

November 2022

Moondance Cancer Initiative find, fund, and fuel brilliant people and brave ideas, to transform and improve cancer outcomes in Wales. We actively support people and projects with potential to transform outcomes across the country, and we undertake research and insight to inform our work.

Alison Leary is a professor of healthcare and workforce modelling. With experience from projects worldwide, she has been commissioned by the UK National Health Service and other government, commercial, statutory and charitable sectors, for workforce research and expert opinion.

Published by:

Moondance Cancer Initiative 12 Cathedral Road Cardiff, CF11 9LJ Wales, UK

Tel: +44 (0) 2921 113990

Email: info@moondance-cancer.wales

www.moondance-cancer.wales



Contents

Executive Summary	3
Background	5
Principles of a diagnostic workforce	7
What do people on a diagnostic pathway need?	7
Diagnostic workforce design and planning: it's not just 'productivity'	8
What are the current challenges?	10
Workload intensification	10
Lack of capital investment	10
Direct service vs service improvement tension	10
A system that works outside of cancer	11
Workforce design for the diagnostic hubs	11
Lessons learned from established hubs	12
Truncated pathways and workload intensification	12
Data collectors vs data interpreters	12
New workforce or more of the same? Leveraging a skilled supplementary workforce	13
Shared/partnership models with the independent sector	15
Co-location or dispersed model	16
Opportunities for the diagnostic workforce	17
Career pathways and roles within the service	17
Destination, not terminal careers	17
Focus on returners	18
Schools and "the slow lane"/Practice facilitation	18
Quality improvement capacity	19
Reflections	20
References	20



Executive Summary

Prompt diagnosis is an essential factor in cancer outcomes. Wales has historically struggled to diagnose cancers early, and the situation has been exacerbated by the pandemic, increasing waiting times for diagnosis. In response, it has been developing and rolling out a new generation of diagnostic modalities: Rapid Diagnostic Centres (RDC), Regional Diagnostic Hubs (RDH), and similar models.

In April 2022, Moondance Cancer Initiative commissioned Professor Alison Leary to author a report, giving her expert perspective on the likely challenges and opportunities for the diagnostic workforce in this new diagnostic landscape. To author this report, Prof. Leary drew upon published academic and grey literature, and consulted with 18 key cancer stakeholders in the clinical, policy, and charity sectors in Wales. She also spoke with stakeholders with experience developing Community Diagnostic Centres (CDCs) in England.

Challenges in Wales

Speaking with Welsh stakeholders, several challenges were identified, which should be addressed in the design of future diagnostic services:

- Workload intensification and lack of capital investment. With increased demand for their labour, higher workloads in terms of volume and complexity, and perception that infrastructure such as IT and diagnostic equipment was under-resourced, the diagnostic workforce is feeling significant strain.
- Direct service delivery vs service improvement tension. Under such strain, stakeholders found it impossible to find time, expertise, and resource to implement sustainable service improvement, even when they had good ideas or saw potential solutions.
- Demand for diagnostic services is not unique to cancer care. There is a need to design a diagnostic system with capacity which works for all patients and workforce, **not just for diagnosing cancer**.
- Uncertainty around the design and workforce implications of new diagnostic provision, and a concern that more strategic planning was required.
- There is the potential to contemporise approaches to workforce policy and planning, from the older models currently being used.

Lessons learned from CDCs

From other jurisdictions, where rollout of CDCs has rapidly progressed, several learnings were identified which might benefit workforce planning in Wales:

 The need to invest appropriately in case management within diagnostic pathways, without which risk to patients of being "lost" in



the system, unnecessary delays in care or not having information needs adequately met

- There is a need to properly train and empower data interpreters
 (skilled expert professionals in a range of professions), as opposed to
 a narrow, task-based view of the workforce, which has lead to the
 expansion of restricted data-collector roles, which are not satisfactory
 to staff, and increase risk of patients falling through cracks or clinically
 urgent issues being missed.
- Distributed workforce models. As opposed to older, hierarchical healthcare workforce models, diagnostic services present a good opportunity to re-distribute work amongst a skilled supplementary workforce (e.g. managers, administrators, IT, other professionals and support staff)
- An opportunity for effective shared/partnership models with the independent sector, designed appropriately to avoid the risk of depleting the workforce. This connects to potential benefits/drawbacks of colocation and dispersed models for different settings.

