance of collaboration across sectors and organisations is central to these ambitions and workforce decision makers must jointly own and address the challenges of AHP workforce planning. Those who lead must be willing listeners and actors in change. AHPs cannot make the required change alone.



Definitions

While not an extensive list, some of the key terms used within this document are described below.

Burden of disease	The sum of mortality and morbidity.
Incidence	The proportion or rate of people within a defined population who develop a condition during a particular time period.
Prevalence	The proportion of a defined population who have a condition at or during a particular time period. This can be expressed as the fraction, a percentage, or most commonly as the number of cases per 1000, 10,000 or 100,000.
Population data	Information about a defined population. This might include quantitative information such as age demographics, measures of deprivation, or qualitative information such as the thoughts and wishes of a local community.
Service offers and supports	The term used to describe the full range of activities and interventions offered by an AHP service.
Service need	The demand a service could expect to see if prevalence was addressed in entirety.
Service capacity	The capacity a service has based on the workforce in post and influenced by the chosen model of delivery.
Service demand	The demand a service experiences based on known requests for assistance or referrals.
Workforce demand	The sum of employment and vacancies. Workforce demand is generated by the creation of funded and available posts.
Workload information	The work which is generated for a team or service from known demand and predicted need. This information is predominately associated with outputs, person-centred outcomes and capacity. Workload information will be influenced by workforce information.

Workforce information	The information relating to workforce that supports the ability to plan, establish and support the right types and numbers of staff with the right skills are available to deliver the right care, in the right place, at the right time. Workforce information is predominately associated with higher level outcomes, strategic ambitions, and service plans (see also workforce planning). Workforce information will be influenced by workload information.
Workforce Development	The education, training and development of the workforce to support staff acquire the skills, knowledge and behaviours necessary to perform a specific role and ensure a flexible and adaptable workforce to meet the needs of current and future demands.
Workforce plan(ning)	The process of workforce planning, based on the Six Step Methodology of Integrated Workforce Planning, that a team, service, directorate or organisation may undertake.
Integrated Workforce Plan	This term relates specifically to the 2019 joint Scottish Government and COSLA publication.
Universal	Population based activities which support and enable communities to understand and manage their own health, wellness, and wellbeing.
Targeted	Population based activities which target a specific area of need in order to support and enable communities to understand and manage their own health, wellness, and wellbeing.
Specialist	Individualised, not necessarily individually delivered interventions that focus on specific need and functional outcomes relating to an identified need.

Acknowledgements

This report was produced between February and May 2021 and discusses the challenges of integrated workforce planning faced by AHPs. While workforce planning is not a new concept, seeking a collective understanding of the process has brought focus to the challenges and opportunities in a new way.

Despite being a comprehensive overview of AHP workforce planning within a whole system approach, there will be specific issues that have not been included for discussion, or perhaps not identified. NES is a learning organisation and will continue to welcome discussion and information sharing, listen to stakeholders, learn together and develop whole system thinking.

I am incredibly grateful for the time and expert knowledge freely given while researching this report. My thanks and gratitude to David Wylie and the NES AHP team, and Colin Tilley and the NES Digital team for their continued support in linking this work to other parts of the system.

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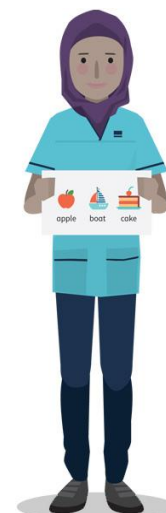
I would particularly like to thank AHPFS and all the Professional Bodies who contributed to the discussion, along with the HEI AHP Academic Heads and the AHP Directors of Scotland Group (ADSG) for their collective and individual contribution and support.

I hope that by raising many of the issues relevant to AHP workforce planning, national and local conversations will grow and spark change as NES grows its capacity to support quality integrated workforce planning.



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Introduction

In line with the recommendations in Part 1 and Part 2 of the National Health and Social Care Workforce Plans^[1, 2], NHS Education for Scotland (NES) is the source for Official Statistics on the NHS Scotland (NHSS) workforce. This report has been written as part of a short-term secondment within the AHP workstreams at NES to explore the challenges and opportunities of workforce planning for AHPs, set out the historical context of previous initiatives related to AHP workforce planning, establish the current national position, and propose the action specifically required from NES to deliver high-quality data, analysis and modelling for this staff group.

The NHS Education for Scotland (NES) Strategy 2019-2024^[4] extends the traditional education and development work of NES and sets out the organisation's new role in workforce data and planning within the NHS. NES recognises that workforce planning is a complex, multi-dimensional process that evolves and adapts to changing circumstances. NES further recognises that the NHS is only one employer of AHPs, and workforce planning must consider a range of AHP service settings. By improving our data capabilities and extending education programmes to support widespread improvement in data skills, NES will improve the quality of AHP data that is collected, collated, analysed and published.

NES has a key role to play in quality workforce planning but also recognises the need for national direction, clear accountability and strong national leadership to steer the required collaborative and co-operative practice between partner organisations to bring meaningful change for AHPs. A recent report from the King's Fund^[3] cites poor workforce planning, weak policy and fragmented responsibility as the cause of chronic excessive workload and a staffing crisis across the UK's health and social care settings. Quality workforce planning will not be achieved by one organisation or by adopting a single tool or practice. Multiagency working and willing cooperation are required across sector to ensure the tools we use to gather the information for one aspect of workforce planning bring connectivity and value to others.

Although workforce planning ultimately predicts the numbers and skills of staff required for the future, broad examination of multiple factors to inform workforce decisions is required. Quality data to fully understand existing workforce models is an absolute requirement for AHPs to undertake quality workforce planning that creates a shared and agreed vision of what we hope to achieve together.

We must also have clear, shared outcomes, that better link career choices, preregistration training, available employment opportunities and post registration development to maximise AHP impact. Workforce planning must also include intentional action to create the healthy working culture that we all deserve. Without being clear how all these issues will shape our workforce planning decisions we risk producing workforce plans that only marginally adapt existing models and limit our potential for transformation.

In considering these challenges, and to ensure quality workforce planning is a realistic goal for AHPs within the next 10 years, this report firstly identifies four foundational themes. These are shared decision

making and shared responsibility for meaningful outcomes, staff wellbeing and wellness, education, skills, knowledge and behaviours, and how we gather and use workforce data.

Secondly, AHP workforce planning is reviewed using the Six Steps Methodology to Integrated Workforce Planning^[5] as a framework for discussion in considering the role of NES. Finally, conclusions, the role of NES and recommended next steps and key actions for meaningful change in the short, medium, and long term are discussed.

NES cannot and should not seek to resolve the challenges of AHP workforce planning alone. To make the recommendations in this report a reality, significant and deliberate action will be required at the highest level. AHPs cannot make the change required without those who lead being willing listeners and actors in change. The importance of collaboration across sectors and organisations is central to these ambitions. Workforce decision makers will need to jointly own and address AHP workforce planning challenges that brings the change required to best serve the people and communities of Scotland.

Although NES has a key role to play in quality workforce planning, the recommendations in this report can only become a reality with a commitment from Scottish Government, NES, employers of AHPs, and the other key partners in order to create the conditions that allow this work to progress. National direction, clear accountability and strong national leadership are required to steer the collaborative and co-operative practice between partner organisations that will bring meaningful change for AHPs.

With this in mind, and in recognition of the significant national commitment required, the recommendations in this report can only be viewed as a proposed way forward, not a commissioned plan, and will be dependent on securing both funding and agreement on how to progress the delivery of quality workforce planning for AHPs.



The Purpose for AHPs

The AHP workforce in Scotland will offer expertise, assessment, diagnostics, advice, support, education resources and/or where needed, direct intervention to people of all ages to improve the mental and physical health and well-being. As experts in rehabilitation, self-management, and reablement, AHPs will provide consistent, person-centred, preventative and therapeutic care for children and adults that enable the people and communities of Scotland to achieve the health and wellbeing outcomes that matter to them.

This will be achieved through a national commitment to working collaboratively across sectors, organisations, populations, targeted groups, and with individuals, to support families and caregivers in changing environments. Service offers and supports will be adaptable and accessible with a range of offers designed in response to the needs of local communities.

By establishing a comprehensive and robust understanding of the workforce required to meet the predicted need of local populations, services will identify gaps and make informed decisions about the use of resources across the whole system. This will support an integrated approach to meet the needs of local communities and the needs of individuals in a way that balances the needs of those asking for help, where that help is offered, and by whom.



Section 1: The Foundations of Workforce Planning for the Future

Despite a number of AHP workforce initiatives in recent years, there is no national workforce planning strategy for AHPs. The challenge of data collection stalled and interrupted workstreams, and the limitations of small projects commissioned in isolation has resulted in slow progress towards finding a safe, effective and sustainable national solution. As a result, opportunities for learning, generating new ideas and improving whole-system outcomes are being lost.

Successful workforce planning must reflect whole systems, organisations and sectors to support AHPs realise the power of integrated working. Of course, not all AHPs work within the NHS (see appendix 1) and future workforce predictions limited to the needs of the NHS risks a shortfall in available workforce. An understanding of the range of employment opportunities in Scotland is essential to comprehensively plan for an adaptable and sustainable AHP workforce of the future.

The National Policy and Workforce Planning

Workforce planning has been a statutory requirement in Scotland in the NHS since 2005 with the publication of the National Workforce Planning Framework^[6]. This established the requirement for all NHS boards to incorporate workforce planning with wider strategy. NHS boards must ensure workforce planning is a key element of the wider planning within NHS Scotland to ensure the highest quality of care, service offers, and supports are delivered by the workforce.

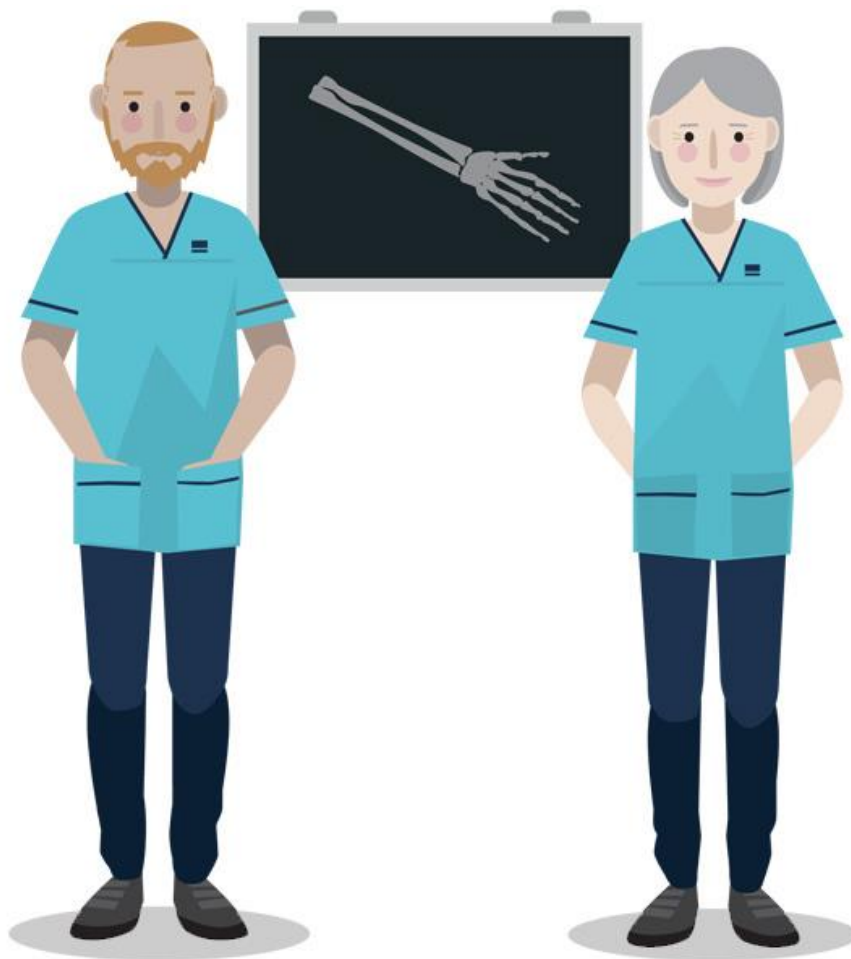
The trilogy of National Health and Social Care Workforce Plans^[1,2,7] set out recommendations to support workforce plans that deliver high-quality, person-centred integrated care with the right people, in the right place, at the right time. Building on these recommendations, the Integrated Health and Social Care Workforce Plan for Scotland^[8] sets out a whole-system approach to workforce planning that puts safe, effective and high-quality integrated services at the heart of all workforce decisions.

Acknowledging the complex interactions across all parts of the health and social care system and the need for cross sector working between health and social care, local authority, education, Third Sector partners and other employers of healthcare professionals, national ambitions are to move away from uniprofessional planning and towards multiprofessional and multidisciplinary provision of person-centred, integrated services. The Integrated Health and Social Care Workforce Plan sets out scenarios for workforce change around the three priority areas of community-based workforce, mental health, and waiting time performance and recognises the need to improve data collection and analytical skills to inform national progress.

All NHS boards and Health and Social Care Partnerships (HSCPs) must develop their own integrated workforce plans by March 2022 to cover the period 1st April 2022 until 31st March 2025. This will require

HSCPs to ensure workforce plans accurately capture what local communities need and ensure the workforce is made up of the right skill mix to support the required change.

Therefore, whether the AHP workforce is a community dietetics service, a hospital diagnostic radiography service, a hospital outpatients orthoptics service, an occupational therapy children and young people's service delivering in early years settings, or AHPs embedded within a multiprofessional team, all AHPs must adopt workforce planning as a core activity that links cohesively to the relevant NHS board, HSCP, or community planning ambitions and priorities.



Theme 1: Shared Decision Making and Shared Responsibility for Outcomes

AHPs within health, social care, local authority and education teams do not work in isolation. To deliver whole-system transformational change, workforce plans must reflect the ways we deliver services based on a shared responsibility to improve outcomes and make best use of our combined resources, knowledge and skills. Across sectors, organisations, services and teams, everyone who plays a role in planning or delivering service offers and supports must also understand their contribution is vital to realise the improved outcomes we desire.

Clarity about outcomes is important for successful workforce planning in all settings as the outcomes a service hopes to deliver will determine the type of roles and the mix of skills required. Differences in service objectives and outcomes will create differences in workforce needs. Meaningful comparison of workforce numbers between services can only be achieved through close examination of local context and the meaningful outcomes a service can demonstrate. Therefore, a workforce plan that requires a change to the numbers or skill within the AHP workforce must be rooted in the evidence of how to best achieve meaningful outcomes.

Understanding what we mean when talking about outcomes is vital. It is important to be clear about whether an outcome is a strategic outcome, a personal outcome that is meaningful to an individual, a functional outcome a clinician hopes to achieve, an efficiency outcome or target, or not an outcome at all but instead an activity output.

Working towards achieving the National Health and Wellbeing Outcomes for Scotland^[9] will require AHPs to align to a whole-system approach that finds new ways for all public services, Third Sector, community organisations and people to work together. Making collaboration work may be the single most important issue for AHPs working across sectors and services to build the strong relationships and cooperative networks necessary for meaningful and sustainable change.

The need for better collaboration rather than competition across and between sectors is widely recognised as a crucial component in the delivery of high-quality integrated care. AHPs embedded in multiprofessional teams may find this more straightforward to establish, but for many the relationship is complex with small uniprofessional AHPs teams dispersed across whole systems, delivering across several service areas at once. For example, an art therapist working exclusively within a community learning disability service may more easily form collaborative interprofessional working practices. In contrast, a dietitian expected to provide a service across learning disability, mental health, primary care and community rehabilitation services may find greater challenges in being included in collaborative working.

For some AHPs who work within hospital settings or a more 'medical model' of delivery, collaboration may not be with other agencies but with other departments and professions out with Allied Health. Podiatrists working closely with orthopaedic surgeons, or radiographers working closely with radiologists

are good examples where outcomes are agreed together and alongside the people accessing those services.

The real challenge is to deliver equity of outcomes for people and not necessarily equality of input. This will not be achieved in silo by individual professions and will require AHPs to learn from services who have evidenced a cultural shift towards the use of specialist resources in the most impactful ways. This will change how we view workload and create new opportunities for system-wide workforce planning. As we Remobilise, Recover and Redesign^[10], AHP workforce planning choices can only be truly understood by examining local need, our existing resource and joint planning with all our delivery partners in all settings. How we perceive each other's role and work between professions will be key for leaders to understand the potentials of what could be possible.

However, creating an accessible and adaptable model across the whole system does not come without challenges. AHPs will need to consider how resources are used across early intervention and prevention for the whole population, people at higher risk in the population, as well as those active on our caseloads, how this looks different across services and teams and how this changes over time.

Despite knowing that collaboration and partnership working is the key to sustainable change, there is very little evidence about which types of collaboration work best and how this impacts overall population health. It is vital to build a realistic and representative picture of how successful service offers and supports are designed and delivered and how outcomes improve across populations as a result.



Theme 2: Staff Wellbeing and Wellness

Compassion sits at the heart of all we do. The NES Strategy recognises the need for an increased focus on the health and well-being of staff and developing the skills to listen, understand and foster caring and compassionate relationships. As the NHS and social care works to rebuild services in a new world alongside covid-19, it is important not to miss the opportunity to also embed staff wellbeing and wellness as a core element of our culture.

The role of NES in healthy working cultures is closely linked with quality workforce planning. Intentional planning and action that allows staff to deliver all aspects of their role and address wellbeing needs will have consequences when estimating the number of AHP staff required in any service. Committing to the health, wellbeing and wellness of our staff means creating the time and space to develop the supports that matter most to teams. Appendix 2 describes an example of good practice in NHS Forth Valley.

By not paying attention to staff values, wellbeing and wellness, services risk increasing workforce challenges. Higher turnover rates, resultant vacancies and high staff sickness and absence rates all impact on the workforce planning required to provide quality services. Compassionate leadership must take responsibility for ensuring we have the tools and information to describe the current system, articulate pressure points, recognise chronic overwork and support staff to safely work within service limitations.

One of the aims of the Health and Care (Staffing) (Scotland) Act 2019^[11], is to improve the employment experience and working conditions for all health and care staff. In addition to the duties of the act regarding real-time staffing workload measurement, employers are required to seek the views of staff and take these into consideration alongside staff wellbeing when making staffing decisions.

This is important for workforce planning as teams who do not feel properly valued, supported, or appropriately represented often continue to work in silo. By addressing staff wellbeing and wellness robustly there is real opportunity to develop shared ownership and improve collaborative working if leaders are willing to stop and really listen.



Theme 3: Education, Skills, Knowledge and Behaviours

Workforce planning requires education and development to support the acquisition of new skills, knowledge and behaviours in two essential areas. Firstly, AHPs may have learning needs associated with workforce planning itself. For some AHPs this will involve developing knowledge about relevant legislation and policy, tools and methods of collecting data. For others, a larger set of skills will be required to take an active role in data collection or leading on workforce planning.

Understanding and utilising published data, confidently using workforce tools, adopting workforce methodology to develop local plans and modelling the connective behaviours of compassionate leadership are all examples where education directly related to workforce planning will be required. Better understanding of the methodologies of workforce planning and their application will also support AHPs to engage partners across the whole system in building a shared purpose and shared responsibility in realising positive change.

However, understanding the system and predicting the numbers of staff required in AHP services is only one aspect of the workforce planning education agenda. Registered practitioners, advanced and consultant roles, support staff and assistant practitioners must maximise their skills and abilities within their scope of practice. The education and development associated with skill maximisation and transforming roles is a core requirement of effective workforce plans and will support services to plan and optimise the impact of the AHP workforce.

Understanding the potential and impact of advanced practice, digital skills, technology enabled practice and the future of artificial intelligence in clinical practice will be key alongside skill mix utilisation to deliver the change we need.



Theme 4: How We Gather and Use Workforce Data

Workforce planning for many AHP services is often a descriptive account of existing resource and allocation rather than a considered and balanced response to meet needs across the whole system. This leads to opportunistic rather than methodical or systematic workforce planning.

Good workforce data informs good decision making. AHPs do not currently have the range of high-quality quantitative and qualitative data to inform those decisions. Without the data capabilities or workforce planning skills to undertake a systematic approach, AHP workforce planning continues to be complicated by unnecessary uncertainty. Limited workforce and population data and variable availability and functionality of eSystems sit alongside the challenges created by the historical workforce structures of Agenda for Change (AfC), chronic workload pressures, efficiency savings and targeted recruitment.

Wherever AHPs practice, multi-agency collaboration, investment in digital infrastructure, development of specialist workforce planning skills, coordinated national and local workforce data and improved local data management must be a priority. A truly integrated approach will require a new level of trust, openness and honesty about all the resources we have and how they can be best used.

The Health and Care (Staffing (Scotland) Act 2019 places a duty on NHS boards and integrated authorities to ensure that right number of staff, with the right skills are available at any given time to deliver the change to Scotland health and wellbeing we desire. The Act outlines the requirement to determine and report on real-time staffing resources and establish mitigation and escalation processes for severe and recurring risk.

Duties of the Act will require leaders to make informed decisions about how we best choose to meet need, with a responsibility to improve the employment experience and working conditions for clinical staff. Leaders will also be required to seek and consider expert professional advice before reporting on staffing decisions and make provision for the professionals consulted to comment on those outcomes.

To meet the obligations of the act, we must base workforce decisions on how to best meet predicted need. However, traditional methods that focus only on capturing existing activity are fundamentally flawed as we cannot understand wider system demand by examining existing caseloads. To improve outcomes, we must consider of a range of population and prevalence data linked with local knowledge, local service context and local workforce resource to deliver accessible, flexible services that people can access when and where they need them.

Best practice is to ensure workforce characteristics are described in the way that demand is captured. Where demand is captured based on the requirement of specific skills, the data must be able to identify those who can meet that need to clearly articulate the harm that arises from the absence of services; missed care, delayed care, absent care and the impact of inequalities. Should AHPs be asked to provide this data, variability in systems and variance of descriptors across and between AHP

professions would require national coordination and agreement to confidently provide assurance that any data was comparable, understood and appropriately utilised.

Additionally, NES does not currently have the data intelligence capability to consistently provide the level of detail required to comprehensively inform workforce planning e.g. it is not possible to determine from the data how many staff currently work in clinical areas like children's services, mental health, or community practice so cannot meaningfully link to population, deprivation, incidence and prevalence data.

As we seek to build the right supports and service offers, we must be prepared to let go of some of our most deeply held beliefs about what makes a good service. Workforce planning starts with outcomes, and we know that measuring change in this way is challenging. However, we cannot presume that which is not easily measured is not important. Poorly chosen data measures risk creating an incentive to amplify existing activity without the changes in practice required to improve the health and wellbeing of Scotland's communities.

AHPs must also develop improved data sharing capabilities across health and social care, social services, local authorities, and education, Third Sector and private enterprise to understand the whole system. The ability to extract data knowledge, develop workforce insight then take action to see impactful change will depend on how we share and use data to design the measures we base workforce decisions upon.



Section 2: The Six-Step Methodology for Workforce Planning

The Six Steps Methodology to Integrated Workforce Planning is a practical approach to planning used by the NHS and some social care providers across all four nations. The Scottish Government made specific reference to this methodology as best practice in the revised workforce planning guidance published in CEL 32 (2011)^[12].



The Six Steps Methodology requires a systematic and stepwise approach, but also an understanding of how intrinsically linked each step is to each of the others.

Every step in the process requires data to inform decisions, with each step being individually and collectively dependent on these data to deliver a meaningful integrated workforce plan.

This report has utilised The Six Steps Methodology to explore the role of NES within workforce planning. Although many AHPs already use this framework, those who are less familiar with this methodology may find the following sections helpful as an initial introduction.

