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International Recruitment of Radiographers and the Development of a Workplace Integration Support Package

Project Evaluation Report

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Abstract

In October 2020, a regional workforce action group was established jointly by Health Education England (HEE) and NHS England and Improvement (NHSEI) in the South West to work collaboratively to address the workforce challenges within diagnostic imaging. The group was established to support the restoration and recovery of services and identify interventions required to develop and enhance the future diagnostic imaging workforce in the region and then support the implementation of these interventions.

As part of the blueprint strategy that arose from the regional adopt and adapt workstream, an international recruitment campaign was identified as an intervention that could address an immediate shortfall of radiographers, fill vacancies and support diagnostic recovery.
Following a successful in-country recruitment campaign in Dubai, 58 radiographers were offered employment in departments across the region. Recognising the many challenges that staff may encounter when relocating to work in the UK it was identified that new recruits would need additional support.

Plymouth Marjon University was contracted to provide a package of training to help newly recruited radiographers from outside the UK integrate successfully into their host departments. Applying novel pedagogy (the eLEARN approach) to develop flexible learning opportunities centred around reusable digital learning assets, self-paced e-learning sessions were augmented by group 'connected' sessions online, facilitated by a tutor. The programme's three-phase strategy that focused on a targeted 'before, during and after' has seen an impact on a number of self-efficacy measures, a raised awareness of challenges, and personal awareness of implications for practice. It has acted to support a smooth transition through onboarding and beyond to both new recruits and their departments.

The principal recommendations following development and implementation of this Workplace Integration Package include ensuring digital accessibility for new recruits as part of the on-boarding process, considering the timing of delivery of any online connected support sessions, the provision of long-term pastoral support; and mandating the training requirement for managers and team leaders to improve engagement.

Introduction

Since October 2020 the newly formed NHSEI imaging team in the South West have been moving forward with plans to support the region's Adapt and Adopt project in the recovery and restoration of diagnostic services. The key strategic objective of maximising and increasing the efficiency of service delivery and workforce has been a key driver for this work and is endorsed by the publication in 2020 of both the Richards' Review (Richards 2020) and the Radiology GIRFT report (Halliday *et al*., 2020).

The region took the early decision to establish a dedicated imaging leadership team, employing a ground up methodology, to target specific areas around recovery response and to drive the future imaging agenda forwards at pace. The team worked alongside HEE colleagues and identified a short-term primary intervention to undertake a large international recruitment campaign to address the immediate workforce shortfall. Furthermore, to address an identified gap in learning provision, a workplace integration programme was developed to improve the lived experiences and cultural transition of internationally recruited radiographers.

Ethical international recruitment has supported the region's workforce strategy successfully and provided much needed resources on the ground post Covid-19. The project was driven by the regional imaging leadership team, who worked with the wider group, including radiology service holders and higher education providers, to ensure successful implementation. The two main aims of the project are identified below:

1. To secure employment for a substantial number of diagnostic radiographers within the Southwest region (50+)
2. To develop a package of support to assist with the cultural and workplace integration and improve retention of international radiographers coming to work in the region.

Following a webinar held with international radiographers working in the region, it was identified that a package of learning would benefit new recruits and support their successful integration into their new departments. The teaching and learning approach was informed using the experiences of international radiographers already living and working in the region, and through seeking guidance from clinical teams.

It was also recognised that some departments that had minimal experience of supporting international colleagues. In order to support departments, resources and workshops were designed to assist department teams to facilitate successful integration of international colleagues into clinical teams.

It was also considered that that successful integration of these new recruits into their host radiography departments could be enhanced considerably with a package of training to help people understand and deal with some behavioural norms in the UK that may be different to their previous experiences. A strong emphasis on language and communication was desirable.

The training began during the recruits' two-week Covid quarantine period, with a continuing package of support for a further four weeks once the radiographers were working within their departments. During this second phase of training, the new radiographers were predicted to be extremely busy and have little time to engage with training. There was, however, potential to schedule up to two hours on a Friday each week with sufficient notice.

It was also identified that integration of international recruits into their host departments could be improved with a short package of related awareness training for the managers and supervisors of the radiographers.

HEE highlighted that this was intended as a pilot study, with an ambitious timescale of delivery to the first group of new recruits during January 2021.