Opportunities in Wales

Finally, drawing on stakeholder conversations, and Prof Leary's expert experience, opportunities for the diagnostic workforce in Wales have been identified:

- Offering more structured career pathways for specialists in cancer (such as nurses and AHPs), making workforce supply more predictable, and allowing for more flexible roles.
- Nurturing destination careers in which people can thrive and develop without seeking promotion if not desired, as opposed to terminal roles: giving individuals the opportunity to continue growing their skills and responsibilities within a role, rather than leaving it as the end of the road with little development and with promotion as the only progression available.
- Focusing on, and offering attractive and distinct roles, to experienced returners, such as supporting quality improvement, teaching opportunities, and a predictable workload.
- Continuing to invest in practice facilitation through diagnostic schools, running parallel 'service' and 'workforce development' lines. Facilitation within more these diagnostic schools might be an ideal opportunity for returners, as described above.
- Investing in expertise and resource for quality improvement, for instance with employing implementation specialists who have the expertise to support improvement. This could empower staff to implement better ways of working suitable for their setting and workloads.



Background

Cancer services have undergone radical change in the last twenty years. New treatment modalities, a population living longer with cancer, and increased complexity of care needs has put increased demands on cancer systems in many countries (Bray et al 2018). This has often lead to reorganisation of cancer services, as bottlenecks are encountered in areas of high demand but insufficient capacity. Diagnostics is an area where this reorganisation has frequently occurred.

Diagnostic services and workforce have been under pressure for some time in Wales (Cancer Research UK, 2020), and the pandemic has exacerbated these issues, with longer waits and the subsequent risks of delayed diagnosis and treatment (Figure 1).

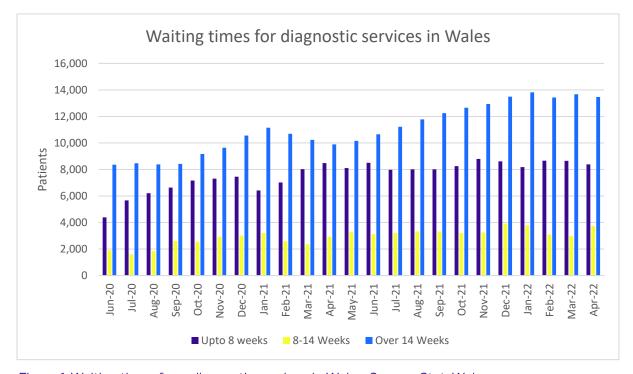


Figure 1. Waiting times from diagnostic services in Wales. Source: StatsWales.

In response to this, there have been several initiatives in Wales, including the introduction of vague symptom rapid diagnostic centres (RDC) which aim to diagnose cancers for which presenting symptoms do not meet criteria for a site specific cancer pathway. RDCs have also been developed and deployed elsewhere, as pathways for single suspected cancer sites, such as lung and prostate. (Nixon et al 2019, Hunter et al 2022).

Concurrently, England has started to implement the recommendations of Professor Sir Mike Richards' independent review of NHS diagnostic services (NHSE 2020). The review set out a case, both for increasing diagnostic capacity, and for a new model of diagnostic service provision in England. One of the key



recommendations of the report was for the rapid establishment of Community Diagnostic Hubs (CDHs) now called Community Diagnostic Centres (CDCs).

Currently there a mixture of models for these new diagnostic provisions. Some have remained primarily in general practice with access to different diagnostic services, whilst others have physically co-located in a "one stop" model. There appears to have been a large degree of local adaption to local resource in terms of organisation, but with a core workforce of medical and nursing staff across the board.

In this report, rather than looking at any one specific model, we will be considering RDC/CDH/CDCs as a shared set of underlying principles (separation of elective/acute, integrated diagnostic pathways crossing traditional site–specific boundaries, increased diagnostic capacity, etc). With new diagnostic pathways aligned to these principles developing in Wales, we have examined the associated challenges and opportunities for the cancer diagnostic workforce.

This work was undertaken using published literature (both peer reviewed and grey literature), and discussions with eighteen different stakeholders in Wales from across the policy, clinical and the third sector. In addition, those with experience of setting up CDCs in England, either from a policy or operational perspective, also offered their views.



Principles of a diagnostic workforce

Before looking at the specifics of these new diagnostic pathways, it is useful to establish some general principles, of **patient's needs** and the **limitations of productivity-based workforce design** in diagnostic provision.

What do people on a diagnostic pathway need?

There is a substantial body of knowledge which examines what people undergoing a cancer diagnosis need from a diagnostic service. In contrast, there is a much smaller evidence base for people who have used cancer diagnostic services, but are not diagnosed with cancer (given the typical conversion rate of cancer diagnostic pathways is 6–12%, this represents the majority of patients).