NES has been requested by Scottish Government to lead on the development of a national digital platform to replace the model of multiple systems which led to duplication and placed limitations on our use of data.

As a result, not every component within each of the six steps is discussed within this report. Instead, some of challenges and opportunities for AHP are considered alongside the role of NES in relation to integrated workforce planning.

Step One: Define the Plan

1.1 Purpose

AHPs often deliver across whole systems but remain operationally and professionally managed within their uniprofessional groups. At an organisational level, workforce plans often continue to be produced in professional silos. As a result, AHPs are rarely commissioned in an integrated way as part of an integrated service, clinical delivery area, or team that recognises the wide range of partners across health and social care, local authority, education, Third Sector partners and other employers of AHPs. Focusing solely on professional groups or traditional teams may create risk within the wider system.

The Integrated Health and Social Care Workforce Plan is inclusive of all health, social and primary care settings. However, the use of narrow definitions resulted in very few of the skills Allied Health Professions bring to an integrated team being mentioned and did not address how an integrated plan should be developed. If we are to move to a truly multidisciplinary system, an integrated workforce plan must ensure the professionals within a multidisciplinary team (MDT) collectively possess the appropriate skills in the appropriate number to meet an individual's needs.

Quality workforce planning must be clear about what the plan enables the service to do and how each member of the workforce contributes to realising positive change. However, when discussing primary care advanced MSK practitioners within the Integrated Health and Social Care Plan, physiotherapy is mentioned but podiatry is not. Given the essential role of podiatrists in assessing, diagnosing, treating, and rehabilitating MSK problems of the foot and lower limb, podiatrists have key and unique skills to contribute to this MDT. There have also been a number of positive opportunities in primary care for AHPs. With the development of the First Contact Practitioner (FCP) roles, a broader discussion around roles in primary care, particularly for physiotherapy, occupational therapy and dietetics, has led to increased collaborative practice and improved outcomes.

A clear definition of the challenges we are trying to address is necessary to construct a workforce plan, but we often work with a limited understanding of need within local communities. Systematically addressing our workforce challenges means first understanding the diverse needs local populations and the impact of inequalities and socioeconomic determinants of health, then focusing on co-production, measuring the outcomes that matter to people and establishing accountability beyond single service units.

The 2021 Feeley Independent Review of Adult Social Care^[13] highlights the need for better whole system thinking, e.g. better relationships between children and young peoples' services and adult health and social care to support better life chances, better health, wellbeing and wellness in adulthood. In this context, workforce planning should recognise the need and plan for close joint working between the implementation of The Promise^[14] and adult services. The Review of Additional Support for Learning^[15] also calls for us to work in partnership to develop and deliver new ways of working to best meet the needs of all our children and young people.

1.2 Scope

Integrated workforce planning must clearly outline the scope of the plan and include details of the services, staff and populations that are covered by the plan. This should include any challenges and opportunities the plan presents both clinically and financially across the short, medium and long-term. Without an integrated workforce plan, this can be challenging for AHPs who may not deliver care at the point in the system where impact is realised.

Services must be able to map what is currently on offer against the predicted need of local populations before they can clearly identify the scope and change required to meet that future need^[16,17]. Data is available on the size, composition, location and projections of the Scottish population^[18], and levels of deprivation^[19]. Information regarding some disease prevalence^[20] is also available, but more work will be required to triangulate this with the likely need for each profession within their local area.

Understanding population data, incidence and prevalence of common long-term conditions is key. For example, if 34% of people with diabetes are at risk of developing a diabetic foot ulcer in their lifetime^[21], over 100,000 diabetic people in Scotland will likely require regular preventative care from their community podiatry service^[22]. An integrated approach will be required between district nurse, specialist diabetes nursing, wound care and surgical colleagues to reduce the risk of ulcers and amputation.

However, if the aim is to achieve equity of outcomes and not equality of input, we will need to be clear about what we mean when we discuss demand. The gap between available posts and filled posts, the known demand for individual services, the predicted need within the populations based on national averages and local data considering the socio-economic determinants of health are all different measures of demand. In determining the scope of a workforce plan, service demand is the demand a service experiences based on known requests for assistance or referrals. However, local prevalence may look very different e.g. the percentage of adults with predicted risk of diabetic foot ulcer in a defined local population per 1000 based on local diabetes data and what that means for local services.

By planning and delivering services in this way, services could work towards a population-based way of understanding and responding to local need. There is currently limited data on what this means for individual professions but examining prevalence in this way is likely to describe need considerably differently to the inference drawn from burden of disease data. Morbidity and mortality rates alone will tell us very little about what this will mean for AHP workload if we are delivering the outcomes that are most meaningful to people and communities.

Burden of disease data links strongly with the consideration of impairment. The World Health Organisation (WHO) International Classification of Functioning, Disability and Health (ICF)^[23] is a biopsychosocial model and provides a common language and framework that considers the whole person and can be useful when considering a range of factors that may influence workforce planning.

The model helps shift from thinking about only impairment to focus on the positive abilities of a person in their environment and supports achieving meaningful outcomes. ICF is structured in two parts: Function and Disability, and Contextual Factors. Function and Disability includes the domains of Body Functions and Structure, and Activity and Participation. Contextual Factors includes Environmental Factors and Personal Factors. The ICF model demonstrates the importance of understanding that impairment is only one consideration in person-centred care.

Profession specific knowledge of local communities also brings the potential to develop better integrated working beyond individual professions and recognise the contribution of other partners in achieving Scotland's health and wellbeing outcomes. Understanding local data in a national context also helps identify the limitations, differences and variations of data systems and practice across Scotland, particularly how workforce resource and data is used, the functional outcomes reported and what this means in the context of more traditional measures e.g. waiting times and waiting numbers. To help better understand the AHP workforce requirements within children and young people's (CYP) services, CYP SLT Services across Scotland have recently undertaken a benchmarking of workforce capacity, population need, patterns of demand and analysis of service models (see appendix 3).

Another area where AHPs know they know they can make a difference and extend their scope is working within and alongside teams delivering population-based activity and public health approaches (see appendix 4). Focusing on preventative measures and anticipating future health and care needs will support a move from crisis intervention to model which is enabling Scotland's citizens to live good lives, well.

Although this is one area in which AHPs can make a significant impact, it is currently difficult to quantify or evidence. Intended for a wide audience, a recent publication from the Royal College of Speech and Language Therapists provides helpful guidance for how to measure the outcomes of population-based service offers and supports that not caseload based, individualised offers^[24].

Defining the scope of a plan that supports AHPs to articulate value and contribution beyond short term targets and numbers of direct contacts will require joined up planning, delivery models and governance. The role of NES in collating and analysing appropriate data would support AHPs to clearly articulate their contribution to a workforce plan or harness the power of integrated services.

1.3 Ownership

Strong collaborative relationships are required and may often be across health, social care, local authority, education, Third Sector and private practice. This will include shared decision making at every level to ensure a clear purpose for the organisations and services involved. If integration is the aim, AHPs must consider how our relationships across service areas, organisations and sectors will develop and grow.

Ensuring everyone who plays a role in the planning and delivery of a workforce plan understands their contribution to the success of the plan is vital. AHPs report limited integrated opportunities to engage in the visioning of integrated workforce plans and a lack of consultation with regards to finding system wide workforce solutions. As a result, AHPs report that their contribution is limited to a description of existing resource and broad ambition rather than ownership of solutions. For the best chance of success AHPs must link data to the outcomes that matter to people, communities, stakeholders and decision makers at all levels.



Step Two: Map the Service Change

Mapping the service change is a particularly challenging step for AHPs. Broad analysis is required to map the service change within an integrated workforce plan, requiring a range of supportive data to evidence the change options. However, a recent report^[25] on the current AHP data position within Scotland highlighted considerable gaps at a local and national level.

Challenges in differentiating AHP data from larger data sets or evidencing the AHP contribution within the wider MDT, difficulties capturing public health and whole population interventions, barriers to gathering complete national AHP data sets and a lack of clear AHP leadership to bring about the required improvements in the infrastructure to enable the collection and processing of AHP data were reported as areas for improvement.

The ability to reflect, review and examine potential change requires the ability to make reasonable predictions of the goals and benefits of change based on the current evidence. Competing eHealth priorities within organisations have resulted in limited or absent AHP data collection, interrogation and analysis to facilitate this process and support redesign alongside the views of people and communities.

Specific local targets within organisations can be perceived as making a more joined up approach difficult to achieve. This can be compounded by funding streams and employment contracts creating resistance and unnecessary challenges to removing both real and perceived barriers. Working together to create a shared responsibility to achieve jointly agreed outcomes is key.

2.1 Goals and Benefits of Change

After defining the plan, it should be clear what the plan is aiming to achieve, identifying and driving the goals and benefits alongside costs and meaningful measures of effectively measuring any change. This should consider broad measures and not be limited to solely headcounts, numbers of people seen, waiting lists numbers and waiting times which do not relate to individual or population changes in wellbeing outcomes. More work is required to be clear about the role of these target driven data sets.

AHPs must also be able to articulate how policy and strategy have created the impetus for change. The Health and Social Care Delivery Plan^[26], Realistic Medicine^[27] and the National Health and Wellbeing Outcomes Framework clearly set out the national ambitions for health and social care and detail key drivers alongside and the national integration agenda^[28].

The Health and Sport Committee report on the Future of Primary Care^[29] clearly recognises the role of a number of the allied health professions in delivering meaningful outcomes within primary and community care teams. Integrated workforce planning that includes AHPs will be central to realising this ambition. Working towards achieving the Public Health Priorities for Scotland^[30] will require AHPs to align

to a whole-system approach that finds new ways for health and social care, local authority, education, Third Sector partners, community organisations and people to work together.

The Feeley Report and Independent Review of Adult Social Care^[13] also recognised the importance of working through collaboration, rather than competition. The report also focuses on the components of the system that lie beyond the location of delivery and often depend on long term relationship development. AHPs have an opportunity to contribute to mapping the wider service change required in an inclusive and sustainable whole-system approach to workforce planning.

Each profession will have a detailed knowledge of the national and UK wide drivers in addition to the local challenges and opportunities to inform integrated workforce planning. For example, the Scottish Radiology Transformational Programme (SRTP)^[31] clearly sets out the need to review the AHP contribution made by radiography alongside the medical input from radiology services. This will be instrumental in driving change and adopting a more integrated service delivery and workforce planning approach to address ongoing shortages of radiology staff.

The ambitions of the SRTP include increasing advanced practising radiographers and consultant radiographers contributing to the reporting of images and online virtual services providing reports. Advancing practice here will require the workforce as a whole to reframe the role of diagnostics and how these practitioners could enable improved care through referral to appropriate agencies that bypass the step-by-step system already seen in place. However, not all strategy or action plans mention or consider specific workforce requirements. The December 2020 Recovery and Redesign: Cancer Services Action Plan^[32] does not discuss the service change required or workforce challenges for diagnostic and therapeutic radiographers who deliver all diagnostic imaging and radiation treatment to cancer patients.

Another important driver for AHPs is The Framework for supporting people through Recovery and Rehabilitation during and after the COVID-19 Pandemic^[33] which has brought a renewed focus on the importance of rehabilitation (see appendix 5). The pandemic has highlighted the importance of having AHPs integrated within multidisciplinary teams in a variety of healthcare settings from intensive care to rehabilitation services. A year on from the first impact of covid-19, many services are working through recovery plans and revisiting workforce planning.

AHPs report that additional pressures directly created by covid-19, and those that have been exacerbated by the pandemic are two different challenges to address alongside pre-existing system pressures. The Scottish Government has appointed an AHP Advisor to oversee the delivery of the Recovery and Rehabilitation Framework and support the service change and quality improvements required. The output of this work should be considered regarding the workforce planning implications for AHPs.

The nursing and midwifery Excellence in Care programme is a national approach to quality management and quality improvement. This programme was established in response to the Vale of Leven enquiry that identified systemic and individual failings in care and governance. Aligning with the Nursing 2030 Vision, the programme has established national standards and supports local improvement alongside strong

data and quality management approach. With a vision to extend this programme across the MDT, integrated workforce planning may benefit from establishing system wide core standards. If the vision to extend this programme across the MDT and include AHPs can be successful, steps to address the AHP data position including the lack of national standards agreed across AHPs will be an important starting point.

2.2 Drivers and Constraints

Understanding the forces that support and limit change at a local level can be a useful exercise in understanding the possibilities for service change. Carrying out a PESTLE analysis that considers the political, economic, social, technological, legal and environmental drivers and constraints can help determine the service change that will deliver the best results.

Some factors like legislation, policy and national strategy will be common to all services, but others will be more specific and locally driven. Understanding the factors that are most likely to bring about the desired change or stifle innovation will be uniquely determined by local circumstances. An example of the type of considerations within a PESTLE analysis in relation to AHP workforce planning can be found in appendix 6.

The forces that hamper change are frequently reported by AHPs to be challenging financial positions and recurring efficiency savings, a lack of data and difficulty linking any existing data comparably to the wider workforce metrics. Waiting times are also commonly reported to be an obstacle to achieving change.

Although data for all services is not reported or collated centrally, many AHP services report having waiting times in excess of the 18-week referral to treatment (RTT) standard, with some services anecdotally reporting waiting times in excess of a year. Official data is currently collected against the 4-week MSK waiting times target for 14 Territorial Boards, and NHS Musculoskeletal Advice and Triage Service (MATS) for four Allied Health Professions (occupational therapy, orthotics, physiotherapy and podiatry).

Even where waiting times data is available, AHP waiting times can be lost within the reporting framework. For example, the RTT clock will stop when a person is offered their first appointment from the wider treating team. Without consistent national data with the ability to determine waiting times for all professions, hidden waiting times will continue in countless pathways that incorporate AHP services.

For services like radiography, where referrals for a diagnostic service are received from all clinical areas, waiting lists and waiting times are useful indicators. However, there are many services where a waiting list will not be a good indicator of demand or need. Waiting lists that are used as a measure of workforce need is too simplistic. For example, CYP services, or those offering rehabilitation and longer-term support, a waiting list reflects the decision-making process at the point when a request for assistance has been made. The outcome at the point of referral is a crucial area of consideration in relation to workforce

planning. It is also worth considering the impact of the ‘worried well’ and the additional pressure this can place on services and waiting times. If a service accepts all referrals without understanding what support or service is being requested, it is likely to result in significant waiting times.

The role of the referrer is key if we are aiming for joint responsibility in achieving the meaningful outcomes we desire. Services should consider how many referrals are from third parties a person may have encountered who believe they may benefit from some kind of intervention but are not clear what that may be. Effective initial conversations at the point of request often help people receive the support they need more quickly. A good example of this is current work supported by NES on Effective Decision Making^[34].

AHPs also recognise that it is not enough to report on the length of wait alone. The impact of waiting times is essential information to inform decision about the best use of resources. The ability to evidence the impact of doing nothing is a key consideration in workforce planning and mechanism to capture the disadvantage, harm or increased requirement for input following a delay in services is crucial. Whether outcomes and impact, including the impact of not accessing services and support, could be identified and captured as part of a suite of workload measurement tools is unclear. Certainly, there is currently no local or national mechanism to gather this type of data.

2.3 Option Appraisal

Reviewing the options of service offers and supports will require AHPs to be clear how resources are used across the whole system. This must be considered for service offers and supports from early intervention and prevention for the whole population, to people at higher risk in the population, as well as those receiving individualised interventions or considered to be part of a service caseload. Some AHP services will provide service offers and support across all three of these areas and others will find their contribution means most of their work sits in one area only.

For some services e.g. CYP speech and language therapy, a proportion of the whole population will require referral or direct intervention, but significantly more are likely to require supports across population-based activities. Other services will work with targeted populations e.g. radiographers carrying out breast screening for women between 50 and 70 years of age, but ultimately complete an individual imaging intervention.

Data to complete option appraisals on how best to deploy staff across the whole system is often not available due to the challenges of capturing whole population or targeted population activity. Additionally, differences in how services describe their own activity may vary and add further uncertainty and confusion. Should the ambition be for national AHP datasets to join up outcomes, workload activity and workforce planning, NES may have a role in establishing clear, agreed terminology and AHP datasets.

Although referral numbers may have traditionally been considered a measure of need, services who have invested in the right balance of service offers and supports across the whole system may experience reduced numbers of referrals. If the aim is to build service offers that are accessible, flexible, delivered in partnership and provide the supports required to see people and communities thrive, it would be reasonable to assume that low referral rates for some specialist services would suggest the right support is being provided across the whole system. The Musculoskeletal Advice and Triage Service (MATs) is a good example of how a targeted helpline to offer musculoskeletal advice from nurses and physiotherapists has reduced referrals to local services.

This illustrates the importance of considering the service model when allocating workforce resources as qualitative data is brought to life by local context. Fundamental changes in activity change the shape of the service workload, the skills required of a workforce and the aims of workforce planning. Quantitative workforce data without the local context may suggest services are efficient when in fact, they do not meet need across the whole system. For example, based on data of local population, prevalence and predicted need, one service may only utilise 10% of its workforce at an individualised, specialist level because whole population supports are embedded across the system to meet need.

If this service were compared with another which uses 75% of resource at a specialist level, examining the qualitative data alone may lead to inaccurate analysis. Without local context and evidence to demonstrate the second service is meeting need across the whole system, it may seem more productive but only address the needs of a small section of the local population e.g. a physiotherapy service in a very deprived area of Scotland will need to offer tailored support provided by an appropriately skilled workforce. It is unlikely that a physiotherapy service with similar population numbers in a less deprived area will require exactly the same mix of knowledge, skills and behaviours.

Similarly, a radiography service in an area with higher incidence of cancers that respond well to radiation therapy will require a different size of workforce and skill mix than another area with similar population numbers, but lower incidence rates. In the case of radiation therapy, it is also important to recognise that not all services deliver the same treatment in every geographical area. This raises the question of whether, for some services, it may be more useful to consider workforce planning in a supra-regional or even national context.

2.4 Working Models

Mapping the change within an integrated workforce plan must be done in collaboration, ensuring the views of people and communities are listened to when choosing the most effective model. This is particularly important where AHPs report the desired outcomes are unlikely due to a lack of workforce.

NES is currently able to provide some workforce scenario planning, but this is limited to available data. It is possible that the types of scenario planning discussed in Step 5 could be developed to include other types of data should it be collected and reported. This could provide evidenced based examples where

we know AHP skill mix will make a significant difference and be a powerful driver in local workforce planning decision making.

It is important to note that not all AHP professions experience the same challenges of supply, demand, or impact measurement. Comprehensive data collection and analysis will not only will differentiate the diversity of relevant factors for each AHP profession, but also support whole system thinking and highlight the importance of integrated workforce planning.

Without integrated workforce planning, attempts to resolve a short fall by plugging gaps in one area may create gaps in others. For example, the supply of advanced practice physiotherapists in primary care requires post registration education and training programmes to upskill the workforce to take on these new roles. Current roles have been filled by clinicians who had already developed those skills and by reallocating this highly skilled part of the workforce, gaps have been created elsewhere in the system. Developing our workforce data to help understand these challenges will be a key role for NES in order to understand the impact of advanced roles on the workforce, as well as within the populations we serve.

We must also value working and learning together and ensure a mutual understanding of the roles and relationships required. AHPs already work collaboratively but more could be done to better understand our roles, how we are delivering change and how by knowing this we could better improve people's experience of services. A good example of this is the impact radiographers can make to the wider system beyond diagnostics. As radiographers are often the only healthcare professionals in contact with those attending for imaging following GP referral, a poster at the 2019 UK Imaging and Oncology National Congress^[35] showed how every contact can improve experiences and outcomes. By providing information, support and where appropriate onward referral, the radiographers in this study hoped to reduce the likelihood of a significant falls event in line with the national falls and frailty agendas.

A greater understanding of the impact of workforce activity across the whole system would support the targeted provision of education and development for AHPs, wherever they practice. NES will continue to liaise with other agencies and organisations to improve data collection, analysis and publication of data relevant for AHP workforce planning and work to improve data sharing agreements with non-NHS services that employ AHPs e.g. occupational therapists working in social care who may reduce future referral to NHS services through preventative or early intervention and reablement.



Step Three: Demand

In line with the recommendations in Part 1 and Part 2 of the National Workforce Plan, NHS Education for Scotland produces current workforce data within the NHS. A longer-term goal is to consider AHP workforce data for all AHPs, wherever they practice, in order to better understand the impact of AHP services across the whole system and support future planning.

3.1 Activity Analysis

Understanding current activity is the first step in being able to comprehensively review current practice and maximise impact.

AHP leaders reported that taking part in programmes of work to examine activity often provided good opportunities for positive change in practice to improve efficiency. However, improvement was often difficult to sustain over time, particularly where staff felt a change had been adopted with a 'done to' approach. Some areas have encouraged a 'done with' approach by utilising Job Planning to help individuals and teams link the organisations goals to their own priorities and everyday practice.

Job Planning is recognised as a foundation for safe clinical practice, for establishing clinical capacity boundaries and the basis from which to provide quality assurance across all four pillars of practice. Clinicians and leaders have reported that this is a useful tool to help set realistic boundaries, plan activity and encourage individual and collective ownership of ambitions and objectives (see appendix 7).

Time in Motion is another familiar tool for AHPs that has been used to help capture and understand activity. One NHS board commissioned an external company to carry out a comprehensive review and report on improvement recommendations. While some of the recommendations and change ideas were not found to be appropriate in the delivery of clinical care, the observations and questions raised were described as pertinent and worth further examination. The objectivity of an external review was valued, but the learning for the service was that recommendations must be owned by the team. Further learning was to be clear about what data is collected and being honest about the motivation for gathering it. NES already has a role in supporting local teams to deliver whole team quality improvements within a continuous learning culture.

AHPs report high levels of variability when allocating or capturing time dedicated to activities other than clinical workload. Ensuring that all aspects of the four Pillars of Practice are equally valued, respected and incorporated in practice is something which AHPs report to be challenging, particularly in times of increased clinical pressure.

Most electronic systems and datasets are reliant on recording task based clinical activity against an individual's CHI number. This often leaves whole sections of AHP activity 'unseen' as population-based activities are not always captured by available systems. A significant proportion of AHP activity cannot be captured in this way or always comparable for analysis or published. It is essential that the eSystems are

fit for purpose and capture all activity and outcome information to inform workforce planning decisions. Where there is good provision for eSystems and migration is well planned, is possible to support workforce planning innovatively using activity data gathered (see appendix 8). However, limiting the ability to capture the range and type of tasks completed across a day, week, or month, can lead to caseload measurement that only considers the demand and capacity for individualised interventions.

In 2015 the Scottish Government in conjunction with the ALIP Programme and The Allied Health Professions Directors Scotland Group (ADSG) examined the potential for creating a workforce and workload measurement tool for AHPs in Scotland. This project considered the range of existing workload measurement tools from a range of professions, across Scotland, the rest of the UK and internationally (see appendix 9). One tool was then selected, adapted and tested before developing to a prototype state. Alongside this work, a gap analysis workforce comparator tool called 'the algorithm' was developed (part A), with guidance (part B) for AHP directors to follow a national approach to using data to support workforce planning and develop business cases (see appendix 10).

Based on the Community Health Activity Dataset (CHAD), an AHP Operational Measures (AHPOMs) activity data set was established to capture a national minimum dataset of clinical activity and create a mechanism to collate and share outputs (see appendix 11). This work was commissioned by the Scottish Government and overseen by ISD, National Services Scotland (NSS). This work produced a working 37 item minimum data set which was published in September 2017.

Following an options appraisal on a number of workforce initiatives and on recommendation from that the reports' authors, ADSG agreed that implementing any one of these tools would not add value to services. It was recognised that further work needed to be done to prepare services and embed a culture of workforce planning before any solution could be adopted.