Project Outcomes

During the initial scoping discussions with HEE, the following desirable outcomes from the training were identified:

1. The new recruits should know what to expect in terms of language and communication and challenges related to integration in the workplace when they start work within their departments;
2. The new recruits will have an improved level of awareness of the challenges ahead especially in language and communication;
3. They will have an enhanced ability to deal practically with professional challenges relating to language and challenges within the workplace;
4. Team leaders and management teams will have an appreciation of the challenges facing the new recruits, and an awareness of how to help.

Review of literature

Three themes were explored from the research literature which came from 15 years surrounding integration of health workers and professional development and informed the development, delivery and impact evaluation of the project; these being workplace integration, communication and language, and well-being.

1. Workplace integration

In 2004, OECD reported that shortages in health care practitioners could pose a problem unless countermeasures are taken, this was echoed by The World Health Organization (WHO), who reported that health labour force shortages are the most serious threat to the right to health by the world's population today (WHO 2013). Strategies for training, retention, and recruitment from abroad have been used with varying degrees of success to increase the number of doctors (OECD 2004). This threat has resulted in significant migration of health workers who have gained their basic professional or further professional education in a country different from the one in which they are practicing. This phenomenon is most commonly explored in research focusing on internationally educated nurses (IEN) (Ramji & Etowa 2014, Lum 2009, Xu & Kwak 2007). A range of workplace integration training programmes have been established to support the increase of international practitioners into the

health labour force, for example, Ramji, Etowa, & St Pierre (2018 p6) promote a two-way process requiring efforts from both the IEN and organisation. This is further explored under three sub-processes: '(1) Respecting diversity and difference, (2) Adopting inclusive practices and (3) Striving to achieve equity'. A mandate from the Government to HEE (April 2014 to March 2015) requires HEE to 'develop a more flexible workforce that is able to respond to the changing patterns of service and embraces research and innovation to enable it to adapt to the changing demands of public health, healthcare and care services' (HEE nd, p6). In order to achieve these aims, four objectives have been established in the strategy: Objective 1 is to 'Establish a system-wide coherence to education and training which will facilitate and sustain the organisational and cultural changes required to embed research and innovation'.

2. Communication and Language

Magnusdottir (2005) reported on research that explored an overarching theme of growing through experiencing strangeness and communication barriers. Five themes to their work included tackling the multiple initial challenges, needing to be let in, the language barrier, different work culture and finally, overcoming these challenges. This research identified the importance of language for personal and professional well-being and argued that language and culture are inseparable entities.

Ramji, Etowa, & St Pierre (2018) support the view that communication and language are an additional hurdle to overcome, not only where IENs need to learn cultural nuances of behaviours of their diverse patients, colleagues and team members but also that many IENs have had the added challenge of mastering 'Canadian' English. One significant challenge that IENs face in learning to communicate in Canadian English, especially concerns the appropriate use of idioms, jargon, slang and acronyms. The challenges of language and communication for international health care workers has been explored in the literature (e.g. Xu 2007; Blythe et al 2009). Xu (2007) suggests that communication poses a formidable challenge, particularly relating to accents, colloquialism, stress and lack of familiarity with the practice environment. A critical aspect of workforce integration is, therefore, the acquisition of communication and language skills so they can perform their duties and responsibilities competently. Workplace culture and communication challenges remind IENs of their 'foreignness' and potential to feel a lack of belonging, which often increase their sense of vulnerability (Ramji, Etowa, & St Pierre 2018).

3. Well-being

Over the last two decades, the body of research into what contributes to the quality of people's experiences of their lives has grown, which has enabled a new understanding of the factors that both influence and constitute well-being. Well-being can be understood as how people feel and how they function, both on a personal and a social level, and how they evaluate their lives as a whole (NEF 2012). According to National Accounts of Well-Being (NAWB), 'The science of 'subjective well-being' suggests that as well as experiencing good feelings, people need:

- a sense of individual vitality
- to undertake activities which are meaningful, engaging, and which make them feel competent and autonomous
- a stock of inner resources to help them cope when things go wrong and be resilient to changes beyond their immediate control'

Personal well-being is a subjective assessment of how people feel about their own lives. In the UK, personal well-being data from the Annual Population Survey (APS) are available in both one-year and three-year data sets. These data show that there has been an increase in overall well-being in the UK (ONS 2019) with a UK average of 63.2% in 2016.