The needs of people using these services are typically expressed by how diagnosis was delivered, and subsequent needs such as psychological care and support in dealing with uncertainty, rather than a focus on speed; for example, sensitive communication, meeting information needs, and a further plan (Coronado et al 2017). These needs should be considered alongside the known effect of delayed diagnosis on prognosis – especially for those who are not diagnosed with cancer; the needs of this group remain relatively under–reported.

In a systematic review of the evidence Alessy et al (2022) sets out the factors that influence the experience of care, and the deficits. Overall, poorer patient experiences were consistently associated with: being from an ethnic minority group, having a more deprived socioeconomic status, poorer general or mental health status, being diagnosed with poor prognosis cancers, presenting to care through an emergency route, and having delayed treatment.

Conversely being diagnosed with earlier stage disease, perceiving communication as effective, positive patient–provider relationships, and receiving treatment with respect were overall associated with better reports of cancer care experiences (Figure 2). This means that improvement efforts aimed at delivering better experiences of patient–centred care need to take account much more explicitly patients' differing characteristics, prognoses, and trajectories they take through their care journeys (Alessy et al 2022).

Many of the needs of people presenting with cancer symptoms are met by the workforce, and this is principally where demand for labour originates.



Factors influencing cancer patients' experiences Clinical processes and interactions Patient characteristics, living area. Survey administration health plan, and cancer type with healthcare providers actors associated with variation gative care experiences negative care experiences Presenting to care through an emergency care route - Having multiple consultations with primary care prior to referral to a cancer care setting Patients with poorer prognoses including brain, pancreatic, and lung cancers were less well represented in Patient characteristics and living area: - Being younger or very old, or female - Being from an ethnic minority group (Black, Asian, and Hispanic) CPES in England primitary care prior to referral to a can care settling Delay in receiving cancer treatment Receiving care in hospitals in London Using emergency department during treatment - More deprived patients, those from ethnic minorities, and those with poorest prognosis were less represented in CPES Health status and cancer type Having learning disabilities, poorer mental health or poorer health status Being diagnosed with prostate, Responding online to CPES was associated with better experience compared to responding through mail actors associated with reporting positive care experiences: na, or pancreatic cancer Being diagnosed with cancer of - Patients reported their experiences (8 to 12 months after diagnosis) indicated better experiences of care compared to those who reported their experiences (0 to 3 months) after diagnosis - Higher comorbidities Effective communication with care providers Better patient-provider relationship Being treated as a person with respect and dignity - Care that takes patients' needs into Patient characteristics and living area considerations Better care administration and coordination United States Being enrolled in both Medicare and Medicaid in the United States coordination Having self-goal of treatment to cure their cancer rather than controlling it Being diagnosed at an earlier stage Presenting through the screening-detection route of diagnosis Being treated in hospitals with higher CPES response rates Being treated in hospitals with more cancer clinical nurse specialists Receiving radiation therapy Having a shorter hospital stay (less than 6 days)

Figure 2. Factors Influencing Experiences of Cancer Diagnosis. Source: Alessy et al., 2022.

Diagnostic workforce design and planning: it's not just 'productivity'

A workforce within a complex adaptive system (such as diagnostics) is not static, and the levels of practice and complexity reflect this, enabling responsiveness to changing population/patient and service delivery needs, therefore making them essential for care delivery.

In common with many healthcare systems, workforce planning in the NHS is driven from a supply side model, rather than by demand for types of labour, complexity of work, or risk. A supply side model is common in areas of public service, where centralised workforce budgets (how many people the budget will allow, how many can be employed or trained) set the levels of staffing – rather than demand for labour based on service or population demand. Views on workforce design and policy in the UK also seem to stem from the language of productivity rather than the more modern language of humanistic workforce planning.

A capable, adaptive, and proficient workforce in healthcare is likely to have many attributes and these should be considered when thinking about defining levels practice, types of work, redistributing work or demand for different types of labour within professional groups or roles. Capability describes the combination



of skills, knowledge, values and self-esteem which enables individuals to manage change, be flexible and move beyond competency into proficient practice (O'Connell et al 2014).

Therefore, diagnostic workforce planning might stand to benefit from a more humanistic model of demand, complexity, and risk, as an entirely supply-side, productivity-based model can have shortcomings.