In response to the challenges faced by AHPs across the global pandemic, Scottish Government AHP professional advisors sought to adapt the existing professional judgement tool used as part of the nursing workforce and workload measurement tools, to be used with AHPs in line with similar tools developed and used in other services (see appendix 12). This work is expected to inform the multiprofessional workload tools currently being reviewed and developed within the HIS Healthcare Staffing Programme (see appendix 13).

The Health and Care (Staffing) (Scotland) Act 2019 has introduced into legislation the requirement for health and social care providers to ensure staff are employed in sufficient number and type to ensure best outcomes for people and communities. The Act will require robust assessment of workforce and delivery of person-centred outcomes to determine staffing requirement in the provision of high-quality care.

Establishing safe workload, based on capacity and demand across multiple professions, service areas and delivery models is described within the duties of the Act and will require employers to provide real time staffing estimation, risk assessment, mitigation and escalation for all healthcare professionals. The

legislation applies to both health and care staff with common guiding principles and detailed content in separate sections for NHS services and social care services.

The Healthcare Staffing Programme has supported the development of tools that have demonstrated good ability to capture a particular type of data for nursing and midwifery in targeted areas. This has been, in part, due to mandating the delivery of data from boards, funding provision and resource development to enable this and locally created lead roles to drive innovation.

Measuring workload to inform workforce planning and workforce predictions must therefore adopt tools capable of measuring all aspects of workload activity undertaken. Workload tools that are more accurate in reflecting AHP activity will also serve to underline the value placed on the wider roles beyond people facing activities. Of course, workload data informs workforce planning and AHPOMs clinical activity data collection is ready and waiting for national direction and local action. Once NHS boards are up-to-speed with the availability of eSystems for data capture, this is likely to still be a relevant piece of work to fill this gap.

3.2 Types and Numbers

Accurately determining what number and type of staff are required for a new service delivery model can be difficult to accurately predict as AHPs currently do not have access to any nationally validated workload tools.

The absence of AHP profession specific data is often a barrier to services creating evidence-based workforce plans. AHPs report that workforce planning is frequently a descriptive narrative, with planning for type and number of staff required feeling opportunistic rather than a robust or evidence-based approach to workforce planning.

Current NHS workforce data is available on the TURAS Data Intelligence (TDI) platform^[36]. The workforce data for AHPs is currently high-level and lacks the detail required to establish numbers of staff groups working in discrete clinical areas. A more detailed description of available workforce supply data can be found in Step 4.

TURAS Data Intelligence (TDI) Platform

NHS Education for Scotland hosts the TURAS data platform that brings together existing data workforce sources and contains the Official Statistics for the NHS Scotland workforce. The AHP Dashboard on the TDI reports information from NHS boards' HR and Payroll applications. This data is used to model workforce supply and demand.

Employment

The staff in post data is taken from the Scottish Workforce Information Services System (SWISS) which is fed by Boards HR Electronic Employee Support System (eESS) and the payroll system, the Scottish Standard Time System (SSTS). This is the same for all staff groups except doctors in training who additionally use Turas People.

The published workforce data is reported by categorising by 'job family' and 'sub-job family'. AHPs are currently indexed as 'AHP' in 'job family' by AHP profession in the 'sub-job family' i.e. 'occupational therapist'. There is currently no facility to report greater details of job role e.g. community rehabilitation. For this reason, it is not possible to identify the numbers of AHPs or individual AHP professions working within discrete service delivery areas. Work to agree and establish a National Occupational Classification Index for AHPs would be required to provide the level of detail for quality AHP workforce planning.

The use of existing classification systems within other healthcare professions have already evidenced a more detailed level of indexing is possible. The nursing and midwifery 'job family' houses a total of 26 individual 'sub-job family' categories; 22 for nurses and 4 for midwives that describe the nature of their role. This allows for the examination of staff numbers even within relatively closely related areas of practice, e.g. community children's nursing, school nursing, staff nursery nursing, paediatric nursing and neonatal nursing. The medical workforce is reported and recorded slightly differently to the NMAHP workforce. Medical staff are reported firstly by specialty, and then by grade. There are 75 medical and dental specialties; 63 medical specialties and 12 dental specialties. This explains why other professional colleagues can identify with relative ease the numbers of staff currently working in discrete areas within the system and AHPs cannot.

NES are currently examining the fields used and the quality issues around using additional fields that have been identified as being potentially useful in the future. It is possible that 'Department' or 'Service Area' could be used to help identify those AHPs working in specific areas, but the current data evidence shows these are not quality assured fields. The accuracy of this type of data is hard to analyse due to the variability of local systems. Some NHS boards continue to require staff with specialist knowledge or who work within the service to identify specific AHP roles.

As the SWISS data comes directly from HR systems, it will be accurate if NHS boards keep the data up to date and have good quality assurance processes. NES carry out quarterly data quality exercises with HR contacts in the Boards the month before publication to check the fields used for publication are up to date and that NES figures are an accurate representation of the NHS board figures. Currently this is done at the level of 'sub job family' for nursing and midwifery, but only 'job family' level for AHPs. These figures are also shared two weeks prior to publication of the Official Statistics for quality assurance purposes and again the week before publications are released.

NES requests NHS boards to check that the compiled data are similar to locally held data. As this is completed at the level of 'sub job family' for nursing and midwifery this will consist of 26 individual

‘sub job families’. For AHPs, this is completed at ‘job family’ level meaning that AHP data is reviewed only as total numbers of AHP staff in post by NHS boards as part of the quality assurance process. No scrutiny is currently carried out at individual profession, or ‘sub job family’ level.

Vacancies

A manual return from each NHS board is used to identify vacancies, including posts that are vacant and funded but not currently advertised and under review. NES is currently exploring the possibility of receiving these figures directly from Job Train.

Currently AHP data is requested on the WTE number of posts vacant less than 3 months, more than 3 months and those under review. Limited data is returned from NHS boards regarding posts under review. It is unclear if this data is not available or if posts are rarely being reviewed and reconfigured within teams and services. Given the uncertainty around this data, the Data Group currently do not use this information. Posts under review are included in the ‘non-medical trend table’ which is published quarterly but not currently used for any forms of analysis.

As with the staff in post information, there are slight differences between the level of detail collected for nursing colleagues and AHPs. Nursing colleagues collect additional information on the number of posts in redeployment, the number of internal vacancies, external vacancies and a higher level of detail relating to the length of vacancies. A greater level of detail about the service delivery are in which there are current vacancies is also collected with 15 discrete categories and an additional option to combine locations of service delivery.

When NES receive the vacancy forms from NHS boards, the figures are compared to previous returns. Queries are checked with NHS boards for accuracy and to establish the context of any sudden increases or decreases in vacancy numbers.

Workforce Demand

Workforce demand can be described as whole-time equivalent (WTE) establishment. This is the sum of employment and vacancies.

As workforce demand is measured by the number of funded and available posts employers have created, it is an accurate representation of the demand for staff, but not necessarily an accurate descriptor of the need for posts. Additionally, even when a demand for posts exists, there are times when this is not captured in workforce demand, for example, as a result of increasing recruitment challenges in remote and rural areas, desperately needed and posts once actively being recruited to may be reviewed, reconfigured, or withdrawn.

This may be confusing for clinicians who might consider the term ‘demand’ to mean the difference between current staffing numbers and the number of additional staff required to meet existing

referrals/requests for assistance, or the staff required to meet the predicted need within local communities. It is important to be clear that in this context, workforce demand does not define service demand, the need for services, or the gap in workforce required to meet that need.

By this measure of demand, considerable variation can be seen in the current demand for AHPs between professions. Figure 1 demonstrates the difference between demand and staff in post has increased during the sample period. This is reflected in the number of vacancies (figure 2: vacancies).

Figure 1: Establishment and Employment

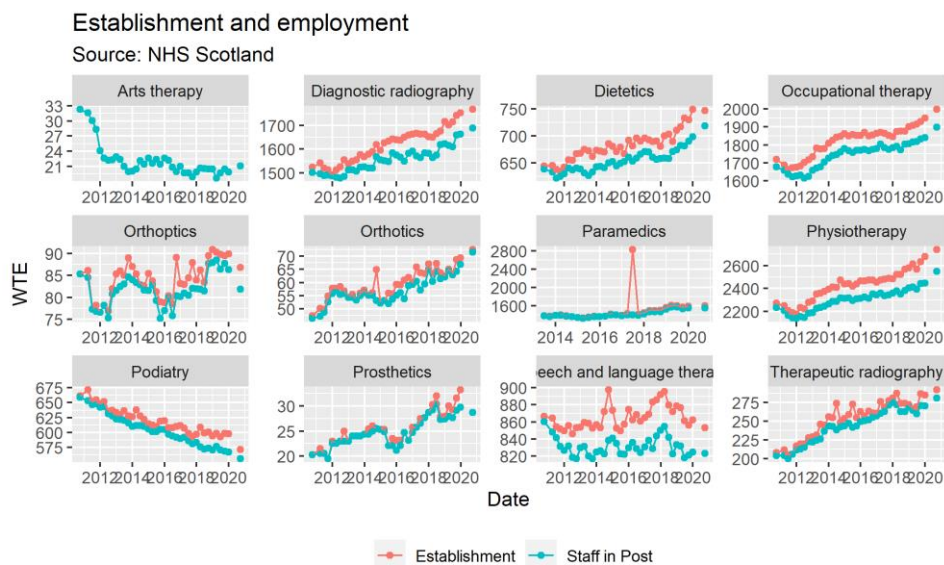
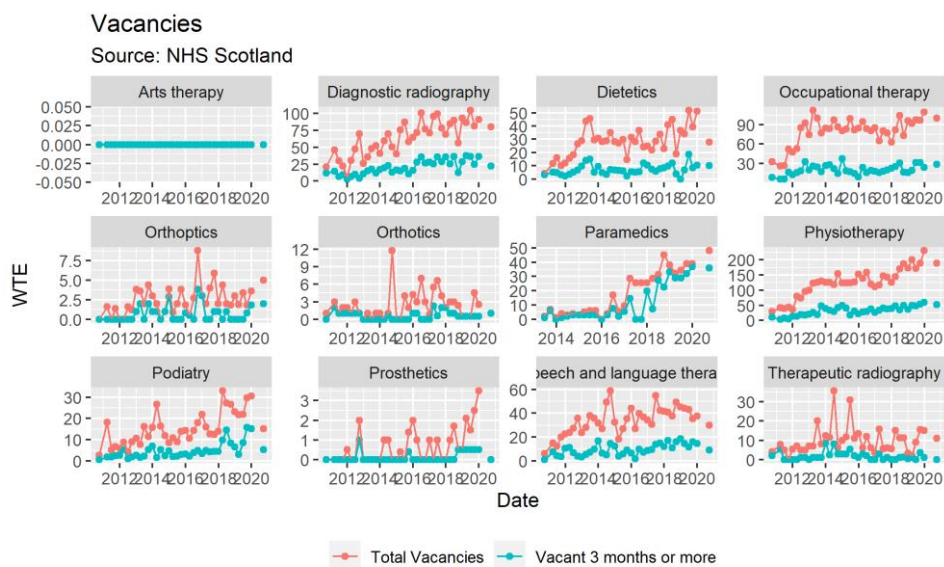


Figure 2: Vacancies



As workforce demand is defined as the sum of employment and vacancies, NES has a role in supporting AHPs to understand the consequence of changes to service offers and supports that may influence the numbers of posts thought to be required. An example of this is when many podiatry services across Scotland faced workforce challenges when the national service offer changed and no longer offered blanket toenail cutting service. As a result, some services without a

clear workforce plan specifying where podiatry skills could be better utilised may have experienced a loss of staff.

NHS Scotland AHP workforce data are routinely reported as part of the quarterly Official Statistics workforce publication. For AHPs employed outside NHS Scotland much less information is available although some information is available from the Labour Force Survey^[37]. Estimates from the Labour Force Survey rely on Standard Occupational Classification^[38] codes, which only includes specific codes for physiotherapists, occupational therapists, speech and language therapists, paramedics and podiatrists.

3.3 Productivity and New Ways of Working

Ensuring teams and services possess the right balance and mix of skills and are utilising those skills to maximise impact is essential. A long-standing NES resource is the Skills Maximisation Toolkit. Comprising of six volumes, the toolkit set out practical advice and support to guide AHP teams and team leaders through a methodology to clarify the route through services, identify the unique service contribution offered and the level of specialism required and create the required change.

Capturing the unique contribution of team members requires the service to consider and agree the tasks and activities that could be carried out by a registered professional, an advanced practitioner, or a support worker. The process supports participants to engage service users in any changes proposed, measuring the time and financial implications and setting out the business case for change. The toolkit does not assist in generating nationally collected, collated, analysed, or published data. Skill Mix Utilisation can result in significant service improvements when systematically and methodically used to maximise AHP impact. Appendix 13 describes the improvement work and outcomes with the NHS Greater Glasgow and Clyde Podiatry service.

Understanding how roles adapt across time is also important and a good opportunity to consider how a service can work in a more collaborative or integrated way to improve productivity. A good example of this is the range of settings in which paramedics work, their expanding role in treating or caring for people in their own home to reduce avoidable admissions. as well as the more traditional role of responding to emergency situations. With a wide and valued skill set, there are now employment opportunities for paramedics to work with a range of employers including the Scottish Ambulance Service, Air Ambulance, private ambulance companies, offshore companies, or with charitable organisations like St Johns Ambulance.

Our use of digital technology also impacts on productivity and has significantly increased in recent years, none more so than in 2020. To ensure that AHPs can take full advantage of these opportunities, the future workforce must acquire and develop the right digital skills guided and shaped by the ongoing transformation of health and social care services.

As digital capabilities expand it is likely that AHPs will increasingly utilise digital tools ranging from simple decision support for triage or assessing risk, to practicing in a digital environment, or complex artificial intelligence and machine learning diagnosis across services and practice.

Some AHPs, for example, diagnostic and therapeutic radiographers, have already had significant involvement in the development of aspects of digital capabilities. It is likely that as artificial intelligence and machine learning technologies evolve, they will become more embedded in clinical practice. A future example of this may be the use of improved technology and better multiprofessional working to improve imaging access in remote and rural areas (see appendix 15). As technology advances, workforce planning, education and support requirements will be required to change alongside clinical practice and governance.

NHS Education Scotland has a well-established NMAHP Digital Leadership Programme funded by Scottish Government with 83 nurses, 16 midwives and 152 AHPs having completed this programme by December 2020. Workforce development is a key priority of the national Digital Health & Care Strategy^[39] which is currently being refreshed and expected to be published in July 2021. This builds on progress to date and the accelerated learning during the pandemic including a greater commitment to upskill the health and care workforce in digital solutions and informatics.

How workload, capacity and demand, activity and outcomes are captured is complex. A Scottish Government resource pack is available to support healthcare professionals to better understand Demand Capacity, Activity and Queue (DCAQ)^[40]. However, striking the balance between the counting of task and the delivery of meaningful outcomes is a key issue to resolve for all health and care professionals that will directly inform much of the data relating to the duties of the staffing legislation. This is particularly true where service offers and supports are more difficult to easily capture and measure, e.g. in whole population activities outside individualised care. In a system seeking to improve personal outcomes, examining workforce using a system that measures only activity and task risks a limited appraisal of workforce demand.

Of course, it is a series of tasks that deliver outcomes, but only by examining the outcomes themselves can AHPs ensure that their contribution to the triple aim^[41] is evidenced. It is therefore essential to ensure our clinicians have the skills, confidence and means to articulate and capture the predicted change, the resource required, and the outcomes achieved in a way that is meaningful across all environments and service models.

AHPs must be given the ability to record and gather essential information on eSystems that are fit for purpose. Data should be easily extracted to national repositories but remain transparent, functional, and beneficial at a local level using data collection tools and that are of minimum burden and maximum utility. Part of this challenge includes examining the data we chose to value and collect, how we ask clinicians to gather data and the way this data is received by national repositories.

As the source for Official Statistics on the NHS workforce, NES would have a role to play in developing future AHP datasets and developing shared definitions. However, as NES also has responsibility to ensure that reported data remains meaningful, significant work would be required to ensure work does not disruptively limit our ability to understand changes to workforce over time.



Step Four: Supply

NHS Scotland is the largest employer of AHPs, but workforce planning must assume multi-sector and multi-agency workforce considerations to accurately predict supply requirements across Scotland. Some professional groups will have large sections of the national AHP workforce employed in areas such as local authority, education, social work services, public and private social care services, prisons, housing associations, industrial and commercial organisations, schools, charities and voluntary agencies.

Where service offers and supports are delivered will also impact on how workforce plans speak to AHPs. For example, CYP practitioners could be employed by either the NHS board or, as is the case in Highland, the local authority, be housed within a HSCP, but deliver the majority of services within an education setting.

4.1 Current Workforce

NHS AHP Workforce Data

Between 2013 and 2015, NES produced a programme of data development and analysis reports on a number of the Allied Health Professions (AHPs) in Scotland with the support and co-operation of range of stakeholders including the Scottish Government, Professional Bodies, the AHP Strategic Group, the AHP Directors Scotland Group, the Scottish Academic Heads Strategic Group and the AHP Federation of Scotland.

The focus was largely on the health sector employment but recognised that AHPs are employed by a range of employers in both the public and private sectors. The suite of reports described the education and training market, the labour market for AHPs and offered analysis drawn from several sources of routinely collected data. This included various stages of the education and employment pathway from application to university through to the provision of services.

These reports were developed in conjunction with NES Digital services as part of the Analysis, Intelligence, and Modelling (AIM) workstream. The reports drew on available validated data and attempted to mirror work already undertaken by NES to produce workforce reports for dentistry and other professions across Scotland. The dentistry reports also included verified and published data e.g. the number of cavities in children across age ranges.

Including relevant prevalence data for each of the AHP professions was also an ambition for these reports. However, extrapolating prevalence data and applying it to a specific AHP profession was complicated. For example, prevalence data regarding the numbers of people whose nutrition is affected by stroke and also require input from a dietitian is not data that is verified and published.

The gaps in verified published data meant that the work required to generate these reports exceeded the usefulness of what the reports included. Initial plans to produce these reports

biannually on a uniprofessional basis were abandoned acknowledging instead the need for timely, widely accessible data provision to enable employers and other stakeholders to use the data to generate meaningful discussion and appropriate action. Going forward, NES has a role in generating reports based on evidence from literature that is relevant for each of the AHP professions.

Best practice is to ensure workforce characteristics are described in the way that workload demand is captured but AHPs do not currently have data intelligence capabilities to consistently provide the level of detail required to comprehensively inform workforce planning in this way. How AHPs identify and evaluate workforce numbers also significantly impact the ability of HEIs to predict pre-registration place requirements and is not linked to any commitment from employers to create the appropriate workforce demand in employment opportunities.

A current example is the work undertaken by the Scottish Government in creating the Mental Health Recovery and Renewal Fund to rapidly increase the mental health workforce. The Scottish Government Mental Health Workforce Group requested information from the NES AHP team about the current AHP workforce working in mental health settings, projected growth and the requirement for further development of skills and competencies.

Due to a lack of detailed workforce indexing or activity data by clinical specialty and no dedicated mental health pre-registration AHP training route, AHPs cannot give a definitive answer or establish the workforce gap in any specific area. At the point of graduation many AHPs have received dual training in mental and physical health e.g. occupational therapists must complete a balanced programme of clinical education that includes an equal proportion of placements in mental and physical health environments. However, AHPs do not graduate with a mental health qualification in the same way as, for example, mental health nurses. Despite this, we know that AHPs are key members of effective mental health multiprofessional teams, particularly occupational therapy, music therapy, drama therapy and art therapy.



To provide the level of data on the AHP workforce required by the Mental Health Workforce Group, the NES AHP team undertook a manual collection, collation and analysis of data gathered through AHP networks including the AHP mental health leads group for Scotland. Examples and scenarios can describe AHP roles and predicted input, benefit and outcomes, but without this data it is difficult to robustly demonstrate the contribution AHPs make to the lives of people experiencing mental health difficulties and in preventing mental ill health.

Accurately predicting the numbers of staff who have appropriate post graduate mental health skills, identifying staff who could fill or develop into new posts, or predicting future numbers of pre-registration AHP university places required to enter the workforce is also challenging and raises a number of questions AHPs cannot currently answer.

- How many AHPs currently work in mental health settings, provide support around mental ill-health although do not work in a mental health setting, work in mental health settings as a new registrant, or go on to work in mental health setting (as a percentage of new registrants)?
- What would the data collection infrastructure need to be to provide this information, and what is the variation in practice that would require standardisation to deliver this level of data detail?
- What are the implications for pre-registration training, developing new skills, advanced practice and career pathways to ensure an adaptable and flexible workforce?
- How does predicted need, pre-registration training, post-registration training and development correspond with employment opportunities and creation of new roles?
- How would increasing pre-registration places impact on the number of AHPs who choose to enter employment in mental rather than physical health?

A manual approach to collating AHP workforce information is regularly undertaken across NHS boards when additional AHP information is requested. However, this requires a line-by-line review of all payroll and HR data which is both unnecessarily time consuming, provides only a snapshot in time and frequently raises concern regarding the reliability and quality of existing AHP data. There is improvement work for NES to do in order to deliver AHP data that match the data capabilities of other health professionals.

A more detailed indexing of profession, clinical delivery area or service unit and population data is the minimum additional workforce profile information required to begin to assess trends within the existing workforce, identify areas for action and consider improvements to maximise the potential of the existing workforce. While there is no national AHP occupational classification system that can be utilised to provide this data, some NHS boards are dedicating significant resource to better understand their own AHP workforce (see appendix 16). However, without a National Occupational Classification Index for AHPs, there remain ongoing risks to establishing safe and appropriate AHP staffing levels and producing data-informed predictions for the future required AHP workforce.

Social Care AHP Workforce Data

The Scottish Social Services Council (SSSC) are the national lead for workforce planning and development for social services in Scotland. Detailed workforce data is published annually on the social care workforce is extensive and available in an interactive data visualisation tool.

The biggest AHP group in the social service workforce are OTs largely working in adult services, with 444 WTE occupational therapists employed in 2019. Differences in health and social care contracts create additional challenges for workforce planning and create areas of conflict for staff working in integrated teams where terms and conditions vary across health and care. This often means staff in the same role within the same team might have a different length of working week. Standard fulltime constitutes 37.5 hours in health but can vary between social care and local authority.

Other examples of differences can include leave entitlements, public holidays, salaries and access to phased retirement policy. Currently these challenges managed through goodwill but require longer term, more equitable solutions. As with the NHS published data, contextual understanding is essential to interpret the published data. For example, according to the published data for 2019 there were no AHPs employed in the offenders' team although AHP support is provided to this group.

The lead agency model in Highland shows some interesting data for AHP with a drop in WTE for AHPs between 2018 to 2019, but an overall increase of approximately 20 WTE in the time since the local authority assumed employment of AHP within children's service in 2012.

Public Health AHP Workforce Data

Identifying AHPs working within Public Health, Scotland (PHS) can also be challenging as there is no detailed system of indexing to find registered AHPs in specific areas of work. In this setting it is likely difficult to identify AHPs because they may not be in an AHP-related position and may no longer hold professional registration. While many Public Health positions will not be specifically for AHPs, understanding the skills, knowledge and behaviours required for posts and the number and type of AHPs in those posts helps inform future workforce planning.

As with health and social care AHP data, a need for improvements in workforce data is reported from Public Health colleagues. Data availability, workforce definitions, system gaps and system limitations all limit the ability to making better workforce decisions. In line with the changing policy landscape and the commitment and focus on improving population health, prevention, early intervention and reducing health inequalities, better quality AHP data is required to inform service redesign.