'Well-being is a much broader concept than moment-to-moment happiness: it includes happiness but also other things such as how satisfied people are with their lives as a whole, and things such as autonomy (having a sense of control over your life), purpose (having a sense of purpose in life)', (NEF 2012, P6).

Waddell and Burton (2006) suggest there is strong evidence showing that being in work is generally good for physical and mental health and well-being, although the extent of the benefits may depend on job quality and job satisfaction. ONS (2019) add that work can be a very important part of our lives, providing structure, routine and a sense of self-worth, which are all important to well-being.

NEF (2014) suggests that well-being comprises of three elements: headonic, eudaimonic, and evaluative. People's feelings or emotions, such as happiness or anxiety, are the headonic aspect of well-being. Leading 'a life well lived', interacting with the world around you to meet basic psychological needs such as experiencing a sense of competence or sense of meaning, are the eudaimonic aspect of well-being. Finally, the evaluative elements of well-being refer to people's own appraisals of how life is going, or particular aspects of their lives, such as job satisfaction.

Well-being is most usefully thought of as the dynamic process that gives people a sense of how their lives are going, through the interaction between their circumstances, activities and psychological resources or 'mental capital'. In 2008 NEF developed a Dynamic Model of Well-Being (Figure 1). The model suggests that when people function well and experience positive emotions day-to-day and overall, we can think of them as 'flourishing'; but this flourishing is influenced by how an individual's external conditions e.g. income, employment status and social networks interact with their personal resources e.g. health, resilience and optimism.