For example, the English CDH model promotes a technical competency rather than professionally qualified model to incubate "the development of a multiskilled flexible diagnostic workforce. New workforce models using competency-based skills and not profession led-posts, could enable opportunities to cross traditional professional boundaries". This approach carries inherent risks: the omni professional/universal worker has been tried and rejected in other safety critical work as it leaves a performance gap (no one can be universally expert at a wide range of things). In addition, the technical tasks and a task shifting approach to work (if someone is technically competent, they are deemed able to perform) is problematic:

- Firstly, it presents a hierarchy of value of technical work, and that people must perform at the "top of their licence" meaning other important work effort is seen as wasted.
- Second, it disregards important safety critical work. For example, in nursing the organisation of work is a key component of work, essential for safe practice. However, it is often seen as not being 'hands on' or 'direct clinical care' despite its importance for care quality.

Cumulatively, these issues can lead to decreased staff satisfaction, and increased risk of patients falling through cracks or clinically urgent issues being missed.

Healthcare Work as Technical Competency – Origins and Limitations

The idea that complex work including complex clinical decision making can be described by technical competency alone (for example "upskilling") and does not require a high degree of knowledge or application to different situations is common in health and one that emerged from Taylorist principles used in areas like manufacturing. It assumes complex work can be "broken up" into primarily technical tasks which can then be distributed, or task shifted to other workers. These division of labour approaches were embraced in healthcare due to the adoption of the internal market and classical management theories during the 1980s which were introduced to increase efficiency, but not quality (Propper et al 2008). This could be because these approaches tend to focus only on technical tasks or task achievement/completion rather than factors that influence quality or safety.



What are the current challenges?

In terms of workforce challenges, two principal themes surfaced during the discussions with stakeholders. The first was not having the right amount of people with the right skills and experience in the right place. The second centred around workloads, and the opportunity for workload redistribution/redesign of work which being largely unexplored due to constraints in time and capacity.

Workload intensification

Stakeholders were clear about the opportunities to re-organise work, and they had also noted how work had intensified over the years. This workload intensification included clinical work becoming more complex, more patients by both volume and complexity, IT that was unfit for purpose causing issues such as workload duplication, and gaps in the workforce meaning that stakeholders had to take on work previously done by others such as administrative staff.

"We used to have great admin support-secretaries; they were part of the team but as they left, they haven't been replaced"

"Digital brings so much promise to make our work more efficient, we were due to roll out a new system, but it hasn't happened, and I can't see it happening soon"

"Our IT is just not fit for purpose-it never really has been, I think it actually slows us down and causes more work"

Lack of capital investment

There was concern that there is lack of infrastructure (buildings and equipment) to run rapid diagnostic services. This varied from single pieces of equipment to buildings and larger infrastructure, for example in endoscopy. In England the push to open CDCs away from current acute centres has meant significant repurposing of existing capital resource–often with that resource doubling for non–CDC work.

Direct service vs service improvement tension

The challenge of providing service and training the next generation was a frequent concern, as was the lack of capacity to reform or redesign services despite an enthusiasm to do so. Many stakeholders could see opportunities to improve services, use resources more effectively, or implement technology but did not have the time and sometimes the technical ability or expertise to achieve this or action the change required.



"We really want to take part in quality improvement work-we can see the possibilities but right now we just have to keep the service going"

"I've seen some QI work I think we have a lot of potential but I would not know where to start to make it happen and really can't take on anything else"

Some were very committed to service improvement but were frustrated that it did not result in change:

"we have been process mapped to death...and then nothing happened"

A system that works outside of cancer

There were concerns raised by several clinicians that although cancer diagnosis is necessarily prioritised there is an issue with other urgent diagnostic work and that prioritising cancer also means there will be more chronicity—that people are being diagnosed later with other long—term conditions that would have been amenable to early intervention if they had had access to diagnostic services.

"there is something of a 'nothing to see here' attitude as cancer work is prioritised at the expense of many other diseases and so looks better than most things but is struggling massively because of workforce gaps and capacity and demand challenges."

Workforce design for the diagnostic hubs

A lot of thought has gone into looking at individual services, but several stakeholders in Wales were still asking how diagnostic hubs might work operationally and in terms of workforce impact.

Workforce design for diagnostic hubs appears to be service based-with the component services such as endoscopy, radiology, genomics and pathology receiving focus separately. Whilst this is necessary to understand and meet demand those services face, the integration of strategic workforce planning is also necessary.

It also means that some workforces do not appear to have the same focus even though they are pivotal to meeting demand, for example nursing and therapies and yet these workforces have great potential in terms of safety, efficiency and improving outcomes – even for those who do not have cancer, for example in health promotion interventions.