4.2 Workforce Forecasting

Examining existing workforce trend data on turnover, vacancy and recruitment can be used to anticipate what might impact on workforce even without system change.

The TURAS Data Intelligence Platform data can be used to provide more detailed information to support workforce planning. In particular, the individual-level data can be used to examine outflows and inflows from various sources to understand the change in overall employment. Figure 3 shows the flows for AfC band 5-9 physiotherapists from 2013-2020.

Outflow defined as the number of people who were recorded as being in a band 5-9 physiotherapy post on the 30th September in one year, but not on 30th September the following year. Inflow from band 1-4 details the number of people in WTE who have moved from a band 1-4 post to a band 5 –9 post. Although the specific circumstance is not reported, this will include registered AHPs previously employed in a band 1-4 role who have taken up a band 5 or above post, and those who have worked in a band 1-4 post while completing study and then successfully recruited to a band 5 post. The residual inflow consists of physiotherapists not previously employed in NHS Scotland. The inflows and outflows during the sample period can be used to estimate future inflows and outflows, which in turn can be used to forecast employment.

Figure 3: AfC Band 5 to Band 9 Physiotherapy Total Employment Flow 2013-2020

Year	Employment	Outflow	Change in WTE	Inflow from AfC 1-4	Inflow from returning AfC 5-9	Residual inflow
2013	2247.76	147.65				
2014	2319.87	146.72	-13.36	2.00		231.11
2015	2311.11	138.88	-30.88	2.00	5.48	161.36
2016	2351.43	166.25	-26.30	6.50	19.58	179.43
2017	2345.54	154.10	-26.51	2.49	18.89	165.48
2018	2382.54	155.75	-12.07	6.00	28.30	168.87
2019	2443.40	127.05	-19.61	4.97	21.13	210.13
2020	2550.86	0.00	-3.64	8.00	31.51	198.63

While these data relate to contracted hours, the difference between actual hours and contracted hours is absence. Individual-level absence data are available from Scottish Standard Time System (SSTS) for a subset of NHS boards. NES has recently secured the information governance to support the transfer of these data, which should be available for analysis later in 2021.

AHPs and Professional Bodies have also requested seeing data in a format that better facilitates discussion with stakeholders e.g. the use of a RAG (Red, Amber, Green) system to highlight areas of concerns or where action must be taken to prevent workforce shortfall. Numbers of accepted university places, vacancy rates and age profile are examples where this may apply.

NES also holds unpublished data and information on the TDI platform which may have the potential to support workforce planning. One of these reports is the AHP Profiles, which contains applications, offers and acceptances data from the Universities and Colleges Admissions Service, intake and completion probability data from the Higher Education Statistics Agency and employment data from NHS Scotland. NES will continue to work to ensure appropriate data is publicly available in useful and meaningful formats to better inform workforce planning, including tools for workforce scenario planning and modelling.

Higher Education Institutions (HEIs) and Pre-Registration Training

The Scottish Government is currently scoping an AHP Education Review to consider the future education of AHPs to best serve the needs of the people of Scotland. Although the terms of reference for the review are yet to be confirmed, key themes are currently expected to include student support, pre-registration and post-graduate education and funding, placements and the workforce planning required to build an adaptable and flexible workforce ready for the future.

Clear, detailed and current AHP workforce data has the potential to allow better understanding of the education agenda for pre-registration and post-registration course provision. This type of AHP workforce planning will uncover potential opportunities for timely and targeted educational involvement and extend collaboration between NHS and educational partners to create the best possible education for the NHS AHP workforce of the future.

Finding whole-system solutions to workforce challenges that meet known and predicted need in the workplace and correctly inform pre-registration and post registration pathways will also require a sustainable funding model. HEIs report a complex set of issues for AHP education ranging from unit cost of pre-registration training, funding shortfalls, a requirement for better links to existing workforce data to support decisions regarding recruitment and selection, supporting remote and rural learners and increasing the routes to registration. There is also a need to create sustainable pathways to employment across all sectors, not just within the NHS.

HEIs recognise the need to ensure learning meets the needs of the current and future workforce and are keen to engage in discussion about introducing new skill sets in pre-registration training and practitioner support to ensure these skills are used and embedded upon registration. For example, HEIs report that Public Health approaches to learning are core elements of the taught programme but not all service models support the development of these skills in practice.

AHP education providers recognise the need to consider the educational themes across all health and social care, but report workforce needs are not being recognised or reflected in the number of quality integrated practice placements. Private practice, private enterprise, local authority, education and Third Sector organisations must be included as mainstream practice learning opportunities.

The number of publicly funded undergraduate places has not altered significantly in the last decade and the increase in supply driven by largely self-funded MSc programmes. Although the postgraduate route is the quicker route to market, HEIs report that Masters programmes are extremely resource intensive for staff across 90 weeks without funding to reflecting this high level of input.

There are currently no plans to offer AHPs a graduate employment scheme similar to initiatives which have previously been successful within other professions when experiencing recruitment and retention challenges. Although now closed, the One Year Job Guarantee (OYJG) scheme was available to newly qualified nurses and midwives to help consolidate and develop their clinical experience. Another public sector example is the one-year probationary placement in state schools through the Teacher Induction Scheme (TIS).

HEIs report a significant step towards planning appropriate post-registration programmes to develop a workforce with the skills, knowledge and behaviours needed for the future would be a clear and attractive career progression for a range of advanced routes and increased support from employers to support AHPs undertake further study. No standard service level agreement (SLA) exists for AHPs to undertake further training which most commonly results in clinicians self-funding and completing studies alongside full-time work with no allocation of time or resource from employers. This also limits the future supply of clinical academics and academics to deliver training in the future and research from the Council of Deans of Health (CoDH) predicts a shortfall for NMAHP academics without a change in workforce planning. HEIs report they would welcome whole system integrated workforce planning to address these issues and challenges.

A diverse workforce is also needed to care for increasingly diverse communities. Diversity within many AHP professions has not grown to match the demographic changes in the diverse social and cultural communities of Scotland. Ensuring diversity across all allied health pre-registration programmes is essential to deliver a modern workforce that represents our communities. Increasing social support, academic support and financial support are commonly reported barriers for student learners from diverse social and cultural communities and addressing these issues well is complex. HEIs are aware they must continue to develop initiatives and supports to ensure diversity in the AHP workforce. However, ensuring a diverse workforce requires a collective responsibility across the system including how we support career choices, routes to registration and recruitment processes.

With exception of prosthetics and orthotics and paramedics, the numbers of AHPs entering training at universities in Scotland are not centrally controlled. HEIs have raised the importance of recognising that instability and variation in student numbers leads to instability and variation in staffing capacity. This also raises how pre and post registration education alongside career pathways for AHPs that are valued and supported by employers are crucial in creating clinical academic roles and routes to academic practice. This is crucial to ensure the ongoing provision of pre-registration programmes.

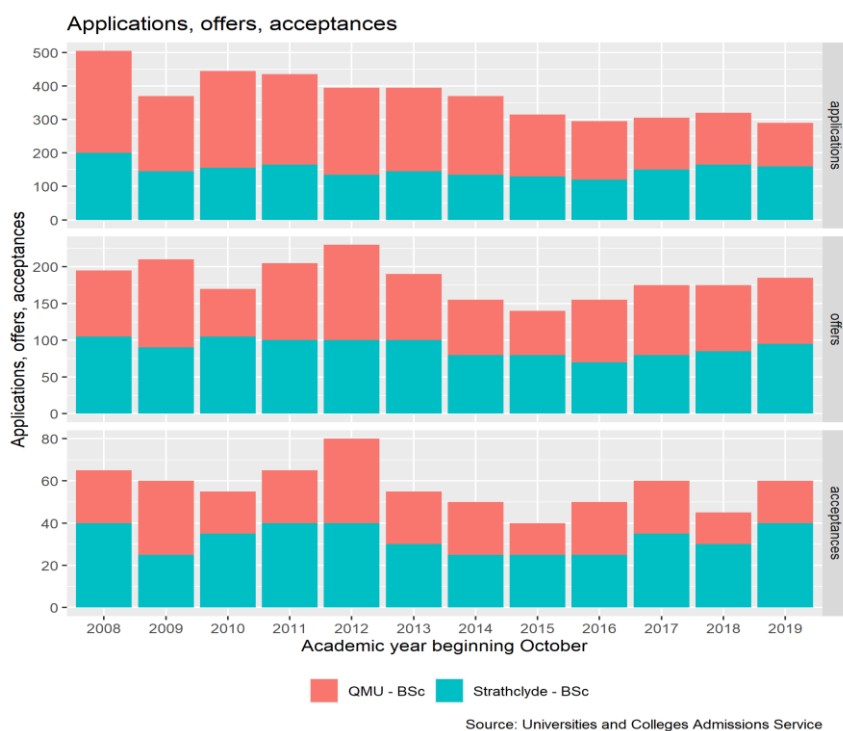
The number of registered clinicians entering the workforce is determined by the decisions taken by universities providing pre-registration programmes. This is based on demand and feasibility in relation to

the HEI business model and available placement opportunities. The availability of placements is supported by a Practice Based Learning Agreement brokered between NES and NHS boards. This has historically provided a framework to agree a minimum placement offer across Scotland. The effectiveness of the placement agreements is currently under review as it does not include placements offered in other sectors and delivery areas beyond health.

NES has recently compiled a series of profession specific reports across the majority of AHP professions to describe placement offers, provision and cancellations across NHS Scotland. These reports also discuss the potential impact of increased student pre-registration places, the predicted future need for placements and hypothesise on the required offers in each Health Board area based on current WTE staffing numbers. These reports are expected to be available by summer 2021.

As most pre-registration course numbers are not controlled, the number of students on these courses is the minimum of the supply of and demand for courses. Figure 4 shows the number of applications, offers and acceptances to SLT courses in Scotland from 2008 – 2019.

Figure 4: HEI Applications, Offers and Acceptances



Individual-level data on pre-registration AHP education in Scotland is available from the Higher Education Statistics Agency (HESA) Student Record. NES has used these data to examine outcomes e.g. the number of students in any year and completion probabilities for each course. They can also be used to examine the relationship between these outcomes and student characteristics such as the location of students before starting a pre-registration course and the location of their pre-registration course.

NES is currently working with HESA to acquire identifiable data from the student record to allow them to be linked to NHS Scotland employment data. These linked data will allow employment inflows to be

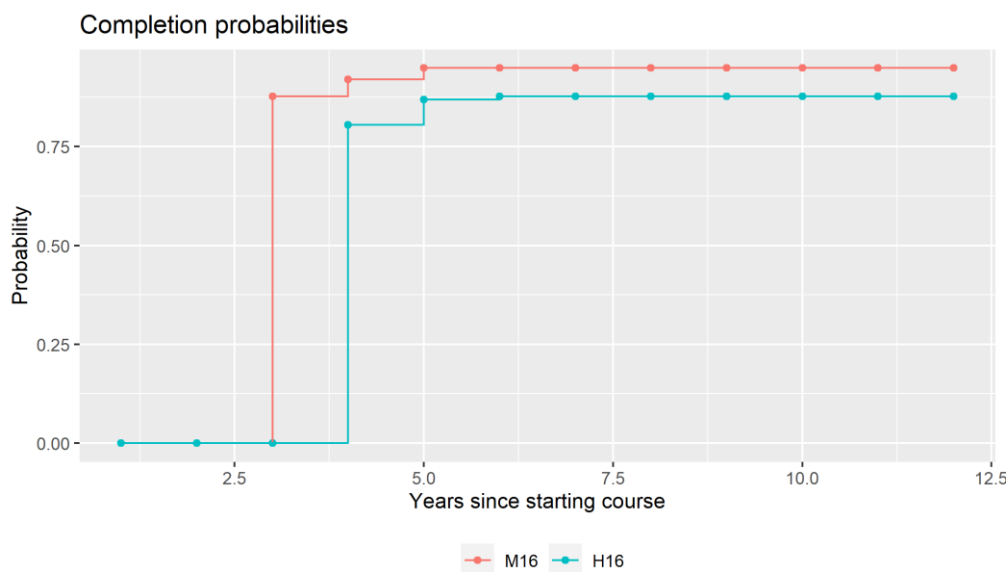
examined even further to understand student characteristics over time and how they link to employment workforce. Reporting on the transition from higher education to employment will be published by NES on an annual basis with an ambition to explore links to student placement data.

Completion Probabilities

The number of AHPs who qualify in Scotland depends on the numbers of students entering and completing pre-registration programmes in higher education institution programmes for each of the AHP disciplines. Completion probabilities are used to look forward and estimate how many students will complete their programmes and when but can also enable planning to hit commissioned targets by looking backwards to estimate the intake required to deliver the required number of graduates within a designated timeframe.

Based on HESA data, Figure 5 shows estimated completion probabilities for Physiotherapy courses. Identifying courses in the HESA student records is more difficult for some subjects than others. Often quite a complicated combination of subject codes, course aim codes and course titles for different years are required to identify records. NES is working with the Scottish Funding Council to improve the identification of these courses.

Figure 5: Physiotherapy Completion Probability



Source: HESA

By using this data to consider the completion probabilities leading to a pre-registration physiotherapy degree with honours (H16), it is likely that 80% of students will complete training within four years of commencing study. Another 7% will likely complete within five years. NES is currently compiling this data for all AHP professions. It is important to note that AHP pre-registration programmes aspire to deliver graduates who are ready to work across the UK and beyond. This means local supply is not guaranteed.

Completion probabilities can help estimate how many students are expected to complete in each cohort. For example, if there are 100 students in a future cohort on the H16 course, 80 would be estimated to complete within four years and a further seven estimated to complete the following year. These completion probabilities can also be used to estimate the intake required to ensure a target number of graduates in the future.

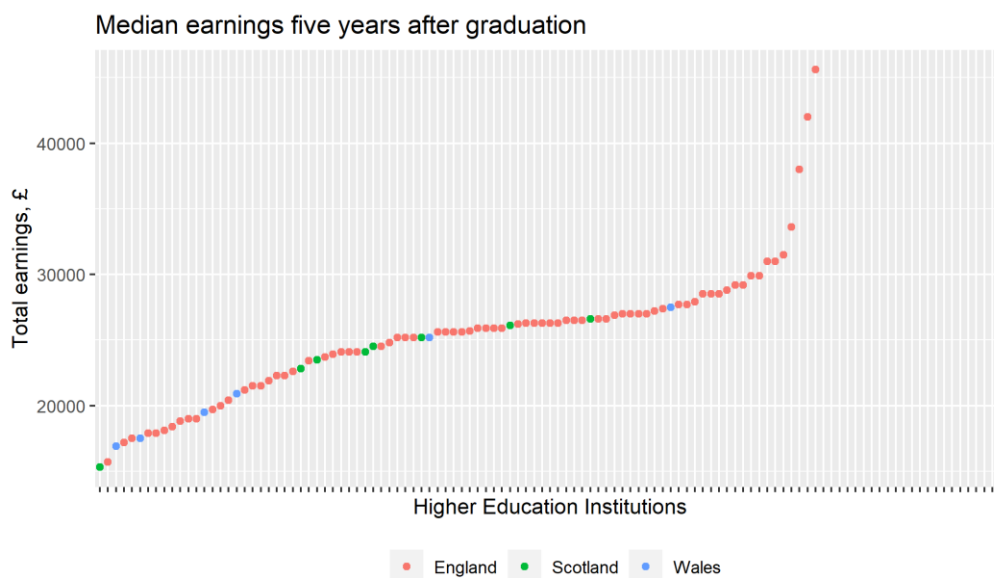
First Destination Data

We cannot currently link student first destination employment for AHPs to employment information within NHS Scotland. It may be possible to establish some data on the first employment destination for AHP students with better data sharing arrangements in the future.

Registration

Of course, the potential supply of AHPs is the total number of registered allied health professionals in the UK. Some data are available on registrants from the HCPC, but this data currently does not have enough specificity to supplement existing data sources. The Longitudinal Educational Outcomes data links higher education and tax data to examine graduate transitions into employment. Figure 6 shows median earnings five years after graduation from Allied Health courses in Great Britain.

Figure 6: Median earnings five years after graduation from Allied Health Courses in Great Britain



Source: LEO

AHPs report workforce planning challenges created by the high level of variance in preceptorship or competency programmes for Newly Qualified Practitioners (NQPs) across and between AHP professions. Some professions graduate with ‘ready to practice’ skills while others require considerable post graduate training to complete some elements of the professional role. An example where this is changing is speech

and language therapy and dysphagia. New pre-registration dysphagia competencies have been developed to ensure the same entry-level knowledge and skills, regardless of where students have undertaken their pre-registration education across the UK by 2024.

With AHP education programmes often out with home geographical areas, the conversion rate from graduates of both the undergraduate and postgraduate programmes in Scotland is difficult to quantify. The Chartered Society of Physiotherapy report that for physiotherapists, the conversion rate from MSc graduation to the NHS is low due to the high number of graduates from overseas who either return home or face work visa restrictions in the UK.

Nursing and Midwifery Quality Management of Practice Learning Experience (QMPLE)

Data relating to the quality of nursing and midwifery practice learning experiences is available in real time through the Quality Management of the Practice Learning Environment (QMPLE) web resource. Developed by NHS Education for Scotland, QMPLE is used by all universities and practice learning environments across Scotland. This database provides information on student placements and student feedback and ensures a nationally consistent approach to the Quality Standards for Practice Learning (QSPL) audits and action plans and Nursing and Midwifery Council (NMC) educational audits.

As nursing pre-registration places are centrally controlled and commissioned, student numbers are directly linked to existing workforce data and trends. Data is considered over a 5-year period and provides key insights into the student journey including patterns of learning and information about discontinuation and retention. This approach aligns with the nursing 2030 vision and the ambitions of the Excellence in Care programme to use a quality management approach to enhance performance. Work is currently underway to review the QMPLE indexing to provide more accurate information to deliver a more informed pathway from placement to quality assurance and workforce planning by having a better understanding of how individual practice education experiences influence careers choices.

AHPs and Practice Based Learning

HEIs providing pre-registration AHP training have expressed an interest in developing a similar quality management approach for AHPs to drive quality practice education experiences for students and practice educators that match the current working experiences of AHPs now and in the future. HEIs and the NES Practice Education team are keen to ensure that any proposed system is widely accessible to enable system wide review and audit of placement delivery and student experience without becoming too resource intensive. Currently AHPs do not consistently have access to electronic systems which means even basic digitalisation of assessment forms is not possible in all Board areas.

NES has identified four key areas where data intelligence improvements could improve AHP student Practice-Based Learning (PrBL) placements; data on health board PrBL provision and numbers of

registered AHP staffing, AHP student PrBL cancellations within health, non-NHS student PrBL provision, and the type of experiences students are accessing. This would require some modernisation of the software and processes for housing and collating the data, a broader dataset to record type of PrBL experience provided and the development of a dashboard that could present this information per profession per NHS Board to be able to move towards the prospective analysis of provision that addresses real time capacity issues.

4.3 Other Options

There are several options to consider when reviewing workforce supply to increase workforce availability. NES currently contributes to supporting education, learning and development in a number of areas that increase workforce availability. NES also provides an advisory role to Scottish Government.

Schools, and Academic and Careers Support

A national recruitment campaign for nursing, midwifery, allied health professionals (NMAHP), and healthcare scientists was launched in November 2019 to encourage more individuals to enter career pathways that would meet Scotland's future workforce requirements. Given the pressures placed on communities from increasing levels of poverty, deprivation and inequality both directly and indirectly related to the pandemic, supporting young people to find careers that help with social mobility and employability may also help to address recruitment challenges in some areas.

Many boards already have links with local secondary schools and promote the role of AHPs to students, providing information on AHP professions and advice on subject choices that will support entry to college or university courses related to AHP roles. The NES AHP Careers Group has supported the development of a range of resources, information and videos^[42] to promote careers in Allied Health as a registered clinician or as a support worker. The group has also facilitated the delivery of two AHP focussed "Meet the Expert" sessions with Skills Development Scotland and are working on increasing delivery of these sessions with different professions. At a local level and across the country, the AHP Practice Education Leads network continue to explore opportunities to connect with cross sector colleagues to promote awareness of AHP careers.

Modern Apprenticeships

Modern Apprenticeships (MA) are available to young people aged between 16-24 to support access to health and social care careers. There are apprenticeship frameworks available within Social Services and Healthcare, Healthcare Support (clinical and non-clinical), Business Administration, Estates and Facilities and IT. These frameworks provide the opportunity to work within a wide range of job families while gaining a qualification and key alternative routes to achieving a specific level of education. NHS

Grampian currently offers a modern apprenticeship for services that support Prosthetics & Orthotics, and NES is currently exploring the application of the modern apprenticeship approach for AHPs as part of the practice education programme and the transforming roles agenda.

Graduate Apprenticeships

In 2018, NES conducted an NMAHP Healthcare Support Workers (HCSWs) Learning Survey^[43] to better understand the learning and developing experience at work for this staff group. Of those who responded, 59% of HCSWs wanted the opportunity and support to develop their careers or become registered nurses, midwives, or allied health professionals. However, the majority of respondents stated they wanted learning opportunities to achieve qualifications that reflected their role as support staff and were not looking to become a registered professional. The numbers of staff who transition from an unregistered to registered post or commerce learning on a pre-registration course remain very small. Supporting the education and development of this workforce creates workforce planning opportunities and supports growth in geographical areas where the workforce may be less fluid.

For those who do wish to undertake pre-registration training, there is currently no route to qualification while continuing in full time employment. The ability to earn while you learn is an important consideration. AHP leaders in some hard to recruit or rural areas report graduate apprenticeships appear to offer a much-needed route to develop existing staff and go some way to addressing recruitment challenges.

Occupational Therapy has a long established HNC programme aimed at assistant practitioners working in a range of employment settings. This route has provided some staff with the opportunity to go on to apply and study to be a registered occupational therapist through one of the pre-registration courses offered by HEIs.

Developing Support Workers

The NMAHP HCSWs Learning Survey found that HCSWs in Scotland want support to develop their careers. The largest group of respondents were nursing assistants employed in Band 2 roles and looking for development opportunities to help progress to Band 3 or Band 4 posts. The survey results showed that 41% of the HCSW workforce reported they were happy to stay in their current role but wanted more access to learning opportunities to improve knowledge, skills, and ability to deliver quality care.

The survey also found that support was highly variable with many HCSWs not being aware of learning opportunities, discussing development options in a PDP, or being supported to undertake further study. On average 65% of respondents had not heard of any NES learning resources.

Linking with the local college to understand what is on offer already and co-creating new training and development opportunities has proved highly successful in NHS Dumfries and Galloway where the Enablement Learning Pathway supports people to develop the skills to maximise opportunities to achieve safe independent living. This partnerships approach in Dumfries and Galloway has been developed to provide learning support about reablement and ranges from 4 hour workshops to increase awareness of enablement, develop mentoring skills, or enablement champions, to formal study through a 'Reablement and Self-Management' distance learning SCQF Level 6 double credit award. A 'Promoting Reablement' National Progression Award (NPA) SCQF6 is aimed at those aspiring to work in roles such as nursing, occupational therapy, physiotherapy, other allied health roles and social work.

Completing a Promoting Enablement NPA supports entry into year two of some pre-registration programmes. Some OTs in Scotland have qualified through this route, although it does require individuals to be able to become full time students with no earn while you learn route available to support progression from support worker to registered AHP. Agreed levels of NHS board support and accreditation of prior learning to reduce the time spent learning may enable this route to be more flexible.

There is wide support for developing this vital part of the workforce. A recent statement jointly released by the Professional Bodies and trade union partners for the Allied Health Professions calls for a commitment from employers, policy makers and workforce planners to take action to grow and develop the AHP support workforce^[44].