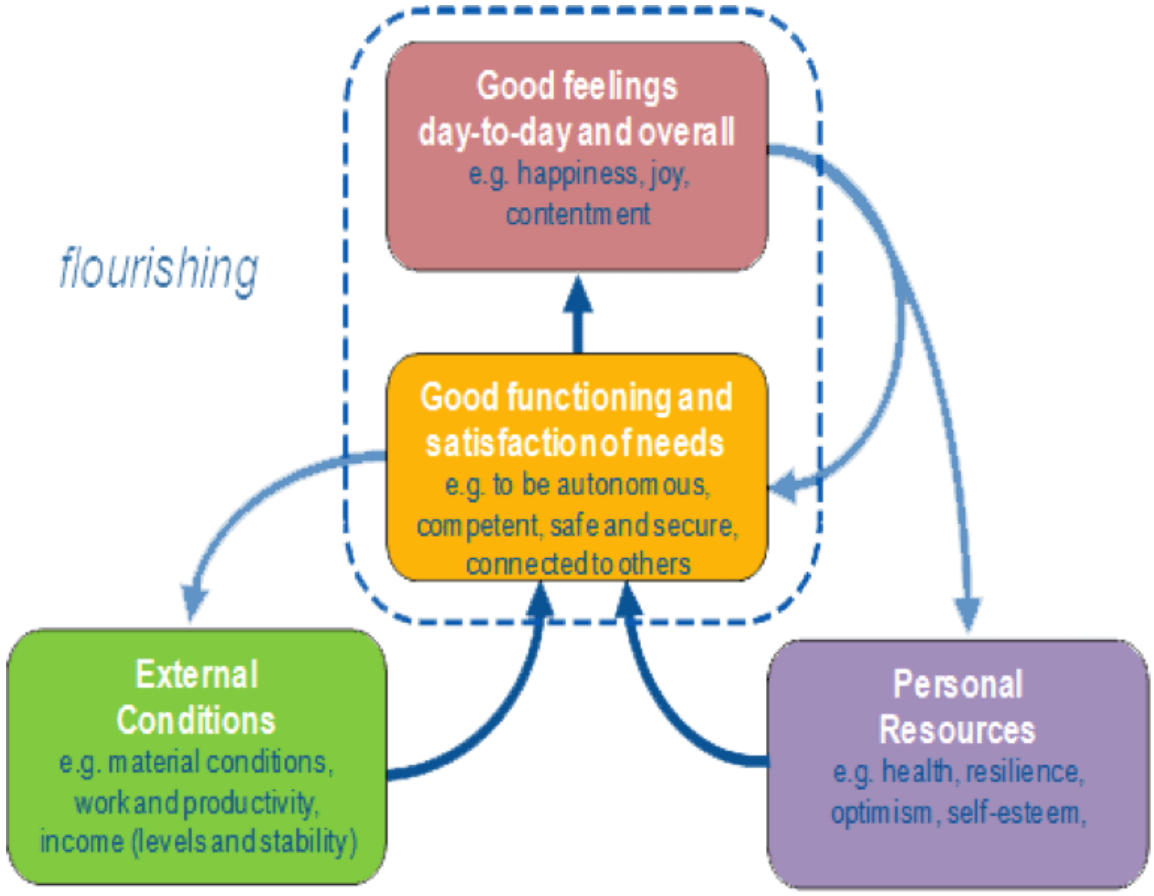


Figure 1: NEF's dynamic model of well-being

Focusing on well-being can help employers and individuals understand 'what makes people's lives go well, see the positive things people bring to situations, and understand people's emotional and social needs, projects and services can be better designed to respond to the many aspects that make up people's lives' (NEF 2012 p8).

The regional development of a cultural support package in response to a large international recruitment drive

Recruitment Campaign

The regional imaging team undertook a scoping exercise to assess the current vacancies and local interest in the region as well as supporting communications to executive teams highlighting the opportunities to fill vacancies through over recruitment of radiographers to support recovery and development plans. This dual approach allowed the potential candidates to be matched to the trust best suited to their expectations, as well as facilitating the departments to fulfil their specific service needs through appropriate recruitment of radiographers with an identified skillset.

An experienced international recruitment team at the regional District Hospital travelled to Dubai to interview a total of 230 candidates and made 187 offers. In order to provide local reassurance, diagnostic radiographers and service managers from the region were consulted throughout the recruitment process and were also involved as members of the interview panel. Of those radiographers offered employment, 57 were already registered successfully with the Health and Care Professions Council (HCPC). The second wave of Covid-19 brought challenges and delays to the arrival and onboarding processes; however, as of March 2021, there was a total of 53 international radiographers ready to arrive in the region between the months of March and May 2021.

Workplace Integration Support Programme

The second half of the project oversaw the development and implementation of a bespoke online learning package that was designed to support and provide a smooth transition through onboarding and beyond to both new recruits and their residing departments. It was intended that this provision would encourage and enable positive levels of retention and well-being within this staff group in the long term.

The package was designed around a three-phase strategy that focused on a targeted 'before, during and after' intervention which are outlined below;

- A series of webinars and discussions used Appreciative Inquiry as a method to explore the lived experiences of international radiographers already working in the UK. The findings were used to influence and guide the development of the support package
- Subject specialists (e.g in topics such as speech and language, and in HR) were briefed to design the online learning resources, focusing on both educational and workplace integration, plus more generic cultural acclimatisation aspects
- New recruits' expectations and perceptions were assessed prior to arrival and evaluation repeated after three month's employment. This evaluation would identify the effectiveness of the various interventions and help plan for a sustainable support package going forwards.

The delivery of the learning package required careful consideration due to Covid restrictions and the digital connectivity of the recruits. Where required, the international radiographers were supplied with a digital tablet, fully prepared in advance with access to all learning assets, and with appropriate capability to dial-in to the connected teaching and learning sessions. The learning programme was delivered through Plymouth Marjon University's Learning Management System. The long-term plan remains for the suite of modules to be available on the e-LfH platform, allowing the material to be accessed nationally.

The Learning Design

The digital revolution has significantly altered how people learn. Generation Z (those born between 1995 and 2010) are technology-literate, digital natives who are at home consuming content from multiple channels and online platforms. Generation X and Millennials may also be confident in navigating through and undertaking online learning activities, but can in some cases, require additional support from a tutor or from their peers in order to progress successfully.

In looking at the most appropriate pedagogical approach for a range of students, both the literature and Plymouth Marjon's considerable institutional experience indicates clearly that the traditional 1-hour lecture, whether face-to-face or online, is not necessarily the most advantageous from the students' learning perspective. Attention span in learners consuming online content is limited, and

in order to engage learners and deliver a positive experience, it is important to match the materials with their needs and expectations.