Lessons learned from established hubs

After discussing with stakeholders and those who had designed or implemented diagnostic hubs in England, several issues and opportunities emerged around workforce.

Truncated pathways and workload intensification

There is an untested but long-standing assumption within some of the policy initiatives in England that the truncated/contracted pathways CDCs/CDHs bring will mean less work. Whilst pathways can make work more efficient, they do not necessarily mean less work is done by all groups. For example, Direct to test for cancer in General Practice in England has intensified workloads (Lawler et al 2020) and without proactive clinical case management this issue may be amplified. If considering systemic or local change, there should be a workload impact assessment for existing services that take on extra functions to see if there is capacity.

The intensity of the diagnostic pathway and the safety critical action required on diagnosis means that proactive management of care is likely to be necessary to ensure timely onward care and that people do not fall through the cracks. Diagnostic pathways generate work and data from investigations and consultations across several services which requires co-ordination and review. The pathway also generates a high requirement for labour to meet the needs of patients, such as psychological care and the ability to make clinical decisions.

Proactive case management or the organisation of care can be done by non-clinical navigators working with a clinical decision maker. The most common type of clinical case manager in specialisms such as cancer is the Clinical Nurse Specialist (CNS), an advanced practice clinical decision-making nurse who is proficient at the organisation of care, including the recognition of deterioration, intervention for red flags, and meeting information and psychological needs of patients. A CNS managing diagnostic and pre diagnosis pathways has been shown to be beneficial in terms of efficiency and even clinical outcomes (Stewart et al 2018). Administrative navigators then co-ordinate the process of care.

Data collectors vs data interpreters.

Following on from the idea that clinical work is primarily technical competence/task based, it's possible to see how the "universal worker" adopted by England but often rejected in other safety critical industries, has become appealing in healthcare and in the design of diagnostic hubs. An example of this is the diagnostic technician with technical competency in several different clinical



specialities, for example different types of physiological or laboratory investigations.

More generic data collection workers, for example technical staff who can undertake many different investigations, might appear to offer more flexibility. However, they are unlikely to have same level of performance at interpretation – and interpretation is where the workforce capacity most often falls short.

Adding more data collectors (people who can perform investigations but can't fully interpret investigations or make clinical decisions/recommendations) won't necessarily abate workforce issues or improve flow unless there are also sufficient staff able to interpret the data.

It is unlikely that data interpreters such as registered healthcare professionals will be content with only this role and little patient contact – a phenomenon that has been witnessed with the division of labour approach in nursing and midwifery. We have seen this in other professional groups where majority of direct care is given to support workers. Registered professionals feel distant from patients and become disinvested. In addition the abandonment of professional jurisdiction proposed in England has already presented problems in areas such as advanced practice, as social identity and autonomy is valued by professionals.

Division of labour also carries inherent risk in complex, multi-layered work, with many joins. The possibility of handoff gaps or falling through service cracks becomes more of a risk.

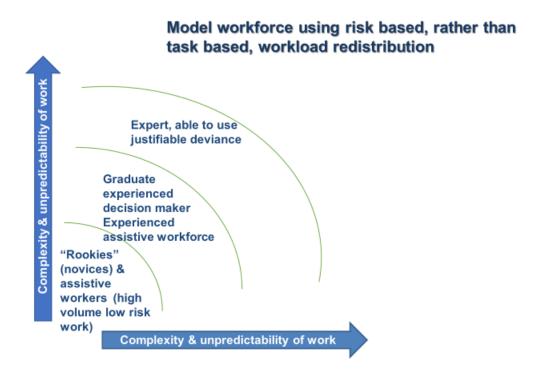
New workforce or more of the same? Leveraging a skilled supplementary workforce.

Often in healthcare, when workloads become too high or demand too great, the solution is often seen as introducing new roles without addressing the underlying issue. New supportive roles are often introduced, and the assumption is made that work can be delegated or task shifted to these workers as long as they are technically competent. This then puts a heavy supervisory responsibility on registered healthcare professionals to oversee complex work delivered by a support workforce. As workforce gaps are usually for registered workers, adding more support workers does not always alleviate this problem. In recent studies, adding support workers did not improve patient outcomes but adding registered nurses did (Griffiths et al 2015).