Careers Framework

Integration of health and social care and the desire to work collaboratively across health and social care, local authorities, education, Third Sector partners, and community organisations brings opportunities for new roles in order to ensure the right professional delivers the right care in the right setting at the right time. Making services accessible and responsive to the current and future needs of people of Scotland will require AHPs to maximise their contribution to efficient and effective services across the whole of the health and social care system. The Feeley Report recommends a shift to earlier intervention rather than crisis management supported by the creation of a new National Care Service. This modern, transformational approach will require an adequately resourced and skilled AHP workforce.

The Scottish Government has outlined a commitment to maximising the contribution of the NMAHP workforce and pushing the traditional boundaries of professional roles. The transforming roles programme^[45] provides strategic oversight, direction and governance for this work and is developing nationally consistent, sustainable and progressive NMAHP roles to meet the current and future needs of Scotland's health and care system. Building on the excellent legacy work completed prior to March 2020, the NES NMAHP Directorate now has responsibility to refresh and complete this important workstream.

AHP data that can provide detailed workforce indexing is required to confidently establish the numbers of advanced practitioners required across the AHP workforce. Without the ability to examine workforce distribution across delivery areas and skill set, it will be challenging to either identify areas where advanced practice clinicians can make most impact or ensure clear pathways are in place to support clinicians to develop the skills to be able to fill these roles. It may be possible for a National Occupational Classification Index to also help better understanding the skills and competencies within the system and map the progress and priority areas within the transforming roles agenda.

Understanding the relationship between demand and supply here will also be vitally important in predicting and identifying the number of new positions or vacancies created by staff in developing roles. Being clear about the role of employers in supporting advanced practice and establishing a commitment to ensuring the right posts are in right place across the system will also be key.

Current priorities of the transforming roles programme are to re-establish stakeholder engagement, align with the pillars of practice and uniprofessional priorities, and ensure equivalence across the four home nations. This Programme will deliver a sustainable and appropriately governed educational pathway at all levels of the career framework.

This must include ensuring that education and development opportunities are supported equitably and do not create inequalities in the system. Current Scottish AHP workforce data to 31st March 2021 shows that proportionately more males than females are currently in senior roles. Examining the percentage of total males and the percentage of total female staff in positions graded as band 8 or above demonstrates that in nine of the thirteen reportable AHP categories, proportionately more males currently hold senior positions (figure 7).

Figure 7: Percentage of total males, and percentage of total females at Band 8 or above by AHP Profession

Profession (Data point 31 st March 2021)	% of total males in profession working at B8+	% of total females in profession working at B8+
Arts Therapy	33.33	11.11
Diagnostic Radiography	6.48	4.34
Dietetics	7.69	5.71
Multi skilled	34.38	18.50
Occupational Therapy	2.05	3.97
Orthoptics	0.00	8.33
Orthotics	13.95	10.17
Paramedics	0.10	0.00
Physiotherapy	8.76	5.31
Podiatry	12.98	4.19
Prosthetics	0.00	21.74
Speech and Language Therapy	5.88	11.29
Therapeutic Radiography	15.15	4.47

Return to Practice

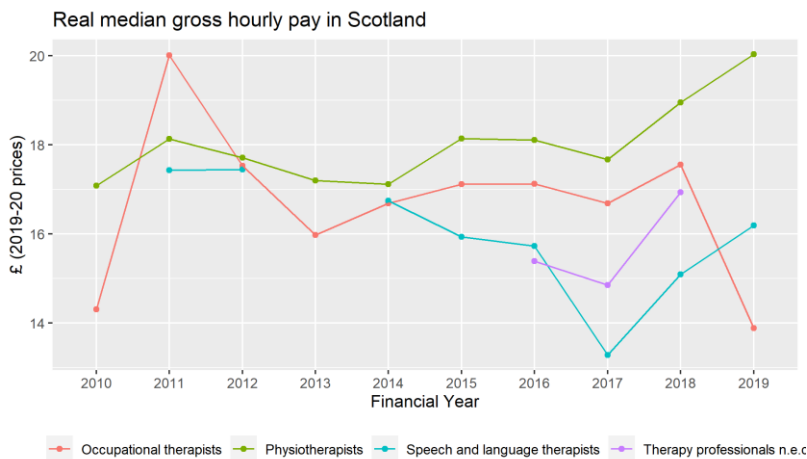
Each year, a small number of AHPs complete the return to practice process. Options to support return-to-practice have been reviewed and AHP Practice Education Leads (PELs) have developed policies and processes to support a partnership approach. The practice education team at NES are currently working to streamline and improve the experience for both the returnee and the supporting supervisors by utilising existing learning resources and platforms.

It is hoped this will make the process more accessible while still being appropriately robust. HCPC are also reviewing the requirements for return to practice to ensure processes are accessible and appropriately governed. The AHP Professional Bodies are often the first port of call when AHPs consider returning to practice and have many resources to support the process. In gathering further evidence to quantify the numbers of AHPs wishing to return to practice and identifying the enablers and barriers, future roles and workstreams for NES may be identified. This may include investigating more formal links between organisations and considering how to integrate approaches.

Considering the process to establish core competency as part of return to practice may be useful for also considering how an adaptable and flexible workforce also supports clinicians move within practice. Specialist clinicians often report having more diverse skills at the point of registration that can be lost as experience and specialty increase. Maintaining core competencies will help to ensure staff remain clinically nimble and able to address gaps across the system.

The 2020 Standard Occupational Classification contains specific codes for physiotherapists, occupational therapists, speech and language therapists, paramedics, and podiatrists. Some data on earnings will be available from the Annual Survey of Hours and Earnings^[46], and several measures of labour market outcomes such as industry, training and absence from the Labour Force Survey. Figure 8 shows real median gross hourly pay for four groups with a Standard Occupational Classification (SOC) from the Annual Survey of Hours and Earning (ASHE). Increasing real pay indicates increasing demand relative to supply.

Figure 8: Real median hourly pay in Scotland



Source: ASHE

Step Five: Planning to Deliver

The six-step methodology suggests that before planning to deliver change, it is essential to carefully revisit and reappraise the achievability of a proposed service model alongside the demand and supply information considered within steps three and four.

It is important to remember the TURAS Data Intelligence statistics on workforce are currently generated in isolation from information about local populations, prevalence, and predicted need. Workforce requirements must also be based on the number and skill of staff required to deliver improved outcomes across the whole system. Including this information would considerably enhance the scenario planning capabilities currently available and support workforce decisions that contribute to a truly integrated system.

5.1 Gap Analysis

The quality of the available information and analysis in the context of local need will determine the level of confidence in any gap identified between the workforce required to deliver the plan and the current workforce including any workforce expected from new employment opportunities. Local ambitions, drivers and knowledge will help determine if further investigation or review is required. Reviewing the nature of any gap in workforce will help decide if there is a need for additional staffing, increased productivity, better skill mix, or changes in working patterns.

Radiography services have found the lack of a robust shift system have a negative impact on staff recruitment and retention. Feedback has revealed that potential applicants and leavers often cite out of hours systems that consistently resulted in a need for staff overtime as the main reason they choose to work elsewhere.

Adopting the Predictive Absence Allowance (PAA) of 22.5% afforded in the workforce planning of other healthcare professionals would be welcomed by AHP leaders and likely to go some way to resolve many of the challenges faced by AHPs who currently have limited ability to manage staffing pressures and the impact of staff absence. Reviewing the impact of all options alongside cost, the lack of built in predicted absence allowance (PAA) and a largely female AHP workforce can result in maternity leave meaning workforce gaps for many services. Linking this to the wider difficulty of filling short-term posts with time-limited funding will often result in vacancies and multiply the challenges for most services.

5.2 Scenario Planning

Planning together and having established a shared responsibility for achieving outcomes will have highlighted the areas of highest priority to realise the greatest whole-system benefit. It should be clear which areas need most urgent change and those in need of least change. Creating an action plan that is

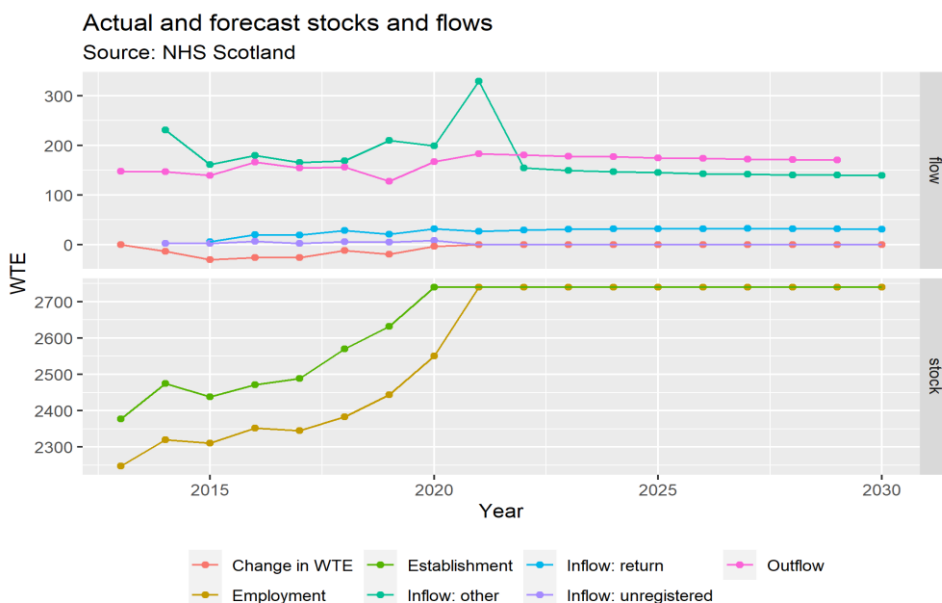
deliverable and within our control will include ensuring sufficient resources are available. Building in the right amount of workforce flexibility for success should be balanced with the ability to deliver the most efficient service possible with the available resource.

Changes in employment depend on the employment opportunities created from inflows compared to outflows. However, there are several policy drivers, enablers and constraints that will influence inflows and outflows. These influencing factors all run with different lags and are under the control different agents. In general terms, workforce planning policies to reduce outflow or increase the WTE per worker are likely to be effective in the short term and are often influenced by employers. By contrast, policies to increase the inflow from pre-registration education that are more effective in the longer term are often controlled by the Scottish Government, for example in nursing and midwifery, medicine and dentistry.

How these data can be used to support the development of AHP workforce plans is illustrated in Figure 9. The lower panel of the chart shows actual and forecast establishment and employment where establishment is assumed to be maintained at the 2020 level. The upper panel shows the actual and forecast flows associated with employment. During the forecast period the change in WTE between years and the inflow from unregistered staff is assumed to be zero and the ‘inflow: other’ line is the WTE required to ensure employment is the same as establishment.

The relatively large increase seen in 2021 for ‘Inflow: other’ is the inflow required to eliminate the vacancies in 2020 and to offset the outflow net of inflow from staff returning from a break in employment. The increase in employment required in 2021 need not come solely from ‘inflow: other’. It may result from a combination of reduced outflow, increased inflow from staff returning from a break in employment, increased inflow from unregistered staff and increased inflow from increasing WTE per person. The assumptions underpinning the chart can be varied to conduct scenario planning exercises. For example, the chart assumes that establishment is maintained at 2020 levels. One scenario might be that establishment increases at 1% a year during the forecast period.

Figure 9: Actual and Forecast Stocks and Flows



Scenario planning can also help plan for predicted changes or wider workforce types and numbers. For example, as around 30% of the AHP workforce is over 45 years of age, scenario planning could support retirement predictions. Wider workforce scenario planning and examination is also important e.g. the number of podiatrists working in Scotland's NHS (WTE) is reducing year on year but is often obscured by the overall number of AHPs increasing. Without data that links workforce, prevalence, predicted need and outcomes, it is not possible to determine if this change is signalling a significant future workforce crisis or is the result of changes in podiatry activity.

This highlights the importance of integrated workforce planning data that can take account of all the health professionals required to deliver the desired outcomes, establish a comprehensive understanding of workforce challenges across the whole system, and support decisions about how this might be addressed. We must develop a shared national vision and ambition, value learning together and ensure a mutual understanding of the roles and relationships required. A model that begins to consider the broad components of workforce planning and workload measurement can be found in appendix 17.

Scenario planning may also include modelling change in where staff resource is spent to improve workforce planning. A good example of where this may be particularly useful is in considering where advanced practice AHPs could provide services and relieve service pressures in areas where medical colleagues have found difficulty recruiting. Using data on current workforce resource allocation could demonstrate the financial impact of reallocating this funding.

NHS boards may be able to review their use of workforce and finance resource in increasingly innovative ways with advanced practice roles. An example of this can be seen in the work of orthoptists where advanced practitioners could be supporting diagnosis and treatment of glaucoma and other eyecare conditions to optimise the capacity of ophthalmology colleagues. Advanced practice orthoptists could significantly impact the outcomes for people in the face of high ophthalmology vacancies. However, this is not routinely part of all existing orthoptist service delivery models in Scotland.



Step Six: Implement, Monitor and Refresh

Workforce planning should be monitored and reviewed frequently and systematically against milestones and predicted outcomes using the Six Steps Methodology. Evaluating progress against key milestones and ensuring the means to report on those measures is essential. Workforce data to support this process is regularly updated on the NES TURAS Data Intelligence platform.

Although this is the last step in the process, where services do not already have a systematic approach to workforce planning, evaluating existing initiatives and outcomes using the available information can be a powerful catalyst to examine existing workforce planning and to begin utilising the Six Steps Methodology. A good example of reflecting on a quality improvement initiative to better understand workforce planning and define the plan is the current work of occupational therapy in Primary Care. Working as part of the Primary Care team, occupational therapists are supporting people by delivering flexible and accessible services as part of the practice offer.

No additional staff across Scotland have been funded via the GMS contract, but funding via the Action 15 Innovation Fund has provided some short-term occupational therapy support within GP practices. Scoping work is ongoing to establish the number of occupational therapists already delivering services as part of Primary Care teams as national workforce data cannot provide this baseline information.

There is currently no firm sense of what the required change for the occupational therapy workforce will be in Primary Care. A national group is gathering and sharing evidencing with GP colleagues to increase a shared understanding of how occupational therapy supports people and communities to live the lives they choose. This initiative aims to define the workforce plan required to deliver change. Key questions that the group hope to answer are how the outcomes related to these posts can provide impact evidence for occupational therapists within the Primary Care team, whether this is work that would previously have been undertaken by GPs, new occupational therapy work or the same workload addressed differently and what the impact is of this on wider workforce planning.

Some of the challenges for AHPs in relation to workforce planning can only be resolved with high level change to infrastructure and collaborative national leadership approaches to integrated workforce planning. While national direction is important, it is local action, based on local decisions that will bring an integrated workforce plan to life, deliver outcomes for people and communities and meet the obligations of the Health and Care (Staffing) (Scotland) Act, 2019. Ensuring an integrated approach requires integrated review with clear milestones and time frames. The greater the level of integration, the greater the complexity and the need for collective action to highlight challenges and initiating early corrective action where necessary.

Section 3: Conclusions

Workforce planning is complex and multidimensional. The challenges of system-wide workforce planning will require national leadership with the ability to challenge some of our most deeply held beliefs about designing, funding and delivering services. An important learning from the pandemic is that uncertainty is inevitable. Where in the past we may have thought that if we have the right information, we will make the right decisions, we now realise this cannot always be true. Uncertainty, that previously may have been viewed as risk, should be seen as a prompt and opportunity to learn that allows us to mitigate risk and improve services together.

Health and social care need to make collaboration and partnership working a priority across all our service delivery areas. We must all make best use of our resources, skills and data to support quality workforce planning, remove barriers, and share our learning to accelerate change in others. Understanding the needs of the whole system will mean accepting that small and large gains will occur simultaneously, not always where we expect.

Ensuring a level of national consistency across all measures of workforce planning is key, not just the number and type of staff, waiting times, contacts and discharges. We must know and understand the difference between outputs and outcomes whilst also counting the totality of the difference in the context of improving outcomes for people and communities. This includes understanding the quantitative and qualitative data we are collecting, for what reason and what the data is telling us. It is vital that the data we gather is both accurate and nuanced to inform local and national comparison, discussion and understanding of whole-system service delivery. Without the right data, integrated authorities, NHS boards and education providers will fall short of achieving quality workforce planning that ensures an AHP workforce in the right number to deliver the right care, in the right place, at the right time.

The Role of NES

The NHS Education for Scotland (NES) Strategy 2019-2024 outlines the ambitions and plans to ensure a skilled and sustainable workforce. The strategy clearly sets out a number of commitments to support workforce planning; to increasingly engage in developing the digital infrastructure, to extend education support that informs workforce planning and provide high quality evidence and impact assessment informed by data analysis, and to improve the employment journey, staff wellbeing and wellness.

Care and compassion sit at the heart of all we do and AHPs must be a healthy, adaptable, and flexible workforce in order to meet the needs of people and communities. The NES Strategy commits to ensuring staff are equipped with the skills to listen, understand and establish caring and compassionate relationships. As the NHS moves from recovery into a period of reflection before rebuilding services in a new world alongside covid-19, it is important not to miss the opportunity to embed staff wellbeing and wellness in our culture and recognised as a priority in workforce planning. This will not be achieved

purely with wellbeing initiatives. We must adopt a whole system approach to workforce planning that creates the conditions for staff to be healthy, happy and compassionately engaged in improving the lives of the people and communities of Scotland.

Inequalities have been created in the level of workforce data available across professional groups by the current infrastructure. Additionally, there is no meaningful link with the AHP data we do have to outcome or activity data. This is of significant concern and exacerbated by limitations of digital systems, poor data on the predicted need within our communities and variability in resource across the whole system. In line with the recommendations in Part 1 and Part 2 of the National Workforce Plan, NES is committed to developing workforce data capabilities, alongside the provision of education and resources for AHPs to improve integrated workforce planning that spans the entire system and across the career framework.

NES has a key role in supporting a national, collaboratively developed, whole system approach to workforce solutions for AHPs within the wider integrated workforce planning agenda that is value focused, rights based and needs driven. NES will provide education and support for AHPs to link workforce planning to everyday clinical activity, clearly linking the function and power of data to the ability to achieve better local outcomes. NES will also ensure education and support for AHP leaders to develop the enhanced clinical, corporate, staffing and financial governance, management and strategic skills required to effectively link workforce planning information to other parts of the system.

We cannot be honest about our commitments to people or build trust in communities if we do not understand our own system. We must be able to challenge the data we are gathering and be honest about the motivation for gathering it. Compassionate leadership must take responsibility for understanding the current system, articulating the pressure points and supporting staff to safely work within service limitations.

AHPs work across health and social care alongside local authority, education, Third Sector and community partners to provide service offers and supports that people and communities can access when and where they need them. **Dignity and respect** must remain at the centre of all our service design and workforce planning. Understanding how and when people want to engage with services is vital in creating the conditions for people to better manage their own health, wellbeing, and wellness. NES will support AHP leaders and teams to ensure local workforce planning recognises the importance of offering flexible and accessible services at the point they are needed and in a way that makes sense to local people and communities.

Keeping people and communities at the centre of all we do will require workforce planning to adapt to local context within a national approach. NES will provide education and guidance to help AHPs develop a better understanding of the impact that well designed and delivered AHP services have on the workload they generate and how this positively impacts people and communities. NES will link AHP workforce planning to the workstreams of other organisations to ensure data can be clear about the harm that arises from missed care, delayed or absent care and poorly designed services that do not address the impact of inequalities across the system.

Improving AHP workforce intelligence will support AHPs to tap into the power of integrated services through quality workforce planning. We have a long way to go before being able to produce robust data that meaningfully describes the current workforce to inform service change and transformation. Taking a truly integrated approach will require a new level of **trust, openness and responsibility** about all the resources we have, and how they can be best used across the whole system. Without a clear understanding of the workforce required to meet the needs of people and communities and a real desire to consider work in partnership, AHP workforce planning will continue to be complicated with unnecessary uncertainty.

Whole System, multiprofessional and multidisciplinary workforce planning has **quality and teamwork** at the heart of the process. Willing and cooperative planning to better understand the challenges of integrated workforce planning across sectors is essential. We must develop a shared national vision and ambition, understand the unique contribution of each partner, value learning together and ensure a mutual understanding of the roles and relationships required. With the right systems and mechanisms, AHPs will not only be able to evidence impact and benefit of inclusion within the wider system but articulate and highlight the risks of what is lost when the right services are not provided.

Clear vision, purpose and strong, collaborative **national and local leadership** will be needed. We must take a whole-system approach to workforce planning that ensures outcomes for people and communities remain central and avoid focusing only on what works for the system. NES will work flexibly and collaboratively with all partners, regularly monitoring, adapting and reviewing plans in response to the changing environment. We must avoid rushing to solutions or confusing output measurement with improved outcomes. It is essential to establish a shared language and understanding of our complex, adaptive systems through the lens of each sector, agency and partner to ensure quality workforce planning delivers the AHP workforce required both now and in the future.



Section 4: Recommendations

A renewed national commitment to achieving national AHP data collection and a combination approach of investment in infrastructure and education, is required for AHPs to meaningfully contribute to integrated workforce planning. This will also require a new commitment to collaborative working across sectors, organisations, services, professions and teams.

NES cannot and should not seek to resolve the challenges of AHP workforce planning alone. To make the recommendations outlined below a reality, significant thought, coordinated planning and deliberate action will be required at the highest level and those who lead must be willing listeners and actors in change. This report does not underestimate the potential for disruption across the system and leaders must ensure that work is well planned and executed as services continue to operate under significant pressure.

The importance of collaboration across sectors and organisations is central to these ambitions. Workforce decision makers will need to jointly own and address AHP workforce planning challenges to realise the change required. AHPs cannot make these change alone.

4.1 Short Term

NES will continue to develop and improve the NHS workforce data collection, analysis, and publication capacity of the TDI data to confidently inform Scottish Government, NHS boards and integrated authorities on national and local AHP workforce issues. To achieve this, NES will take action to provide AHPs within the NHS with robust workforce data including immediate work to progress a National Occupational Classification Index for AHPs. This will require national and multisector collaboration to establish and develop an agreed system.

For all AHPs, wherever they practice, NES will work with a range of relevant national bodies to explore how and where the different elements of workforce intelligence best connect to a range relevant data. Within the NHS, NES will also ensure this meaningfully links with our workforce data. In addition, NES will continue to work with other organisations and agencies to improve data collection, analysis and publication relevant for AHPs employed within other sectors and services.

This report recommends that the first steps for NES are to:

- engage with Scottish Government, other national organisations, and local and national eHealth leads across sectors to drive the local infrastructure improvements required to collect and process AHP data.
- review, recommend and secure the appropriate AHP and data analyst support within NES to advance this work.
- explore the need for national and local access to data analysts, workforce planning expertise, and other key roles such as health economists and social policy researchers.

Although NES has a key role to play in quality workforce planning, the following recommendations can only become a reality with a commitment from Scottish Government, NES, employers of AHPs and the other key organisations and agencies. National direction, clear roles and accountability, and strong national leadership are required to steer the collaborative and co-operative practice between partner organisations that will bring meaningful change for AHPs.

Quality workforce planning will not be achieved by one organisation or by adopting a single tool or practice. Multiagency working and willing cooperation are required across sectors to ensure the tools we use to gather the information bring connectivity and value to other parts of the system.

With this in mind and in recognition of the significant national commitment required, the following key objectives could then be undertaken in the short-term if the appropriate allocation of resource and staffing is established. A more detailed timetable with short term objectives and performance indicators can be found in appendix 18 with a provisional timeline in appendix 19. This timetable is a proposed way forward, not a commissioned plan, and will be dependent on securing both funding and agreement on how to progress the delivery of quality workforce planning for AHPs.