Flexibility in learning is also of paramount importance; a recent study (Yu and Canton, 2020) highlighted that the first two ranked areas of importance in learning for Gen Z students are flexibility in their learning, and self-paced learning.

Plymouth Marjon University has recently developed the eLEARN model, to develop and deliver effective online and e-learning content to learners with a wide range of educational experiences and age groups:

- **L**isten: The core 'taught' content. Typically a recorded lecture of 5-10 minutes in length
- **E**ngage: Engaging learners in active learning
- **A**ctivity: Independent tasks and enhanced learning
- **R**eview: Has the learner fully understood the topic?
- **N**ext: Moving on to the next eLEARN session

Marjon's experience in developing e-learning has shown that the quality of the recorded content is absolutely critical to learner engagement. High production values are essential, as almost everyone has viewed professional-looking free training content, on YouTube for example. The approach, therefore, has been to use a professional media production company to film and edit the content for the 'Listen' elements. Scripts for these sessions were developed by Marjon subject matter experts, the experts themselves delivered to camera on a film set, which was decorated carefully to create an 'informal living room' or 'home study' effect. Editing, graphics, subtitles and final colour grading were all undertaken in post- production to deliver a final video product which is visually appealing, accessible for non-native English speakers and engaging for learners of all ages and backgrounds.

To facilitate the requirements of the radiographer recruits, the e-LEARN sessions were developed to facilitate learning and exploration around 5 core themes. Additionally, a further three e- LEARN themes were developed for their managers or team leaders:

Table 1 eLEARN core themes

eLEARN sessions		
Radiographer recruits	**Titles of the 'Listen' elements. (Recorded video lectures)**	**'Activity' elements for each learner**
1	Maintaining positive relationships	1 hour online connected session with tutor and peers
2	Handling negative, racist or aggressive behaviour	1 hour online connected session with tutor and peers
3	Dealing with people	1 hour online connected session with tutor and peers
4	Resolving misunderstandings	1 hour online connected session with tutor and peers
5	Common language problems	1 hour online connected session with tutor and peers
Managers and team leaders	**Titles of the 'Listen' elements. (Recorded video lectures)**	**'Activity' elements**
1	Supporting new international recruits in your team	2 hour online connected session with tutor and peers
2	Helping new international recruits overcome challenges and maintain positive relationships	2 hour online connected session with tutor and peers
3	Helping new international recruits to handle negative behaviours and resolve misunderstandings	2 hour online connected session with tutor and peers
Workplace support sessions		
1 hour online 'connected' session each week, post course completion, facilitated by a Marjon tutor. Designed to pick up any particular issues the radiographer recruits were experiencing in the workplace, and discuss possible approaches and solutions		

In addition to the 'Listen' video-based elements, engagement was promoted by providing questions for the learner to consider during the self-paced sessions. Where appropriate, further reading resources and web links were provided.

The 'Activity' elements were largely focussed on 'connected' support sessions (online via MS Teams). At least one, one-hour long online session was provided for each theme. This allowed the learners to

join an informal online session with their peers, facilitated by the tutor. This allowed a more in-depth exploration of the subject matter discussed in the online video 'lectures'.

Finally, a two hour Workplace Support Session was provided each week. These sessions were also 'connected' (online, via MS Teams) and facilitated by a by a Marjon tutor. They were opened up to all recent international radiographer recruits, and were an opportunity to share experiences, build relationships with peers, discuss problems in a safe environment, and explore solutions and approaches where appropriate.