When thinking about workload redistribution, it is important to consider types of work, complexity, and risk, including the likelihood for deviance (for example to handle unpredictable situations) and types of labour required (e.g. relational labour–healthcare requires relational and emotional labour.) This allows work to



be organised in a way that can maximise workforce assets alongside mitigation of risk. It is a common approach in other safety critical work



Another helpful approach is workload redistribution – where different types of skilled professionals can supplement a registered clinical workforce. This has been shown to be effective, for example Ward Manager personal assistants introduced in the 1990s in nursing, or the MDT co–ordinator role that was introduced as part of the English cancer plan in the early 2000's. For example, when highly specialist case managing community nurses have access to even part time skilled administrative help, more admission avoidance work can take place, and less acute inpatient bed days are used (Leary et al 2015). Many of the stakeholders articulated work that could be redistributed to skilled administrative or technical staff rather than support staff.

Rapid and remote diagnostics is also likely to need additional roles such as navigators and information technologists/tech support. Models in England are heavily reliant on technology, and a workforce capable of utilising this technology including analytics would be necessary to leverage most benefit. In recent work with a highly complex diagnostic workforce, we found an opportunity to redistribute work by leveraging a supplementary skilled workforce in the form of IT support, data managers, administrators/service managers, and registered nurses not only improved productivity but also made work more satisfying. A workload redistribution model is likely to be more effective than a technical hierarchical model (Figure 3).



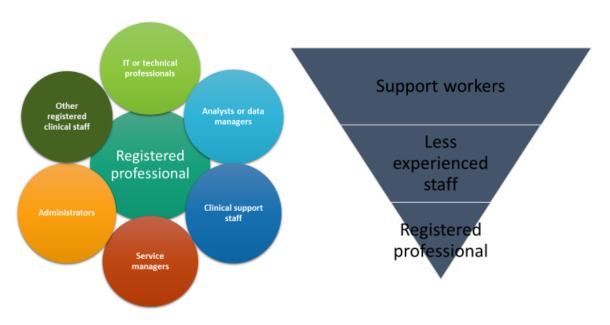


Figure 3. A distributed workforce model (left), vs a technical hierarchical model (right).

Shared/partnership models with the independent sector

The independent sector seems to be increasingly utilised for diagnostics work across all the UK health economies. Independent providers have impacted on workforce issues in several ways. Some workforces have simply migrated to the independent sector, either in substantive employment, or by doing locum work, meaning that available extra work in NHS organisations via bank work is less attractive. Likely reasons include better pay, opportunities for progression, and working conditions that are more appealing.

In one potentially promising mode, the independent sector could offer partnership working, with workforces rotating across different organisations via a passport system, or NHS-only internal rotation between CDC/CDH/RDH and acute services. One independent provider to a CDC in England was actively investing in local NHS workforce development to aid partnership working going forward. Another independent provider working in partnership with the NHS recently folded – meaning local services have had to increase capacity, revealing one of the risks involved.

Overall, stakeholders were broadly welcoming of partnership working opportunities



Co-location or dispersed model

There appears to have been a policy decision in England that a CDH will be located away from acute hospitals:

- The standard model is a CDH that provides the minimum diagnostic tests, except for endoscopy, and any other diagnostic test deemed a priority locally. Only diagnostic testing is carried out.
- The 'large' CDH offers all minimum services and endoscopy, and potentially provides some of what NHS England refer to as optional components in the diagnostic pathway e.g. consultation. If we examine the evidence on patient 16experience and the demand for meeting information needs, it is perhaps at odds that that consultation is deemed optional.
- Lastly, there is the hub and spoke model. In this, a central hub must include all minimum diagnostic tests to support a coordinated service for patients that requires multiple tests. CDH 'spokes' provide further capacity to 'hubs' for specific tests through a satellite location, mobile unit or pop-up. Spokes can be used to meet specific service needs (e.g. to reach certain populations or increase local capacity for specific tests). The spokes can also help integrate CDH models with other community diagnostic expansion (e.g. primary care diagnostic services). It is this model which seems to be emerging in Wales and given that there is no policy requirement for "standalone" CDHs, this might also be a better workforce model as opposed to duplication of stand-alone centres.

Currently standalone CDHs in England run or aspire to run a seven–day service 12–14 hours per day, however staffing these is a challenge. Standalone centres require a workforce – and this will likely be drawn from the current pool of independent providers. This has implications for not only capacity of these services, but also speak to the issue raised by stakeholders about the prioritisation of cancer and the risks of more chronicity in other possibly undiagnosed long term conditions.

It was perceived that within Wales, diagnostic hubs were protected (or in future could be protected) from the pressures of acute hospitals. However, they also recognised challenges in general practice workforce, and therefore in accessing diagnostic services. There was an appetite to further centralise diagnostics services in some areas and specialisms.