NES will

1. seek immediate agreement and approval of actions to establish the quality workforce planning capabilities required to deliver an adaptable and flexible workforce for the future.
2. work collaboratively and flexibly with a range of stakeholders to develop national workforce planning principles and local capabilities.
3. continue to develop and lead on organisational learning to better understand the landscape and decisions that affect AHP workforce planning.
4. influence and support the development of integrated workforce plans, aiming for a whole-system approach to workforce planning that realistically discusses the opportunities, challenges and impact of the AHP workforce.
5. promote data collection design that starts with shared decision making and shared responsibility to achieve meaningful outcomes, not tasks.
6. ensure that all appropriate data is publicly available in useful and meaningful formats to better inform workforce planning.
7. begin work to develop an understanding of the information governance infrastructure required to build the best possible picture of existing AHP data.
8. begin work to develop an agreed National Occupational Classification Index for AHPs to allow for workforce data that identifies AHP roles by profession and clinical, practice, or diagnostic delivery area.
9. review all published data and recommend actions towards a whole-system approach to workforce planning that aims to improve outcomes for people and communities.
10. begin work to enhance our AHP workforce data, ensuring these data can be triangulated with other relevant sources to inform quality integrated workforce planning.

With the appropriate allocation of resource and staffing, NES would additionally commit to consolidate shorter term learning and goals and deliver on the following medium and long-term outcomes across a 4-year cycle.

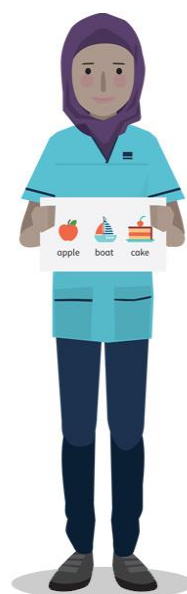
4.2 Medium Term: March 2023 onwards

1. We will continue to provide education and support to ensure the workforce have the skills knowledge to meaningfully contribute to the delivery of the integrated workforce plans using the Six Steps Methodology. Aiming for excellence, we will focus on developing the skills and behaviours required to see widespread change. This will include increasing the capacity, skills and knowledge of senior leaders and teams to interpret and best use data for scenario planning and continuous improvement.
2. Through a range of engagement activities, education and supported action learning we will improve each staff members' understanding of their individual and collective contribution to the success of organisation.
3. We will work alongside our HIS Healthcare Staffing Programme colleagues to support key areas of learning and development, starting with our 'readiness to measure.' By working with AHP leaders and teams we will support AHPs to build the conditions for change.
4. By providing relevant data we will support the HIS Healthcare Staffing Programme continue to develop workload measurement tools that genuinely reflect the complexities and value of AHP activities including, but not restricted to direct service user input.
5. Taking a Quality Improvement approach, we will deliver bespoke support to AHP teams to understand the current system and embed the use of the Six Steps Methodology as a framework to develop an aims, change theories and change ideas that addresses local challenges and meets local needs.
6. We will support clinicians to be clear in articulating predicted change, when and how has this made a difference to the lives of people and communities and what resource will we need to deliver this in the future.
7. We will support clinicians to be confident in utilising data to develop population-based approaches to prevention and early intervention, developing and enhancing skills where required, building on successful initiatives like 'Effective Decision Making' supported by NES in 2020.
8. We will support AHPs leaders to articulate their vital contribution alongside impact evidence and data within the integrated workforce plans required of all integrated authorities and NHS boards.

4.3 Long Term: April 2024-March 2025

1. We will support local teams to continually improve their workforce planning capabilities and skilfully reflect on change. By increasing the capacity, skills and knowledge of senior leaders to interpret and best use AHP data, we will engage with NMAHP leaders, chief officers and other employers of AHPs to raise the profile of the AHP contribution within the 2025-2028 integrated workforce plans.

2. We will use the available data to model scenario planning that helps AHPs, employers and HEIs better understand and improve workforce planning, skill gaps and education needs. This will also be with the ambition to extend modelling beyond the current expectation of roles, consider the incorporation of new approaches as standard practice and support advancing roles that go beyond current definitions. We will support HEI and employers, working in partnership to help bridge gaps and have confidence that they are planning the right workforce by highlighting the relationship between HEI pre-registration offers, quality placements, employment opportunities, and include the transforming roles agenda and ongoing development for AHPs.
3. We will continue to work to ensure the development of a flexible and adaptable AHP workforce using the NES NMAHP development framework, transforming roles and advanced practice. We will champion the importance of employers creating a working culture that enables staff to appropriately value and develop all 4 areas of practice within a range of clearly identified career pathways. Maximising the skills and capability of our workforce wherever they practice will require us to better understand the impact of skill mix utilisation and advanced practice roles. We will support new and innovative ways to increase workforce availability that reduce inequalities and support local people to successfully enter health and care careers.
4. We will support a joined-up approach to enable employers meet the ongoing duties and obligations of the Health and Care (Staffing) (Scotland) Act 2019. We will engage with a wide range of stakeholders including NHS boards, HSCPs, HIS, SSSC, local authorities and education, HEIs, Professional Bodies and Third Sector colleagues.
5. We will make best use of learning that improves integrated working in the context of each professional groups clinical activity, whether this is between other defined professions working in a similar area, or across sectors and whole systems.
6. We will learn from all examples of improvement and change projects across the AHP community including examples like the long term workstreams to understand workforce and workload needs in complex adaptive systems in CYP practice and the Scottish Radiology Transformation Programme.



References

1. Scottish Government, *National Health and Social Care Workforce Plan: Part 1 - A Framework for Improving Workforce Planning Across NHS Scotland*. 2017, Scottish Government: Edinburgh.
2. Scottish Government, *National Health and Social Care Workforce Plan: Part 2 - A Framework for Improving Workforce Planning for Social Care in Scotland*. 2017, Scottish Government: Edinburgh.
3. Charles, A. and L. Ewbank. *The Road to Renewal: Five Priorities For Health and Care*. 2021; Available from: <https://www.kingsfund.org.uk/publications/covid-19-road-renewal-health-and-care>.
4. NHS Education for Scotland, *NHS Education for Scotland Strategy 2019-2024*. 2019, NHS Education for Scotland.
5. Skills for Health, *Six Steps Methodology to Integrated Workforce Planning*. 2008, Skills for Health: Manchester.
6. Scottish Executive, *National Workforce Planning Framework*. 2005, Scottish Executive: Edinburgh.
7. Scottish Government, *National Health and Social Care Workforce Plan: Part 3 - Improving Workforce Planning for Primary Care in Scotland*. 2018, Scottish Government: Edinburgh.
8. Scottish Government and COSLA, *Health and Social Care: Integrated Workforce Plan*. 2019, Scottish Government: Edinburgh.
9. Scottish Government, *National Health and Wellbeing Outcomes: A Framework for Improving the Planning and Delivery of Integrated Health and Social Care Services*. 2015, Scottish Government: Edinburgh.
10. Scottish Government, *Re-mobilise, Recover, Re-design: The Framework for NHS Scotland*. 2020, Scottish Government: Edinburgh.
11. Scottish Government, *Health and Care (Staffing) (Scotland) Act 2019 (asp 6)*. Available at <https://www.legislation.gov.uk/asp/2019/6/enacted> (Accessed: 03 November 2020).
12. Scottish Government, *Chief Executive's Letter 32*, Directorate for Health Workforce and Performance, Editor. 2011, Scottish Government: Edinburgh.
13. Feeley, D., *Adult Social Care: Independent Review*. 2021, Scottish Government: Edinburgh.
14. Independent Care Review, *The Promise*. 2020, Independent Care Review: Edinburgh.
15. Morgan, A., *Review of Additional Support for Learning Implementation*. 2020, Scottish Government: Edinburgh.

16. MacKenzie, A., G. Tomblin Murphy, and R. Audas *A Dynamic, Multi-Professional, Needs-Based Simulation Model to Inform Human Resources for Health Planning*. Human Resources for Health, 2019. **17**, 42 DOI: 10.1186/s12960-019-0376-2.
17. Tomblin Murphy, G., et al. *A Synthesis of Recent Analyses of Human Resources for Health Requirements and Labour Market Dynamics in High-Income OECD Countries*. Human Resources for Health, 2016. **14**, 59 DOI: 10.1186/s12960-016-0155-2.
18. Scottish Government. *National Records of Scotland*. 2021; Available from: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population>.
19. Scottish Government. *Scottish Index of Multiple Deprivation*. 2020; Available from: <https://simd.scot/#/simd2020/BTTTTT/9/-4.0000/55.9000/>.
20. Observatory, T.S.P.H. *Scottish Burden of Disease*. 2020; Available from: <https://www.scotpho.org.uk/comparative-health/burden-of-disease/overview/>.
21. Armstrong, D.G., A.J.M. Boulton, and S.A. Bus *Diabetic Foot Ulcers and Their Recurrence*. New England Journal of Medicine, 2017. **376**, 2367-2375 DOI: 10.1056/NEJMra1615439.
22. Scottish Diabetes Data Group, *Scottish Diabetes Survey 2019*. 2019.
23. World Health Organization, *International Classification of Functioning, Disability and Health: ICF*. 2001, World Health Organization.
24. Royal College of Speech and Language Therapists (RCSLT), *Measuring Outcomes Outside Individualised Care*. 2021, RCSLT: London.
25. Cameron, L., et al., *SBAR: The Current Allied Health Professions (AHP) Data Position in Scotland*. 2020.
26. Scottish Government, *Health and Social Care Delivery Plan*. 2016, Scottish Government: Edinburgh.
27. Realistic Medicine. *Working Together To Provide The Care That's Right For You*. 2021; Available from: <https://www.realisticmedicine.scot>.
28. Scottish Government. *Health and Social Care Integration*. Available from: <https://www.gov.scot/policies/social-care/health-and-social-care-integration/>.
29. Scottish Government, *What Should Primary Care Look Like For The Next Generation? Phase II*. 2021, Scottish Parliamentary Corporate Body: Edinburgh.
30. Scottish Government, *Scotland's Public Health Priorities*. 2018, Scottish Government: Edinburgh.
31. NHSScotland Shared Services. *Scottish Radiology Transformation Programme (SRTP)*. 2021; Available from: <https://www.sharedservices.scot.nhs.uk/scottish-radiology-transformation-programme-srtp/>.

32. Scottish Government, *Recovery and Redesign: Cancer Services - Action Plan*. 2020, Scottish Government: Edinburgh.
33. Scottish Government, *Framework for Supporting People Through Recovery and Rehabilitation During And After The COVID-19 Pandemic*. 2020, Scottish Government: Edinburgh.
34. Earl, G., *Who's Bothered? An Evaluation of AHP's Learning About Effective Decision Making (Effective Conversations)*. 2020, NHS Education for Scotland: Edinburgh.
35. Mould, S. and J. McConnell, *We Can Break Your Fall: An AHP Collaboration*, in *UK Imaging and Oncology Congress*. 2019, UKIO: Liverpool.
36. NHS Education for Scotland. *TURAS Data Intelligence Platform*. 2021; Available from: <https://turasdata.nes.nhs.scot/workforce-official-statistics/nhsscotland-workforce/publications/01-december-2020/dashboards/allied-health-professions/>.
37. Office for National Statistics. *Workforce Labour Survey*. 2021; Available from: <https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurvey>.
38. Office for National Statistics, *SOC 2020*. 2020.
39. Scottish Government, *Scotland's Digital Health and Care Strategy: Enabling, Connecting and Empowering*. 2018, Scottish Government: Edinburgh.
40. Scottish Government Health Delivery Directorate Improvement and Support Team, *Understanding Capacity and Demand: A Resource Pack for Healthcare Professionals*. 2007, Scottish Government: Edinburgh.
41. Berwick, D.M., T.W. Nolan, and J. Whittington *The Triple Aim: Care, Health, and Cost*. Health Affairs, 2008. **27**, 759-769 DOI: 10.1377/hlthaff.27.3.759.
42. NHS Education for Scotland. *AHP Careers*. 2021; Available from: <https://www.careers.nhs.scot/careers/explore-our-careers/allied-health-professions/>.
43. NHS Education for Scotland, *Healthcare Support Worker Learning Survey 2018*. 2019, NHS Education for Scotland: Edinburgh.
44. *Optimising the Contribution of the Allied Health Professions Support Workforce*. 2021; Available from: https://collegeofparamedics.co.uk/COP/News/optimising_the_contribution_of_the_allied_health_professions_support_workforce.aspx?WebsiteKey=9a9b21e9-7e94-4adf-a89a-eb1cb57da56.
45. NHS Education for Scotland. *Transforming NMAHP roles*. 2021; Available from: <https://www.nes.scot.nhs.uk/our-work/transforming-nmahp-roles/>.

46. Office for National Statistics. *Annual Survey of Hours and Earnings (ASHE)*. 2020; Available from: <https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/annualsurveyofhoursandearningsashe>.
47. Scottish Government, *Everyone Matters: 2020 Health Workforce Vision*. 2013, Scottish Government: Edinburgh.
48. AHPFS, *Allied Health Professions Scotland consensus statement on quality service values*. 2013, Scottish Government: Edinburgh.
49. NHS Education for Scotland, *Scotland's Allied Health Professions Compendium 2020*. 2020, NHS Education for Scotland: Edinburgh.
50. Gascoigne, M.T., *The Balanced System*® 2016, Better Communication CiC. Available from <https://www.thebalancedsystem.org/2016%20Balanced%20System%20Outline.pdf>
51. Gascoigne, M.T., *The Balanced System*® for Allied Health Professionals Working with Children and Young People in Scotland: A Pilot Project to Explore the Impact of Understanding Need and Mapping Provision 2018, Better Communication CiC. Available from <https://www.thebalancedsystem.org/2018.04.16%20Final%20Overview%20Report.pdf>
52. Wylie, D.A. *The Art of The Possible: A Whole System Approach To Foot Protection Redesign*. The Diabetic Foot Journal, 2019. **22**, 30-33.
53. Wylie, D.A. *Foot Protection Service Redesign: An Adaptive Leadership Approach*. Wounds UK, 2020. **16**, 70-77.

Appendices

Appendix 1: Who are AHPs and Where Do They Work?

Allied Health Professionals (AHPs) are a group of fourteen specific professions (art therapists, dietitians, drama therapists, music therapists, occupational therapists, orthoptists, paramedics, physiotherapists, podiatrists, prosthetists/orthotists, radiographers (diagnostic and therapeutic) and speech and language therapists). Each of the allied professions have unique and protected skills that contribute to the health, wellbeing, and wellness of our communities, and are brought together under one professional regulator, the Health and Care Professions Council (HCPC). A number of the Professional Bodies also have one voice through the Allied Health Professions Federation Scotland (AHPFS).

The Scottish Government 2020 Workforce Vision^[47] recognises the strategic role AHPs play in achieving the transformation ambitions of health and social care services. The values of AHPs^[48] are aligned with core NHS values and rooted in a commitment to work in partnership. The 2020 AHP Compendium^[49] illustrates the difference AHPs make in people lives by supporting people to do more of the things that matters to them.

AHPs are the third biggest workforce in the NHS, but also work in other sectors including social care, local authority, and education, Third Sector, and private practice. The NHS is the biggest employer of many of the allied professions, e.g. orthoptists. Only a small number of orthoptists work in private practice, Higher Education Institution (HEI), or contracted optician services. However, occupational therapists are just as likely to become NHS employees as they are to work for one of the many local authorities across Scotland, and for some AHP professions, private practice is a significant source of employment e.g. podiatrists and physiotherapists.

Third Sector employers such as Capability Scotland are also small, but significant employers of AHPs including physiotherapists, speech and language therapists, and occupational therapists.

Appendix 2: Staff Wellbeing and Wellness in NHS Forth Valley

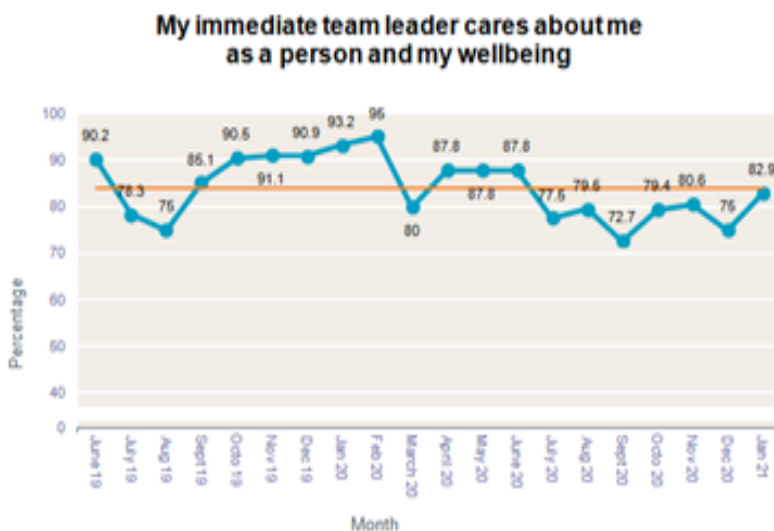
Allied Health Professionals in NHS Forth Valley have been on an improvement journey to promote a healthy culture that began with the children's speech and language therapy team over two years ago. Taking a quality improvement approach, teams have been working together to improve culture by considering two themes of work: leadership development, and the IHI framework for Joy in Work.

Based on the idea that compassionate leadership and culture are inextricably linked, the model for leadership development focused on the three key principles of prioritising relationship, giving power away, and facilitating effective action.

Using the IHI framework, the team started very simply by having a 1:1 conversation with all staff asking them 'what makes for a good day' and 'what makes for a bad day.' The information from those conversations was themed prioritised by staff and reviewed alongside a healthy culture questionnaire by an improvement group of staff from across all bands and roles.

Spending time on understanding the unique local context, the process has allowed the improvement group to understand the system and in partnership with the wider staff group identify what to work on first. Staff are asked to fill out monthly pulse surveys that focus on key change ideas. This allows the improvement group to track change over time.

Figure 10: The percentage of people who 'strongly agree' or 'agree' with the statement 'my immediate team leaders cares about me as a person and my wellbeing.'



The success of this approach has been attributed to the process being initiated by leaders but owned and driven by the wider staff group.

Appendix 3: CYP SLT National Benchmark of Services

To help better understand the AHP workforce requirements within children and young people's (CYP) services, CYP SLT Services across Scotland have recently undertaken a benchmarking of workforce capacity, population need, patterns of demand and analysis of service models (appendix 3). The methodology used was the Balanced System[®]^[50], a whole systems improvement methodology based on outcomes at universal, targeted and specialist levels across the Balanced System[®] Five Strands of Family Support; Enabling Environments; Developing Workforce; Early Identification and Effective Intervention. This built on a pilot conducted with four Health Board areas which reported in 2018^[51].

All 14 Health Boards and 32 Local Authorities participated in this recent benchmarking resulting in a complete dataset of the local needs, workforce to meet need, demand on services and mapping of service offer. The aims of this piece of work were not only to collect a comprehensive national dataset but build understanding of the role of the SLT workforce as part of a wider outcomes-focused children and young peoples' system. The forthcoming report will present an analysis of the quantitative and qualitative data through four cross cutting themes and is expected to make recommendations for consideration.

A second study continues which uses the Balanced System[®] beyond the understand phase in a multiprofessional project involving SLT, occupational therapy and physiotherapy where the analysis of the original dataset is being used to inform multiprofessional pathways. This will report late 2021. This work may provide opportunities for NES to support AHPs to learn from successful improvement initiatives within CYPs services and apply in a range of settings.

Appendix 4: AHPs and Public Health Approaches

An Allied Health Professional Fellowship in NHS Ayrshire and Arran is undertaking a work-based project to scope the potential contribution that AHPs could make to the six national Public Health Priorities. The secondary aim of the project is to identify the factors that would enable AHPs to fulfil their contribution to the Public Health Priorities.

Early findings suggest AHP awareness of the Public Health Priorities, and the UK AHP Public Health Strategic Framework is low. Themes identified where improved AHP workforce planning could support whole system change and improve outcomes are.

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- **Time, Capacity and Priority**

AHPs reported that a lack of clear direction and level of priority for public health approaches as part of workforce and workload planning meant that clinicians often felt pressure to address waiting lists and direct clinical care before addressing population level activities and support. Common themes were limited opportunity, capacity, or appetite to look upstream and develop strategic approaches which might transform their services.

- **Skill Building**

There is currently wide variation in understanding of the role AHPs in delivering population and public health approaches, tackling health inequalities and or how AHPs can contribute to changing outcomes. AHPs report a lack of confidence and limited skills in understanding the evidence and impact to inform service change knowledge and behaviours required to plan and deliver more public health and population-based approaches.

Appendix 5: The Recovery and Rehabilitation Framework

By the end of 2025, the Recovery and Rehabilitation Framework aims to ensure all adults who require rehabilitation have timely access to the right information and services in the right place to support them to enjoy and participate as actively as possible in the life they choose.

Considering the five aspects of prevention and early intervention, self-management, prehabilitation, generalist rehabilitation, specialist rehabilitation, and covid-19 rehabilitation, a self-evaluation tool is currently under development to help integrated authorities, NHS boards and Third Sector organisations identify current delivery and consider future requirements. Determining rehabilitation provision prior to, during, and moving forward in the pandemic will provide learning and establish a nationally recognised baseline for the provision of quality rehabilitation.

This must also be in line with the principles of realistic medicine to reduce waste and variation and ensure appropriate intensity and frequency of interventions to meet agreed outcomes. Providing the right co-ordinated, person-centred care will only be achieved by rigorous integrated workforce planning that includes the creation of new roles where required and acknowledges the impact of the health, wellbeing, and wellness of staff on service delivery.

The Framework supports identifying what good looks like for people and services. Key principles of this work will be to ensure rehabilitation is

- easy access for every person
- delivered by a flexible and skilled workforce
- provided at the right time
- realistic and meaningful to the individual receiving support
- innovative and ambitious, and
- integrated

Appendix 6: PESTLE Analysis

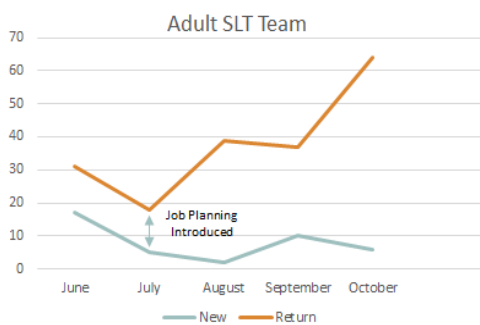
<p>Political</p> <ul style="list-style-type: none"> • Election year and political manifesto • Potential for Indy Ref 2 • BREXIT • NES Strategic Plan for 2019-2024 details the commitment to provide high quantity workforce data • National Workforce Planning Framework • National Health and Social Care Workforce Plans • Integrated Health and Social Care Workforce Plan for Scotland • Local Strategic planning and priorities 	<p>Economic</p> <ul style="list-style-type: none"> • Health inequalities resulting from socio-economic determinants • Investment availability for workforce growth • Investment availability for innovation, workforce development, and new clinical practice • The devolution of eSystem provision to boards, variable investment, and inconsistent availability and functionality of eSystems and data capabilities
<p>Social</p> <ul style="list-style-type: none"> • NHS and AHP values • Leadership Culture • Attitudes to flexible and agile working • Individual responses to the challenges and opportunities from working from home • Existing NES workforce data is collated and generated by a team which sits outside the NMAHP directorate • Cultural attitudes to data and workforce planning within wider systems and AHP teams • Real and perceived cultural barriers for clinicians engaging with robust use of data and workforce planning skills in daily practice, planning and strategy 	<p>Technological</p> <ul style="list-style-type: none"> • Digital poverty • Need for improved clinical skills to increase technological and digital competency across the workforce • Future role of Artificial Intelligence in clinical practice • Need for greater data collection infrastructure and compatibility to inform integrated workforce planning
<p>Legal</p> <ul style="list-style-type: none"> • Working Time Regulations 1998 • ‘Once for Scotland’ policies and staff governance • Health and Care (Staffing) (Scotland) Act, 2019 • Propositions for increased regulation of non-registered staff • Accreditation and registration duties and obligations of advanced practice 	<p>Environmental</p> <ul style="list-style-type: none"> • AHP adoption of green initiatives relating to <ul style="list-style-type: none"> – Travel and transport – Buildings and estates – Use of technology and A.I. • Importance of location of services within communities • Digital impact on the physical environment where services are traditionally provided

Appendix 7: Job Planning in Speech and Language Therapy

Services in South Ayrshire have introduced job planning to begin to address issues of chronic workload pressure.