Data collection Tools

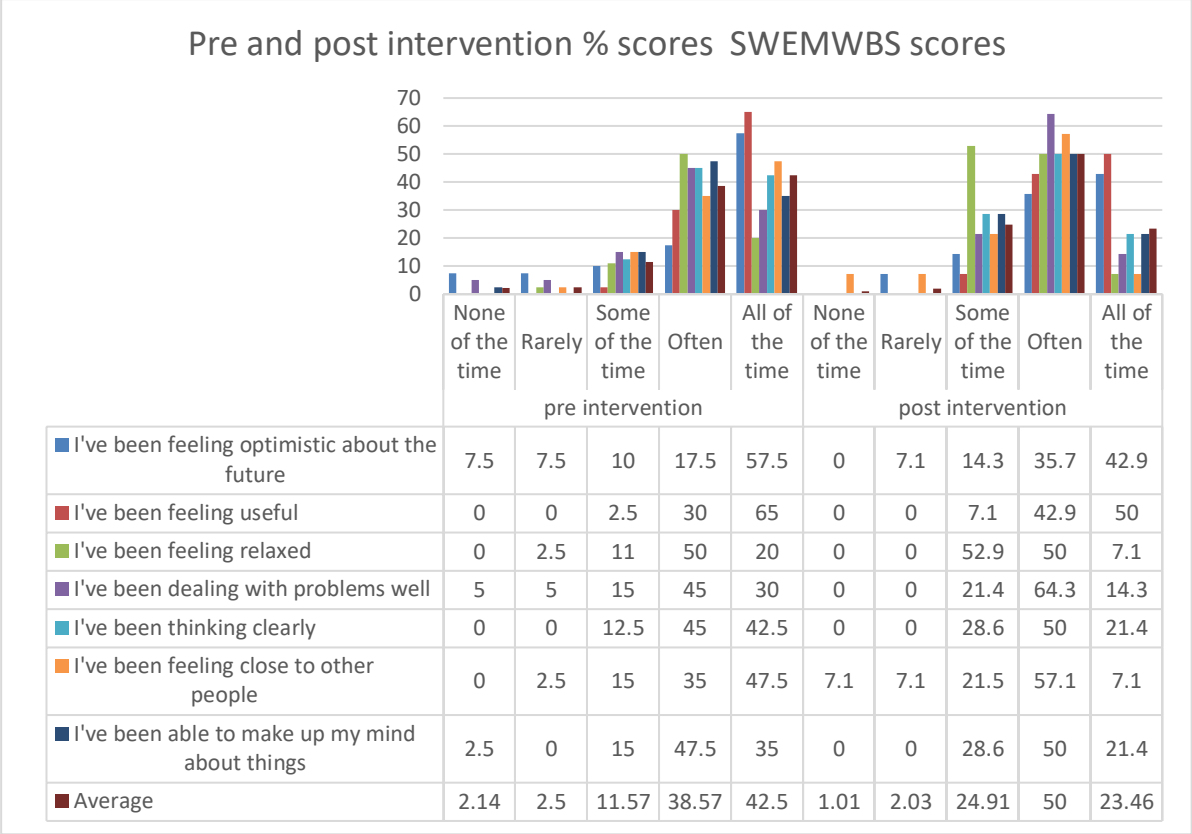
Two surveys were developed using established measures to explore the impact of the workforce integration programme for International radiographers joining the NHS.

Each survey had two distinct sections: Section one focused on well-being and integrated three established sets of questions about well-being using the Short Warwick Edinburgh Mental Well-being Scale (SWEMWBS), the ONS subjective well-being questions and a question on social trust, which is known to be a key factor for well-being. The second section focused on language and communication and utilised a generic assessment instrument to capture the skills used in 'prolonged patient-centred conversations performed by the different occupational groups, primarily physicians, nurses, health care assistants, midwives, physiotherapists, and occupational therapists' developed by Axboe *et a*l., in 2016 (p2). The final section included an open-ended question for further comments to provide additional depth or feeling to be exhibited.

Out of the 58 radiographers enrolled on the programme, the response rate for pre-intervention was 40/58 (68.9%); however, this reduced to 14/58 post intervention (24.1%). The reasons for this reduction were thought to be due to the radiographers being fully inducted into departments by the end of the programme and, therefore, too busy working to complete the questionnaire.

Discussion

The participants in the Marjon Radiographers course were surveyed before and after the course using the standard SWEMWBS and other measures. Figure 2 below illustrates the pre- and post-percentage scores against the 7 scale measures. The average for 'often' or 'all of the time' has decreased from 81.1% to 73.5 % but it should also be noted that the percentage of a smaller sample in the second survey (n=14) compared to the first survey (n=40) may have skewed these results.