Opportunities for the diagnostic workforce

Career pathways and roles within the service.

A lack of structured career pathways at all levels across different professional groups and specialist areas was articulated during the stakeholder discissions and has been a common theme in previous reviews.

Several professional stakeholders articulated how this lack of structured career pathways meant that planning a workforce to meet demand, succession planning, and how services could be utilised into cancer pathways was not always clear. This was in reference to diagnostics but extended over the entire cancer pathway. Some examples were the potential underutilisation of therapists/AHPs and a lack of development opportunities to develop CNSs. There was also a lack of recognition that roles such as CNS practiced at an advanced level and that they played a pivotal role in the diagnosis of cancer.

A lack of flexibility in employment models also made internal promotion more challenging for example in one specialism:

"we employ people [biomedical scientists] at band 3 who are graduates and then when there is the opportunity promote them internally to band 5 but this leaves a gap in the band 3 workforce-doing things this way can mean it can takes months or years to recruit everyone to fill the posts again"

Currently the English workforce model promotes using generic workers at different bands. This is unlikely to be a sustainable model for the reasons given previously (e.g. not optimising professional expertise or workforce satisfaction), however a multi-professional model built along the attributes of enhanced and advanced practice is likely to be more sustainable and offer satisfaction.

Destination, not terminal careers

Currently, many NHS employers operate on a terminal career model. The focus in terms of pay and development is almost always on the role, as opposed to the role and person. This means there is a ceiling for many roles, not only in terms of pay progression but also in terms of personal and professional development. This is significantly different from other high reliability organisations, in which people do not have to seek promotion to achieve reward (which is not necessarily financial) and professional development.



There is opportunity to develop and offer a destination career model, as opposed to a terminal job. This means for example, in the biomedical scientist example given above, that some workers can stay and develop within the band 3 role if they wish to, giving workforce stability, whilst others might pursue a role in biomedical science at a higher grade which addresses succession planning and sustainability.

Focus on returners

The usual approach to workforce in health is to focus on supply, largely from a reasonably predictable graduate pool, alongside international or other sources of labour. Less consideration goes into retention, and almost none into returners.

There is a need to focus on recruitment, retention, and returners in most labour pools. Many stakeholders in Wales cited a recent loss of talent, for a variety of reasons such as early retirement, retirement, over working, inflexible employment models, not feeling valued, and lack of investment in professional development.

There is therefore an opportunity to attract returners, for example into supplementary to service work that is also highly skilled. Such work might be supporting teaching and learning in service, or clinical service work but with shorter hours, increased flexibility, and a more predictable workload.

Pay was an issue – some areas of the diagnostic workforce, such as nurses in endoscopy, radiology and laboratory scientists had a variety of market rate options as an alternative to either NHS employment or NHS bank work. Pay is generally a primary lever and linked to the limited opportunities for promotion and lack of career structure. Employers looking to attract returners can offer incentivisation such as "golden hello" payments, help with travel costs, shorter working hours in supplementary but essential skilled roles, such as supporting trainees or those new to clinical leadership roles, educational roles, or quality improvement.

Schools and "the slow lane"/Practice facilitation

Diagnostic "schools", which are post graduate learning organisations in areas such as radiology and pathology, were thought to be a successful model in Wales for increasing workforce capacity, although some had had challenges attracting participants. There were questions about the reliability of increasing capacity in some areas, but overall it was thought to be a successful model.

One of the opportunities for returners or hard to retain experts is one of practice facilitation. These roles support people, often less experienced workers, in practice. This means that expertise to develop practice is more readily available



and does not take resource from frontline service provision. It adds to service provision, creating a "slow lane" where complex clinical work is still done but also helps generate new capacity. These roles are appealing to learners who are supported and also to returners or hard to retain groups as they are often able to offer more flexible working patterns or have lower workload intensity.



Main Service line

Provides day to day operational service Supports trainees but does not do bulk of training

Most of the workforce

Can transfer to development line periodically to gain teaching experience



Workforce development line

Works in practice but slower service line

Takes on most of work of training

Attractive to experienced leavers and part time

workers

Works with "schools" to build workforce capacity

Can cross over to main service line periodically
to maintain proficiency

Figure 4. Workforce development "slow" lines, as compared to main service lines.

There are examples of practice facilitation or clinical tutoring throughout the recent history of healthcare, such as ward based or community based educators who work with less experienced staff, such as newly qualified nurses, allied health professionals, or those returning to practice. As this opportunity emerged it was tested in discussions with stakeholders and was well received.