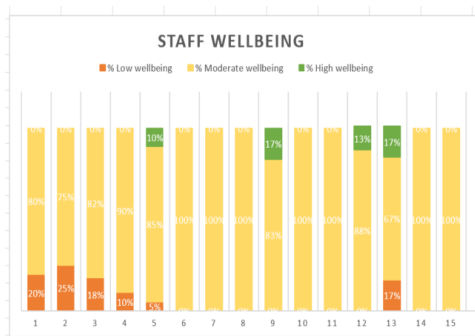
Staff were supported to adopt a standardised process to create the conditions to balance the 4 pillars of practice and inform the creation of service specifications. By being clear about how much time was allocated to clinical activity, teams were able to create shared and achievable goals.

Figure 12: Adult SLT Team New and Return Contacts



Job planning resulted in better individual and team planning with the ability to review the service offer undertake a quality improvement approach to improve outcomes for people and communities. While not the objective of the initiative, job planning also resulted in an increase in team activity.

Figure 13: Adult SLT Team Staff Wellbeing



Staff reported that better planning resulted in better care, that they felt more productive, and that they could see their CPD goals embedded into their working week. In addition to providing a structure to support realistic and achievable work goals, teams reported improved wellbeing and wellness.

Team leads have reported greater psychological safety and agile working within teams, increased leadership behaviours, and better open and supportive conversations with 360 review of workload. Work is underway to adopt these principles across all AHP services and teams.

Appendix 8: Data Migration in NHS Forth Valley

Where there is good provision for eSystems and migration is well planned, is possible to deliver innovation beyond only activity data gathered. NHS Forth Valley AHPs have migrated all data from MiDIS, the previous electronic patient record, to the Morse system in order to confidently assure continuity across AHP practice.

Several test migrations exercises were executed to identify and resolve user error and system compatibility issues in transfer. This generated a whole system review not only of where data could be cleansed, but also highlighted areas where targeted training would support clinicians to make best use of the system.

The result is that AHPs can report on all AHPOMs and generate powerful data relating to individualised activity. This data is now being used in some teams to help identify and support learning needs for staff. By monitoring the type of clinical experiences and range of care delivered by clinicians, the data can be used to support individual and team discussion and ensure clinicians have the skills, competencies, and experience required to confidently deliver the full range of interventions within their scope of practice.

However, no ability to record or document population-based activity or record personal outcomes continue to limit the relevance of this type of data collection for some AHP groups.

Appendix 9: If You Don't Count, You Don't Count

In 2015 the Scottish Government in conjunction with the ALIP Programme and The Allied Health Professions Directors Scotland Group (ADSG) examined the potential for creating a workforce and workload measurement tool for AHPs in Scotland. This project considered the range of existing workload measurement tools from a range of professions, across Scotland, the rest of the UK, and internationally.

With a focus on testing and adapting the NSS (ATOS) nursing workload measurement tools used across nursing in Scotland, a prototype tool that was tested across a range of AHPs in line with the nursing workforce and workload measurement tools. The value of utilising these tools was ensuring that all workload was measured meaning whole population activities, supports targeted at specific populations, and individualised interventions were captured along with time spent participating in other activities such as research, facilitated learning, and leadership.

The tools were trialled in NHS and local authority settings with a small number of AHPs working across a wide range of locations and teams. Settings included child health, hospital acute, outpatient services, community services, and community mental health and falls prevention teams. Participating AHPs included podiatry, physiotherapy, radiography, occupational therapy and dietetics. Any development of workload measurement tools arising from the safer staffing legislation will need to take a similar approach to ensure inclusivity of AHPs and the variety of settings we work within.

The 'professional judgement tool' which forms part of the nursing workload measurement tools was also considered and adapted for AHP use as part of this project. During the pandemic, community based AHPs have further adapted the professional judgement tool coordinated by the AHP primary care advisor to Scottish Government. This project concluded and a recommendation to establish a 5-year development plan to refine the workload measurement tool in iterative data collection cycles was considered. However, further work resulted in the undertaking of an options appraisal to assess the applicability of other UK wide systems that could support AHP workforce planning.

The options appraisal further examined the AHP adapted NSS (ATOS) nursing workload measurement tools alongside the Workforce Repository and Planning Tool (WRaPT), The Balanced System[©], and The Workforce Capacity and Planning Tool (GE Healthcare). When critically appraising these tools, examining their ability to support the requirements, and considering cost effectiveness, all options were ruled out.

At that time, and on the recommendation of the reports' authors, ADSG agreed that implementing any of the tools would not add value to services. It was recognised that further work needed to be done to prepare services and embed a culture of workforce planning before any solution could be adopted.

The group concluded the procurement of a tool at this time would be counterproductive as the challenge of adopting any measurement tool without addressing the variance in understanding and practice relating to workforce across Scotland's AHPs would be counterproductive.

Appendix 10: Part B Workforce Questions

The AHP workforce algorithm (Part A) provides a figure of WTE AHPs based on population and size of area covered. However, comparing the number of WTE AHPs employed in one area with requires further contextual consideration.

As part of this workstream, the following questions were provided to AD SG to guide a national approach to workforce planning to be used in conjunction with 6 steps methodology.

1. Vacancies

This figure given is WTE in post, not your establishment.

How many vacancies do you have?

How many of these are vacant for over 3 months?

What actions are you taking to enhance recruitment?

2. What are the Health Needs of Your Local Population?

Each NHS board has public health information analysts employed by NHS Scotland but working locally.

Data is available for your NHS board area alongside an indication of whether the profile for health information in your area is significantly higher or lower than the national average statistically.

<https://www.scotpho.org.uk/comparative-health/profiles/online-profiles-tool>

You might use this tool to provide information for example that shows the rate of diabetes and people with diabetic foot care risk is high and therefore is one of the reasons that additional podiatry posts are required.

Do you provide any regional or national services?

What is the wider population your national/regional services extend to?

3. Service Model in Use

Has this service been considered for redesign?

Are you sure the model of service delivery is as up to date as it can be and based on best available evidence?

4. Clarity of Roles Undertaken

Are the roles clearly defined for each participant in the service?

What skill mix considerations have been taken into account?

How confident are you that the right person with the right skills is doing the right thing or things?

5. Mode of Delivery

Is the service making best use of technology to be as efficient as possible?

6. Added Value of AHPs.

Are there examples of contributions the AHP can make/are making that address specific local needs or priorities?

Are there specific shortages within medical workforce where AHP could be part of the solution?

Are there gaps or examples where good practice could be spread to the whole system/organisation?

Can you evidence cost savings and efficiencies through task/activity analysis and different models/ pathways where AHPs make additional contribution at a cost that is far less than the current ways this service is provided?

Can you link these improvements to the health and wellbeing outcomes?

7. Quality Service Values

Can you demonstrate that your service is meeting the Scotland consensus on quality service values?

Is quality measured and improving, maintained or declining?

What do the figures about waiting times, feedback, compliments and complaints tell you about the quality of service being provided?

Are your staff well educated and is KSF, CPD and mandatory training up to date?

Appendix 11: AHP Operational Measures (AHPOMs) Activity Data

The AHP National Delivery Plan (NDP) for Scotland 2012-15 identified the need for a national minimum dataset to capture AHP activity in health and social care that could be made available in dashboard format.

National datasets had been developed and available to AHPs for the last 20 years, but due to devolved responsibility for eHealth to local NHS boards, the proliferation of local systems and locally defined data sets, national data capture remains challenging. Significant variation in access to clinical IT systems across Scotland has prevented AHPs from effectively recording, interrogating, and reporting data, with some areas continuing to have no local systems in place to record the required datasets.

The Community Health Activity Dataset (CHAD) was designed to capture district nursing activity. The datasets were aligned as closely as possible to the Information Services Division (ISD) data dictionary and social care datasets to allow for future data linking. Original plans were to include a dataset for Allied Health Professionals, but this was not progressed due to the development of the Allied Health Professional Operational Measures (AHPOMs) that are based on the current CHAD model of data collection. CHAD data may include some AHP data, but this will be recorded within the categories of district nursing, community mental health or health visiting and not separately identified as an AHP Profession.

Based on the CHAD model of data collection, the purpose of AHPOMs was to establish a national minimum dataset to capture clinical activity and create a mechanism to collate and share outputs. This work was commissioned by the Scottish Government and overseen by ISD, National Services Scotland (NSS). Phase 1 of this work produced a working 37 item minimum data set which was published in September 2017.

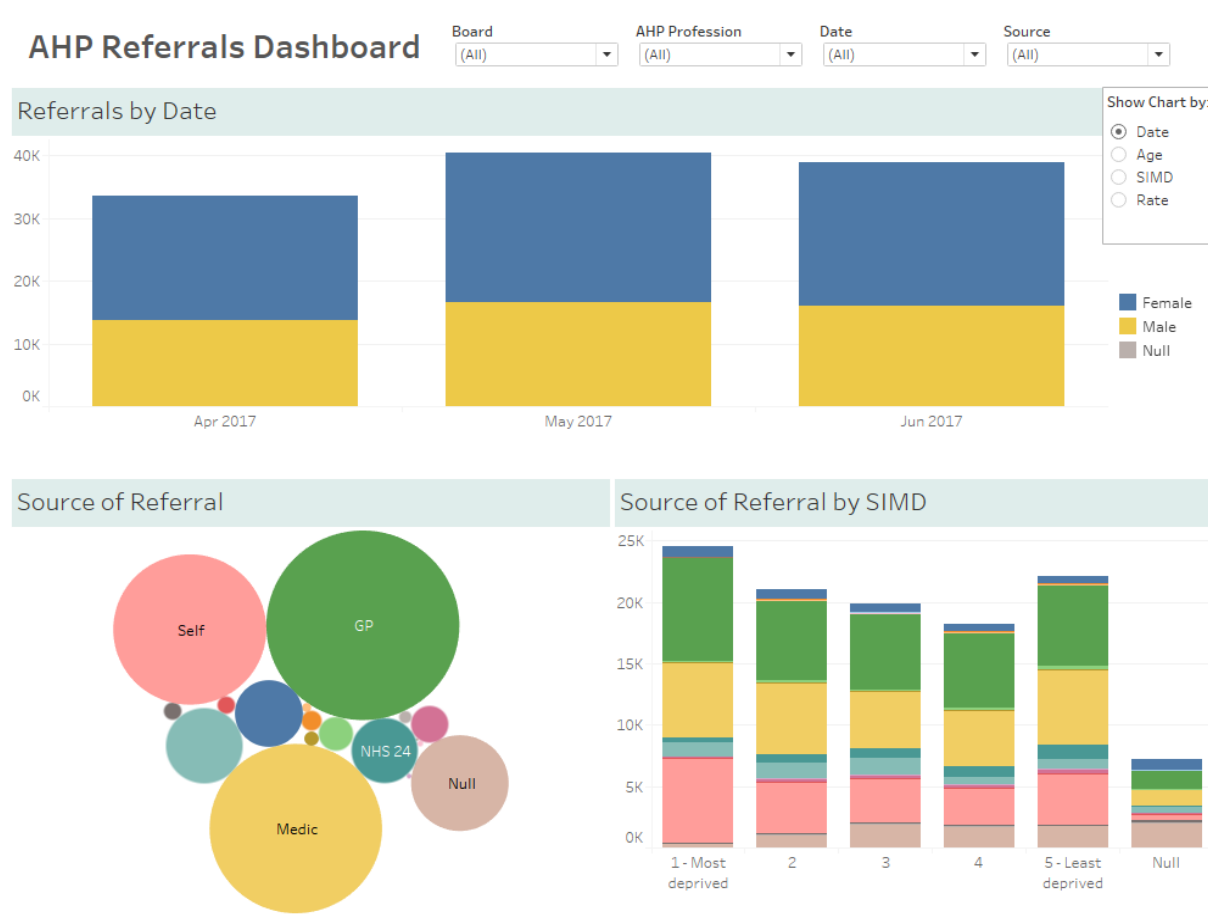
Phase 2 of AHPOMs included piloting the dataset and data capture mechanism in three NHS boards/social care partnerships, developing a data repository and appropriate information governance protocols, and the means to produce high quality outputs in the form of a dashboard. The dashboard provides a wide range of useful information to inform workforce planning including referral information, episode of care, and activity data. Examples of the dashboard can be seen in figures 14, 15 and 16.

By October 2019, the decision was made by the AHPOMs steering group to pause this work as less than half of NHS boards were able to submit the full dataset. Some areas were close to delivering complete sets of data, but significant variation in availability, functionality, and access to systems in some NHS boards and local authorities meant many AHPs did not have an eSystem capable of collating the required fields or standardised data definitions.

For those NHS boards where data was being collected manually, a limited number of fields were captured at significant cost of time for clinicians. A lack of awareness in the value of data and practical skills to support data collection therefore limited instances of data being used to drive service improvement and is likely to have been a barrier to data collection. The steering group reported that the initial purpose to gather reliable and complete data from AHP services nationally was not feasible at that time until efforts had been made to address these shortcomings.

Even where systems would allow, in some circumstances there were varying and often limited numbers of AHP professional groups enrolled in using electronic data systems. Some did not consistently enter complete data resulting in high variance and poor overall data quality.

Figure 14: AHP Referral Dashboard (AHPOMs)



An NSS/ISD summary of AHPOMs data submission readiness at NHS board level reported boards felt clinicians, eHealth, and information service colleagues working together on projects such as AHPOMs were well connected with regards to AHP data. However, as NHS boards were not able to consistently provide comparable or validated AHP data, the level of connection did not always influence the priorities of their work plan. Some boards continue to rely on manual data collection relating to activity, caseload and performance creating a significant burden of task and risks higher levels of data inconsistency.

Figure 15: AHP Episode of Care Dashboard (AHPOMs)

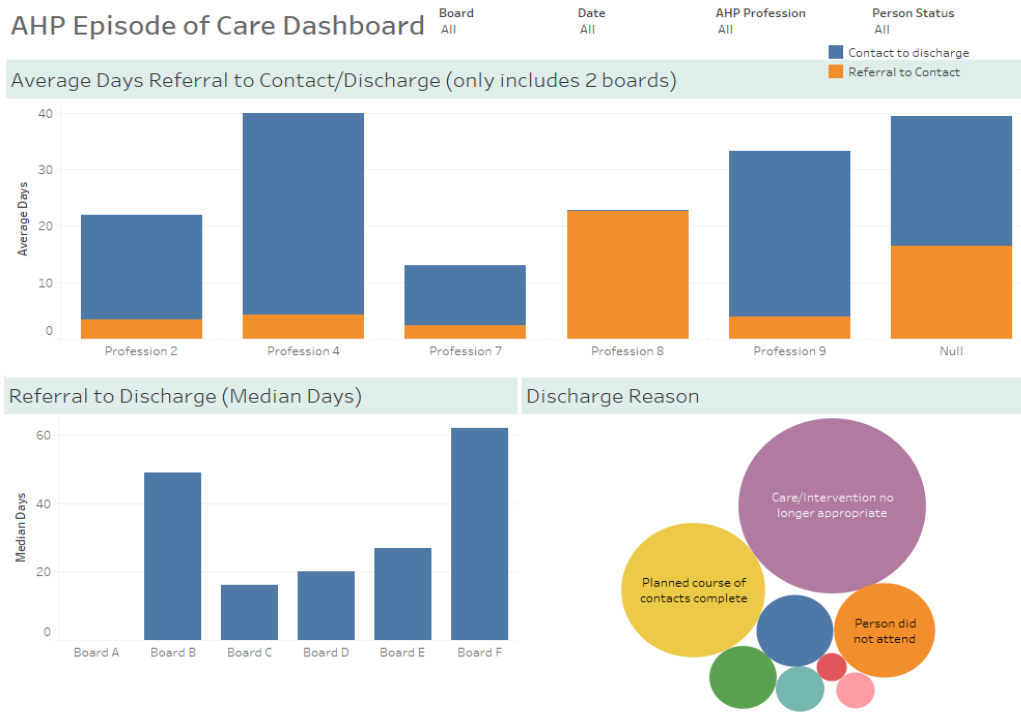
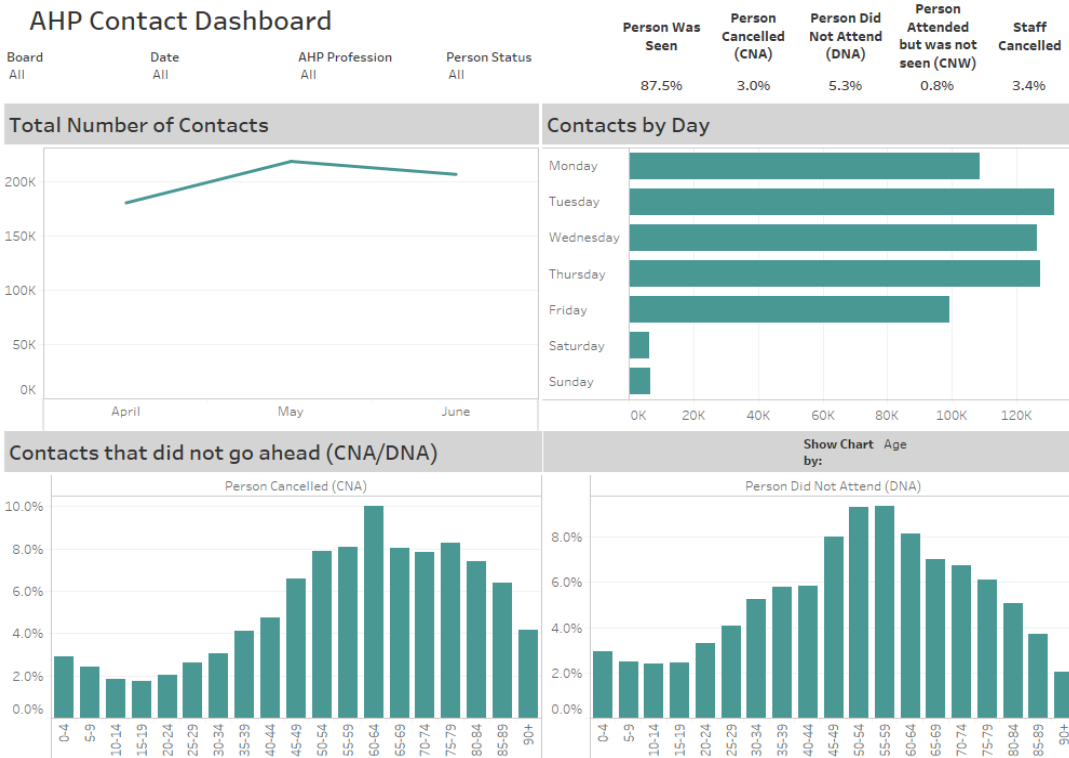


Figure 16: AHP Contact Dashboard (AHPOMs)



The development of the AHPOMs agreed minimum dataset is a significant achievement and carries the potential to inform workforce planning, management, and financing at both a national and local level. A significant investment in local information management alongside an increased appetite and priority given to the collection AHP data is required to realise the potential of this work.

Appendix 12: AHP Caseload Templates, Professional Judgement and Safety Huddle

In response to the challenges faced by AHPs across the global pandemic, Scottish Government AHP professional advisors sought to adapt the existing professional judgement tool used as part of the nursing workforce and workload measurement tools, to be used with AHPs in line with similar tools developed and used in other services.

Co-produced using improvement methodology by CNOD Health & Care staffing team, Scottish Government advisors, AHP Directors of Scotland, & volunteer clinical stakeholders to help team assess whether on any given day they have sufficient resources and skills to undertake known demand. The tool can be used to record data over several shifts or routinely using an excel file, and can be useful in highlighting whether, in the judgement of the senior staff member working that day, the number of staff was appropriate to meet demand.

The professional judgement templates were not designed to be workload measurement tools but resources to support teams articulate staffing requirements and escalate severe and recurring risk. Safety huddle template and professional judgement tools were trialled in practice using volunteer clinical stakeholders across Scotland, with 52% of users reporting a positive evaluation.

Users reported that the ability to see trends in admission and discharges, guidance of complexity and the ability to see staffing gaps were useful. Challenges reported included the need to consider skill mix and skill mix utilisation, the tools were time consuming and did not reflect the way in which some teams worked and did not account for variation to staff availability e.g. part time or additional hours.

Volunteer stakeholders reported the tools to be more useful retrospectively for analysis than prospectively for planning and highlighted the limitations of using an excel file. This work is expected to inform the multiprofessional workload tools currently being reviewed and developed within the HIS Healthcare Staffing Programme.

Appendix 13: The Healthcare Staffing Programme

The Healthcare Staffing Programme delivers tailored support, guidance, and monitoring and compliance in relation to the obligations of the Health and Care (Staffing) (Scotland) Act 2019. The programme works in partnership with a wide range of stakeholders and professional groups to deliver the ambitions of multiprofessional real-time staffing assessment tools and methodology development, quality and care assurance, education, and support.

The work of the programme builds on the work of NSS, in partnership with ATOS, to develop nursing and midwifery workforce, workload activity and caseload measurement tools. Average workload is considered alongside local context, quality indicators and professional judgement. The Scottish Government describes this as a triangulated approach.

With a renewed focus and ambition to deliver multiprofessional outcomes, the programme has a longer-term view to link more closely with the Excellence in Care programme and national quality standards. The programme has also recognised the need for further work that considers how best to capture staffing requirements and articulate, mitigate and escalate severe and recurring risk. Ensuring that the right measures are used to best articulate the risk across multiple settings remain the most significant challenge.

The Healthcare Staffing Programme will support teams to understand the relationship between available staffing, the resource required to meet need, and any discrepancy between the two. Data trends will help to better articulate future need considering safety alongside quality and improved person-centred outcomes. There are a wide range of tools that have been used across nursing for many years.