	pre intervention					post intervention				
	None of the time	Rarely	Some of the time	Often	All of the time	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	7.5	7.5	10	17.5	57.5	0	7.1	14.3	35.7	42.9
I've been feeling useful	0	0	2.5	30	65	0	0	7.1	42.9	50
I've been feeling relaxed	0	2.5	11	50	20	0	0	52.9	50	7.1
I've been dealing with problems well	5	5	15	45	30	0	0	21.4	64.3	14.3
I've been thinking clearly	0	0	12.5	45	42.5	0	0	28.6	50	21.4
I've been feeling close to other people	0	2.5	15	35	47.5	7.1	7.1	21.5	57.1	7.1
I've been able to make up my mind about things	2.5	0	15	47.5	35	0	0	28.6	50	21.4
Average	2.14	2.5	11.57	38.57	42.5	1.01	2.03	24.91	50	23.46

Figure 2 Short Warwick- Edinburgh Mental Well-being Scale % scores

Table 2 illustrates the scores for the SWEMWBS at the end of the intervention, which compared the National average to observed score from the participants. This result is in the top two quintiles and represents a 'good' score.

	Combined SWEMWBS score (out of 35)
Please enter the average score for your group in the box:	26
The score falls between the 41% and 60% of responses	**GOOD**

Table 2 SWEMWBS averages scores and National comparison

The Office for National Statistics' subjective well-being questions are a set of four questions with a response scale of 0-10, intended to capture what people think about their well-being:

1. Overall, how satisfied are you with your life nowadays?
2. Overall, to what extent do you feel the things you do in your life are worthwhile?
3. Overall, how happy did you feel yesterday?
4. Overall, how anxious did you feel yesterday?

Figure 3 below indicates the pre and post intervention measure for well-being compared against the National average in 2019.

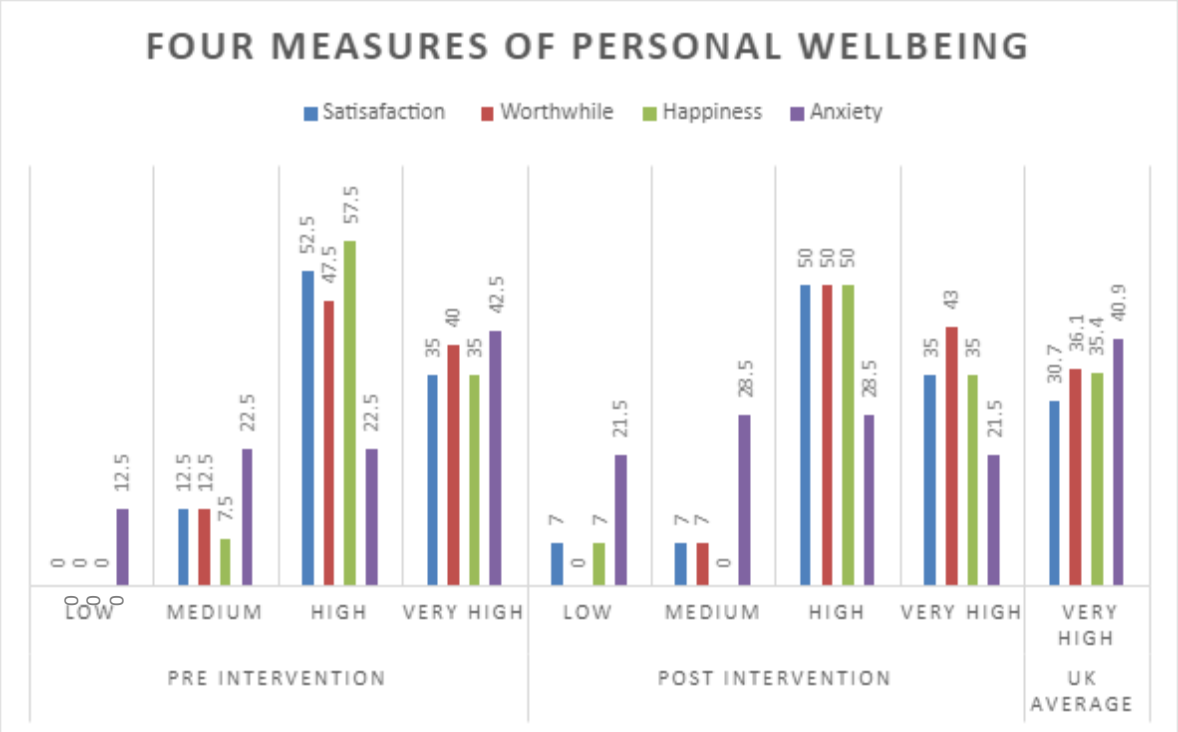


Figure 3. The pre and post intervention measure for well-being compared against the National average in 2019

As in our National Accounts of Well-being framework, we are led by the findings from well-being research to recommend that social well-being is included as a headline measure of well-being given its importance – within functioning – to overall well-being. The single survey question which measures social trust is very widely used, often within social capital research, and therefore will enable well-being analysis to be linked to this further rich research area.