Quality improvement capacity

An issue articulated by many stakeholders was the lack of capacity, knowledge or resource to either undertake activities such as quality improvement, service improvement, service redesign, implement technology or otherwise invest time and expertise in modernisation.

It might be possible to utilise quality improvement or implementation science expertise to help clinical staff to do this work. Resource is also needed to implement and evaluate any improvement. Currently, this falls to the already overburdened workforce.

There have been historical examples of this, for example the NHS Modernisation agency in the mid 2000's and more targeted recent examples such as the CIP–CAN (Co–producing and Implementing Person centred Key Performance Indicators in Cancer Nursing) project in Northern Ireland, which generated eight key performance indicators in partnership with patients using chemotherapy services, supported by Macmillan Cancer Support.



Reflections

There is an enthusiasm from clinical staff, third sector and other partners for a new vision of diagnostic services for people with suspected cancer in Wales. There are opportunities and challenges in achieving this, including the opportunity of the workforce as a valuable asset alongside the challenges of workloads, needing the time to reflect and reorganise workloads, and workforce policy that is not yet recognising the work as safety critical work. To fully achieve the potential of diagnostic services for patients, these workforce issues need to be addressed.

References

Alssey A et al (2022) Factors influencing cancer patients' experiences of care in the USA, United Kingdom, and Canada: A systematic review eClinical Medicine 2022;47: 101405

Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R.L., Torre, L.A. and Jemal, A. (2018), Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: A Cancer Journal for Clinicians, 68: 394–424. https://doi.org/10.3322/caac.21492

Cancer Research UK. (2020) Cancer Research UK position paper: The diagnostic workforce in Wales. https://www.bsg.org.uk/wp-content/uploads/2020/02/Cancer-Research-UK-position-paper-on-the-diagnostic-workforce-in-Wales.pdf

Coronado AC, Tran K, Chadder J, Niu J, Fung S, Louzado C, Rahal R in collaboration with the System Performance Steering Committee and the Technical Working Group. The Experience of Patients with Cancer during Diagnosis and Treatment Planning: A Descriptive Study of Canadian Survey Results. Current Oncology. 2017; 24(5):332–337. https://doi.org/10.3747/co.24.3782

Hunter R, Wilkinson B, Snaith B. (2022) A single–centre experience of implementing a rapid CXR reporting and CT access pathway for suspected lung cancer: Initial outcomes Radiography 28 (2022) 304e311 DOI: https://www.radiographyonline.com/article/S1078-8174(21)00197-8/fulltext

Lawler, J, Leary, A, Lofton, L, Bushe, D. Perceptions of the cancer care left undone in primary and community services: A mixed methods evaluation. Health Soc Care Community. 2020; 28: 2117–2124. https://doi.org/10.1111/hsc.13022

Leary A, Quinn D, Bowen A (2015) Impact of Proactive Case Management by Multiple Sclerosis Specialist Nurses on Use of Unscheduled Care and Emergency Presentation in Multiple Sclerosis: A Case Study. Int J MS Care 1 July 2015; 17 (4): 159–163. doi: https://doi.org/10.7224/1537-2073.2014-011

NHS England (2020) Diagnostics: Recovery and Renewal – Report of the Independent Review of Diagnostic Services for NHS England by Prof Sir Mike Richards NHS England

Nixon S, Bezverbnaya K, Maganti M et al. (2019) Evaluation of Lymphadenopathy and Suspected Lymphoma in a Lymphoma Rapid Diagnosis Clinic. JCO oncology practice Volume 16, Issue 1 33 https://ascopubs.org/doi/10.1200/JOP.19.00202

Propper C, Burgess S, Gossage D (2008) Competition and Quality: Evidence From the NHS Internal Market 1991–9, The Economic Journal, Volume 118, Issue 525, 1 January 2008, Pages 138–170, https://doi.org/10.1111/j.1468-0297.2007.02107.x

 $StatsWales \ \, \underline{\ \ } \ \, \underline{\ \ \ } \ \, \underline{\ \ \ } \ \, \underline{\ \ \ } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \, \ \, } \ \, \underline{\ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \ \, } \ \, \underline{\ \ \, }$

DIAGNOSTIC WORKFORCE PAGE 20 OF 22



Moondance Cancer Initiative helps find solutions so that more people in Wales survive cancer. We actively support people and projects with potential to transform survival outcomes across the country, and we undertake research and insight to inform our work.

www.moondance-cancer.wales

© Moondance Cancer Initiative 2021. Not to be reproduced without permission.