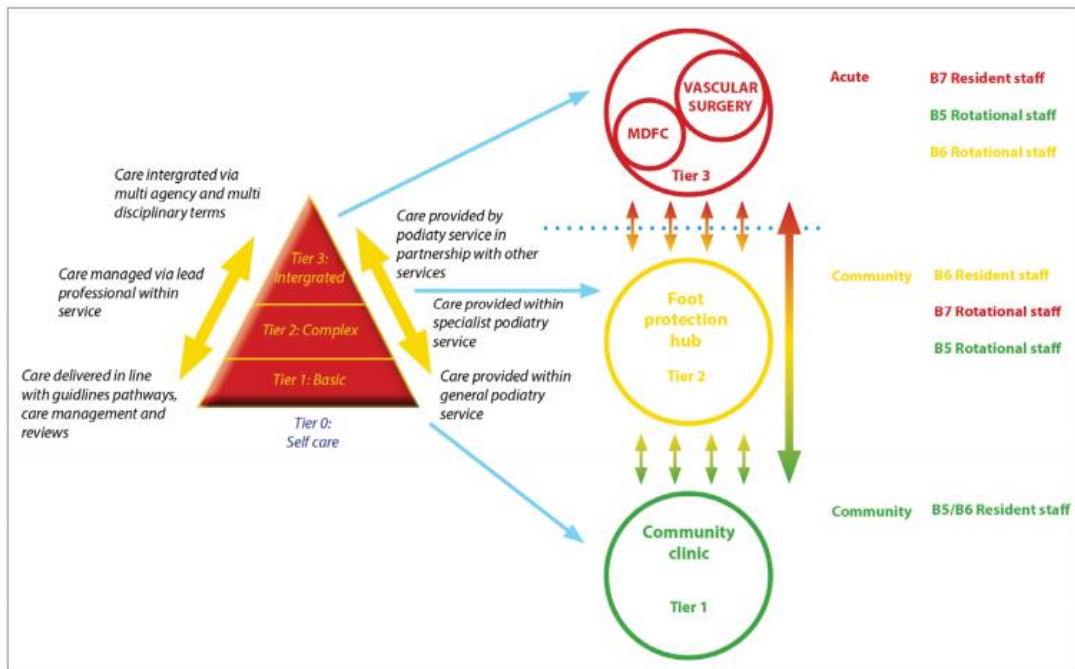
The tools include a community nursing tool and a clinical nurse specialist tool which capture both caseload activity and time spent by each practitioner in a wide range of other clinical and non-clinical activities. These tools were used in the 2015 Scottish Government project described above as they more closely replicated AHP practice. Population based work, drop-in sessions, working with families, plus travel, administrative, research, education and other types of activity were all included in these tools. However, outcomes and impact of workload could not be captured.

Following the appointment of a National AHP Workforce Lead, the programme is reviewing some of the most challenging aspects of workload and caseload measurement for AHPs. The impact of missed care, quality and care assurance, older people and rehabilitation, and education and support needs are a current focus. Early scoping work is exploring the learning and education needs for AHPs related to workforce and workload, the readiness to provide professional clinical advice on workforce decisions, supporting alignment between HSP and other AHP priority areas, and engaging the wider AHP community.

Appendix 14: Skill Mix Utilisation

The podiatry service within NHS Greater Glasgow and Clyde underwent service redesign that included a review of skill mix to maximise the impact of the workforce resource.

Figure 17: NHS Greater Glasgow and Clyde Podiatry Service Model^[52, 53]



The service specification that clearly identified what was in and out of scope along with a proposed three service model (figure 17) to deliver the redesigned service.

This also described what levels of care were to be delivered within each redesigned tier.

The capabilities and competencies of individuals within the service were examined against what was required to be delivered at each tier to develop a whole system learning and education plan.

By supporting learning and education across the service, the redesign could maximise the impact of each member of staff. This enabled the podiatry MSK service to deliver into a rehabilitation model rather than being heavily focused on therapeutic interventions and orthotic provision.

By using what was already known about the increased burden of disease relating to type 2 diabetes, the service produced a 2018-23 workforce plan that increased the number of posts to meet this anticipated need. This workforce plan resulted in the creation of an additional 8.4 WTE band 6 podiatry foot protection posts and delivered the 2023 workforce ambition by 2020.

Appendix 15: Advancing Technology and Imaging in Remote and Rural Communities

Expertise in telemedicine and the availability for reporting of images through virtual systems is enabling rapid responses to urgent requests. However, acquisition of simple examinations may not be readily available in remote and rural settings due to a need for appropriate housing of equipment or availability of staff to operate the equipment. Similar situations in Australia have been overcome by educating healthcare staff to operate simple X-ray equipment under stringent licensing arrangements following appropriate education.

Coupled with equipment that can now perform multiple exposures on a single battery charge with wireless transmission of data to reporting centres that include reporting radiographers, remote and rural imaging could be performed at home if necessary. With the potential for the availability of almost instant results, person-centred decisions can quickly be made with the most efficient use of resources.

NHS England is already evaluating the access of more complex imaging through mobile centres where imaging services may not be able to perform wider preventative screening services. By establishing new approaches to multiprofessional working, using mobile domiciliary imaging systems, developing radiographer reporting abilities, it may be possible to see improvements to unscheduled care, reduce delays, and help address the geographic and population distribution challenges for some NHS boards.

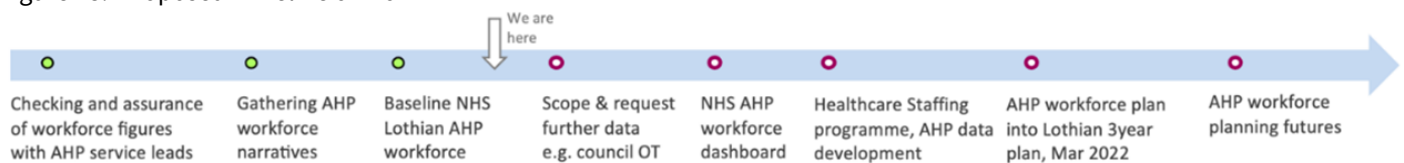
Appendix 16: AHP Workforce Data in NHS Lothian

Without detailed national AHP workforce data, NHS Lothian have commenced work to review local systems and devise methods to extract meaningful AHP workforce data from locally held sources

This workstream aims to establish a demographic profile of AHPs within NHS Lothian, and those working within local authorities and has three main aims

- to establish a Lothian-wide AHP workforce baseline
- to support AHP services and AHPs within MDTs to use data to define, develop, and prioritise future workforce planning
- to meet the duties of the Health and Care (Staffing) (Scotland) legislation

Figure 18: Proposed Timeline of Work

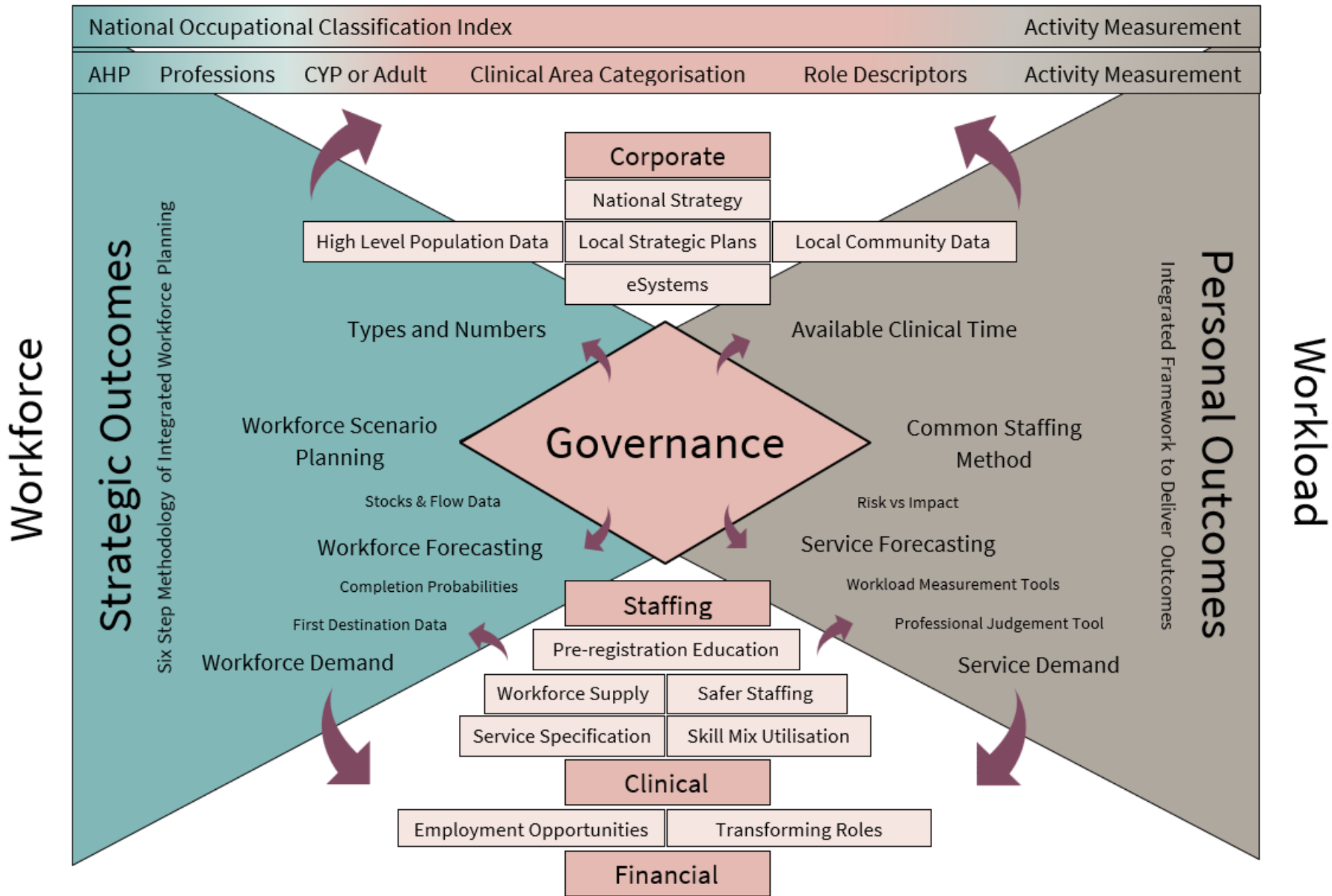


Data cleansing has included a line-by-line review of all payroll and HR held data to provide quality assurance on workforce data for registered AHPs, AHP Health Care Support Workers, Community Care Assistants, Technicians, Administrative and Clerical, and Business Support staff.

The work has produced high quality snapshot data that can be filtered by profession, locality, post descriptor, contracted whole time equivalent, headcount, banding, age, increment/ years in post. Work is in progress to additionally filter data by specialty.

Work is currently underway to use this data to characterise each AHP service and determine overarching workforce priorities based on

- priority directions, strategies, opportunities and innovations
- defined AHP workforce need
- potential risks, barriers and opportunities identified



Appendix 18: Short Term Objectives and Performance Indicators

	Objectives	Performance Indicators
1	NES will seek immediate agreement and approval of actions to establish the quality workforce planning capabilities required to deliver an adaptable and flexible workforce for the future.	<p>The Associate Director of AHPs will take the recommendations in this report to the NES Executive Board for review and seek agreement on priorities for action, appropriate resource allocation, and next steps.</p> <p>August 2021</p> <p>The NES AHP workforce lead will produce a short, digestible summary of themes, agreed actions, and next steps for NHS boards, AHP leaders and AHP communities.</p> <p>September 2021</p>
2	NES will work collaboratively and flexibly with a range of stakeholders to develop national workforce planning principles and local capabilities.	<p>NES will lead on establishing a national leadership steering coalition to agree roles of national organisations, delegated responsibilities, and oversee the direction and development of all AHP workforce planning initiatives and developments. Organisations who should be invited to be involved will include, but not be limited to representation from AHPFS, ADSG, NES Digital, HIS, SSSC, PHS, NHS boards/HSCPs/non-NHS AHP employers strategic and workforce planning staff, HR Directors, Employee Directors, and Scottish Government e.g., CAHPO, AHPs, and Workforce.</p> <p>The NES AHP workforce lead will establish a small advisory and planning group to report back to the national steering coalition.</p> <p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will begin a comprehensive and structured consultation with AHPs, NHS boards/HSCPs/ non-NHS AHP employers, and other stakeholders regarding current local capabilities, challenges, opportunities, and education and development needs.</p> <p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will offer support and practical support to local workforce planners developing the Integrated Workforce Plans HSCPs must deliver by March 2022, to support achieving the best possible outcomes for AHPs.</p> <p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will explore and develop a comprehensive glossary of terms relating to AHP workforce planning.</p>

		<p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will engage with national leaders and consider the benefits of a national audit of AHP waiting lists to better understand the current practice, who is currently waiting and for what, areas of greatest concern, and begin to improve national understanding regarding the role of the referrer and appropriate decision making processes at the point of referral.</p> <p>October 2021</p>
3	<p>NES will continue to develop and lead on organisational learning to better understand the landscape and decisions that affect AHP workforce planning.</p>	<p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will led on a piece of organisation learning to articulate the details and process of how resources are allocated that have an impact on AHP services. This may be a process map that identifies the cascading governance routes, significant gatekeeping and decision-making points, and the types of information required at each point in order to better understand the type of data required to appropriately influence key decisions on the best use and impact of any distribution of resources.</p> <p>October 2021</p>
4	<p>NES will influence and support the development of integrated workforce plans, aiming for a whole-system approach</p>	<p>Working with NES Digital, The NES AHP workforce lead will explore and report to the national steering group on how information relating to NHS Pay Bill data, AHP and related profession locum procurement and external provider costs may be useful in AHP workforce planning.</p> <p>October 2021</p>

<p>to workforce planning that realistically discusses the opportunities, challenges and impact of the AHP workforce.</p>	<p>Following the identification of need described above, and building on learning needs already identified, the NES AHP workforce lead, in collaboration with the advisory and planning group, will work alongside existing national workstreams and local practitioners already delivering best practice to coordinate the delivery of a series of live webinars recorded and available on TURAS. This may include</p> <ul style="list-style-type: none"> • Promoting the importance of linking service activity to overarching NHS boards/HSCPs/non-NHS AHP employers' strategic priorities • Job planning • Sharing the CYP journey • Collaborative working: what are the outcomes and impact of good collaborative working, what it takes, and how to do it. • Public Health approaches for AHPs • Prevention and early intervention • Understanding capacity and demand • The Six Steps Methodology of Integrated Workforce planning • Skill Mix Utilisation • Understanding and utilising data • Linking strategy to practice • Writing a good business case • Sharing learning from the HIS led Learning and Education Framework linked to the Healthcare Staffing Programme
	<p>Beginning in November 2021</p>
	<p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will perform a structured listening exercise and consultation with AHPs, NHS boards/HSCPs/ non-NHS AHP employers to explore the</p> <ul style="list-style-type: none"> • challenges and opportunities of whole system integrated workforce planning including shared decision making and shared responsibility for outcomes • education, support and ongoing future development needs of managers and AHP leaders in the widest sense to enable to broad strategic thinking and detailed operational skills to deliver quality workforce planning <p>This will culminate in a short position report for the national steering group.</p>
<p>November 2021</p>	

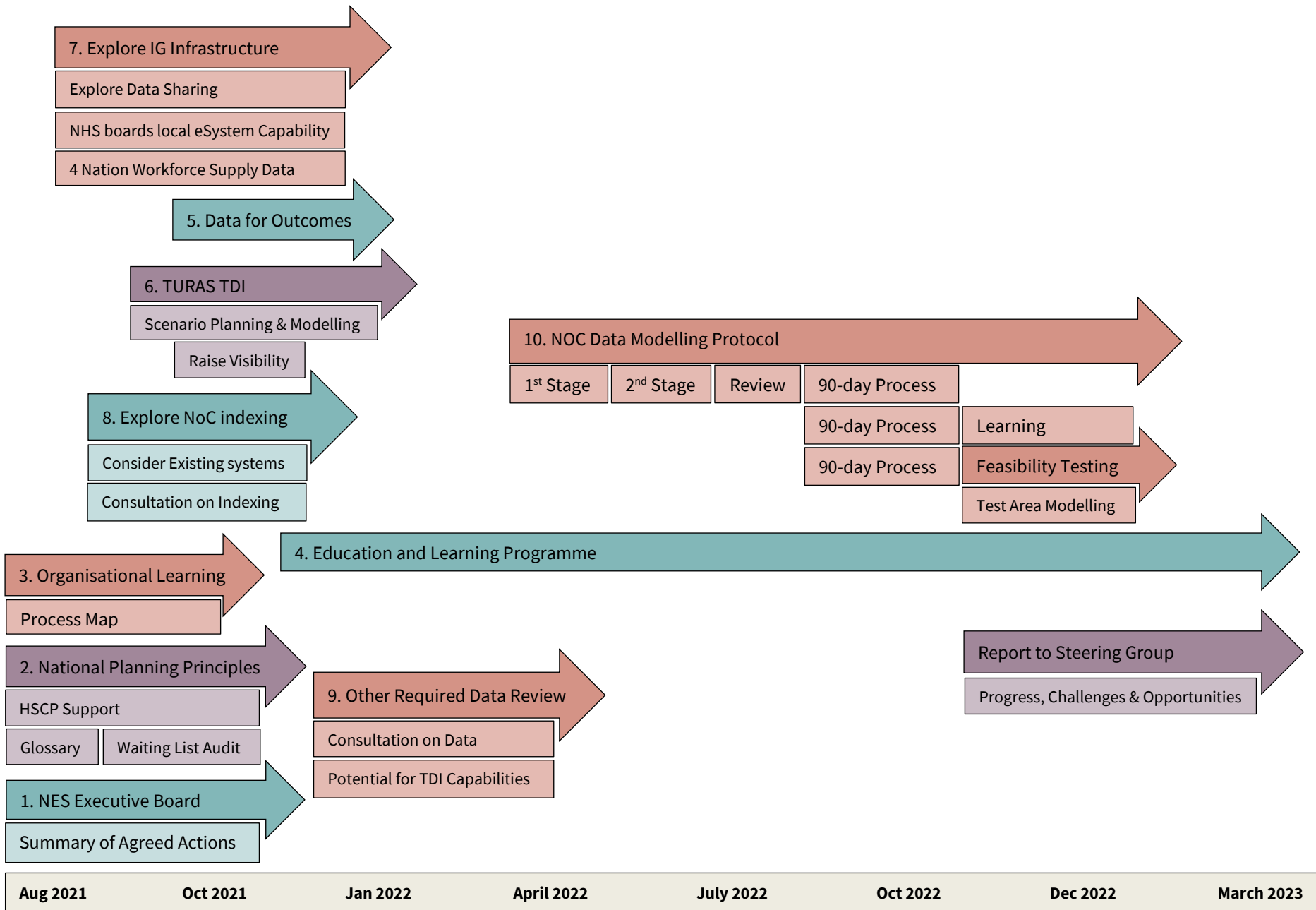
5	NES will promote data collection design that starts with shared decision making and shared responsibility to achieve meaningful outcomes, not tasks.	<p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will begin work alongside our HIS Healthcare Staffing Programme colleagues to collaboratively explore solutions to our most challenging data gaps e.g. capturing the impact of delayed, missed, or unavailable AHP services providing education and support as required, adaptably and flexibly, to ensure all 4 pillars of practice are valued, respected and incorporated in the development of staffing and workload development tools.</p> <p>November 2021</p>
6	NES will ensure that all appropriate data is publicly available in useful and meaningful formats to better inform workforce planning.	<p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will work alongside ADSG and local AHPs to raise awareness and visibility of TURAS Data Intelligence Platform functionality by leading a series of webinars and bespoke support.</p> <p>November 2021</p> <p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will work alongside NES Digital to develop a workforce scenario planning and modelling component on TURAS, beginning with trend information on existing workforce data for each profession within the AHP family and the information on student completion probabilities.</p> <p>January 2022</p>
7	NES will begin work to develop an understanding of the information governance infrastructure required to build the best possible picture of existing AHP data.	<p>The NES AHP workforce lead, in collaboration with the advisory and planning group, will work with NES Digital to investigate and establish data gaps for AHPs and identify the most appropriate agency(ies) with whom to seek information sharing agreements, producing a short report and timetable setting out the proposed action to strengthen the information governance infrastructure for the national steering group. This will include</p> <ul style="list-style-type: none"> • working with NES digital and our 4 nation colleagues to better understand first destination employment and workforce supply data across the UK. • Working with NES the Practice Education Programme to optimise the contribution of a placement Quality Management System and ensure connectivity with emerging and improved workforce data. • working with NHS boards to establish current data position and local eSystem capabilities.

		<ul style="list-style-type: none"> exploring possibilities to enhance existing or establish new data sharing agreements e.g. with HCPC, SSSC, and PHS.
		January 2022
8	NES will begin work to develop an agreed National Occupational Classification Index for AHPs to allow for workforce data that identifies AHP roles by profession and clinical, practice, or diagnostic delivery area.	Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will consider pre-existing AHP systems such as the AHP placements classification system produced by the NES AHP Practice Education Programme with common placement profile descriptors using terminology that aligns with and informs the development of a National Occupational Classification Index.
		Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will perform a comprehensive and structured consultation with AHPs, NHS boards, and other stakeholders regarding the requirements and functions of a National Occupational Classification Index
		Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will perform parallel consultation with other organisations and agencies that hold and publish AHP workforce data to ensure consistency where possible and learning is shared.
		January 2022
		Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will write a report paper for the national steering group setting out a route map for a National Occupational Classification Index and with options for discussion and agreement with the national steering group.
		February 2022
		Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will identify an NHS board(s) test area(s) and at least one other employer of AHPs out with NHS Scotland with whom to adopt a QI approach to develop, review, and test a National Occupational Classification Index for AHPs.
		March 2022
9	NES will review all published data and recommend actions towards a whole-system approach to workforce	Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will liaise with colleagues at LIST, PHS, NES, HIS and to explore the ways in which population, burden of disease data, incidence, prevalence and predicted need data for local areas and by profession can be

	<p>planning that aims to improve outcomes for people and communities.</p>	<p>gathered, validated and triangulated, producing a short position report for the national steering group.</p> <p>April 2022</p> <p>Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will explore how and where the different elements of workforce intelligence best connect to a range of population, deprivation, and prevalence data to inform the design of appropriate service offers and supports. This will include exploring the feasibility of incorporating some population, incidence and prevalence data on the TURAS Data Intelligence Platform that is relevant to each profession within the AHP family, and result in a short position report and options appraisal for the national steering group.</p> <p>May 2022</p>
<p>10</p>	<p>NES will begin work to enhance our AHP workforce data, ensuring these data can be triangulated with other relevant sources to inform quality integrated workforce planning.</p>	<p>Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will coordinate the first stage development/initial protocol of a National Occupational Classification Index for AHPs with NHS board(s) plus other non-NHS employer test area(s). Adopting a 90-day process approach, this will culminate in a short report for the national steering group.</p> <p>June 2022</p> <p>Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will conduct a second stage development/protocol and testing of a National Occupational Classification Index with AHP communities alongside the NHS board(s) plus other non-NHS employer test area(s) to develop, test, and refine.</p> <p>July 2022</p> <p>Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will coordinate a series of information, consultation, and review sessions generate national feedback regarding the initial development/protocol for testing a National Occupational Classification Index with AHP communities, NHS board(s) plus other non-NHS employer(s), to disseminate learning, review, develop and refine, reporting to the national steering group.</p> <p>August 2022</p> <p>Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will liaise with</p>

		<p>relevant partner agencies to establish the required infrastructure for a National Occupational Classification Index and begin testing in NHS board(s) test area(s) and non-NHS employer.</p>
		<p>September 2022</p>
		<p>Working with NES digital and in collaboration with the advisory and planning group, the NES AHP workforce lead will coordinate a 90 day process choosing one AHP profession in the first instance, in no more than 3 defined localities within the test NHS board(s) and non-NHS employer(s), to utilise some population, incidence, and prevalence data that is relevant to the test AHP profession, producing a short position report for the national steering group on triangulating data in this way.</p>
		<p>October 2022</p>
		<p>The NES AHP workforce lead will continue to work collaboratively with NES Digital, the advisory and planning group, NHS board(s) test area(s), and non-NHS employer(s) to explore specific data for one area of practice e.g. mental health, to test the feasibility of workforce prediction based on the combined use of multiple data to inform local workforce planning.</p>
		<p>December 2022</p>
		<p>The NES AHP workforce lead, in collaboration with the advisory and planning group will produce a position report for the national steering group to summarise progress to date, including successes, challenges and future opportunities.</p>
		<p>March 2023</p>

Appendix 19: AHP Workforce Short-Term Objectives Provisional Timeline



Allied Health Professions Workforce Planning

Identifying the Role and Value of NES



This resource may be made available, in full or summary form, in alternative formats and community languages. Please contact us on 0131 656 3200 or email altformats@nes.scot.nhs.uk to discuss how we can best meet your requirements.