The group result at the end of the intervention highlighted in Table 3 shows delegates are in the top two quintiles for their average well-being score, both compared to national and regional (South West) responses.

On a scale where nought is 'not at all anxious' and 10 is 'completely anxious', overall, how anxious did you feel yesterday?	
Please enter the average score for your group in the box:	3.7
The score falls between the bottom 61% and 80% of responses	**Below average**
Overall, how happy did you feel yesterday? where nought is 'not at all happy' and 10 is 'completely happy'	
Please enter the average score for your group in the box:	8.4
The score falls between the top 61% and 80% of responses	**Good**
Overall, how satisfied are you with your life nowadays? where nought is 'not at all satisfied' and 10 is 'completely satisfied'	
Please enter the average score for your group:	8.2
The score falls between the top 61% and 80% of responses	**Good**
Overall, to what extent do you feel that things in your life are worthwhile? where nought is 'not at all worthwhile' and 10 is 'completely worthwhile'	
Please enter the average score for your group:	8.5
The score falls between the top 61% and 80% of responses	**Good**

Table 3. Average well-being scores for participants compared to National and regional scores

The second aspect of the survey measured the respondents' views on their personal levels of self-efficacy both before and after attending the communication skills training course to compare the level of skills evaluated by perceived self-efficacy. Each question began with the words: "How certain are you that you are able to successfully …" followed by a specific communication skill. A 100-point response scale ranging from 1 (very uncertain) to 100 (very certain).

When comparing the sum scores in the group prior to the intervention with those of the group after the intervention, we found higher scores of six of the self-efficacy questions in the post-intervention

group as identified in Table 3. The mean sum score in the post intervention survey (n = 14) was 86.91 (SD = 4.95), whereas the mean sum score in group 2 (n = 40) was 87.51 (SD = 5.54). Figure 3 illustrates the difference between the 12 self-efficacy items.

Silverman *et al*., (2005) suggest that clinical communication is a series of modifiable skills that can be developed to become a better communicator, in addition to being a personal trait. The results below (Figure 4) indicate that six out of 12 of these communication skills have, according to the perception of the respondent, been improved as a result of the intervention. Effective clinical communication that improves accuracy and efficiency has been shown to have a positive impact on several aspects of patient outcomes, such as patient satisfaction, adherence, symptom relief, and physiological outcome (Silverman *et al*., 2005).

Table 3 Descriptive statistics of the 12 self-efficacy items (range, 1–100)

Self-Efficacy Item	Pre intervention		Post Intervention	
	Mean	Standard deviation	Mean	Standard deviation
Identify the issues the patient wishes to address during the conversation	82.90	19.37	85.64	8.03
Make and agenda /plan for the conversations with the patient.	77.92	22.61	83.5	14.48
Urge the patient to expand on his/her problems/ worries.	72.51	27.39	74.57	26.20
Listen attentively to the patient.	89.95	20.51	92.14	8.90
Encourage the patient to express thoughts and feelings.	91.72	13.91	85.86	13.47
Structure the conversation with the patient.	87.05	15.84	83.86	12.35
Demonstrate appropriate non-verbal behaviour (eye contact, facial expressions, placement, posture and voicing)?	87.92	22.10	90.43	9.43
Show empathy (acknowledgement of the patient's views and feelings)	95.18	7.81	91.84	7.59
Clarify what the patient knows in order to communicate the right amount of information	92.54	12.37	87.43	10.23
Check the patient's understanding of the information given.	92.67	12.43	89.28	11.21
Make a plan based on shared decisions between you and the patient	88.41	15.14	89.29	10.57
Close the conversation by assuring that the patient's questions have been answered.	91.38	13.36	89	10.28

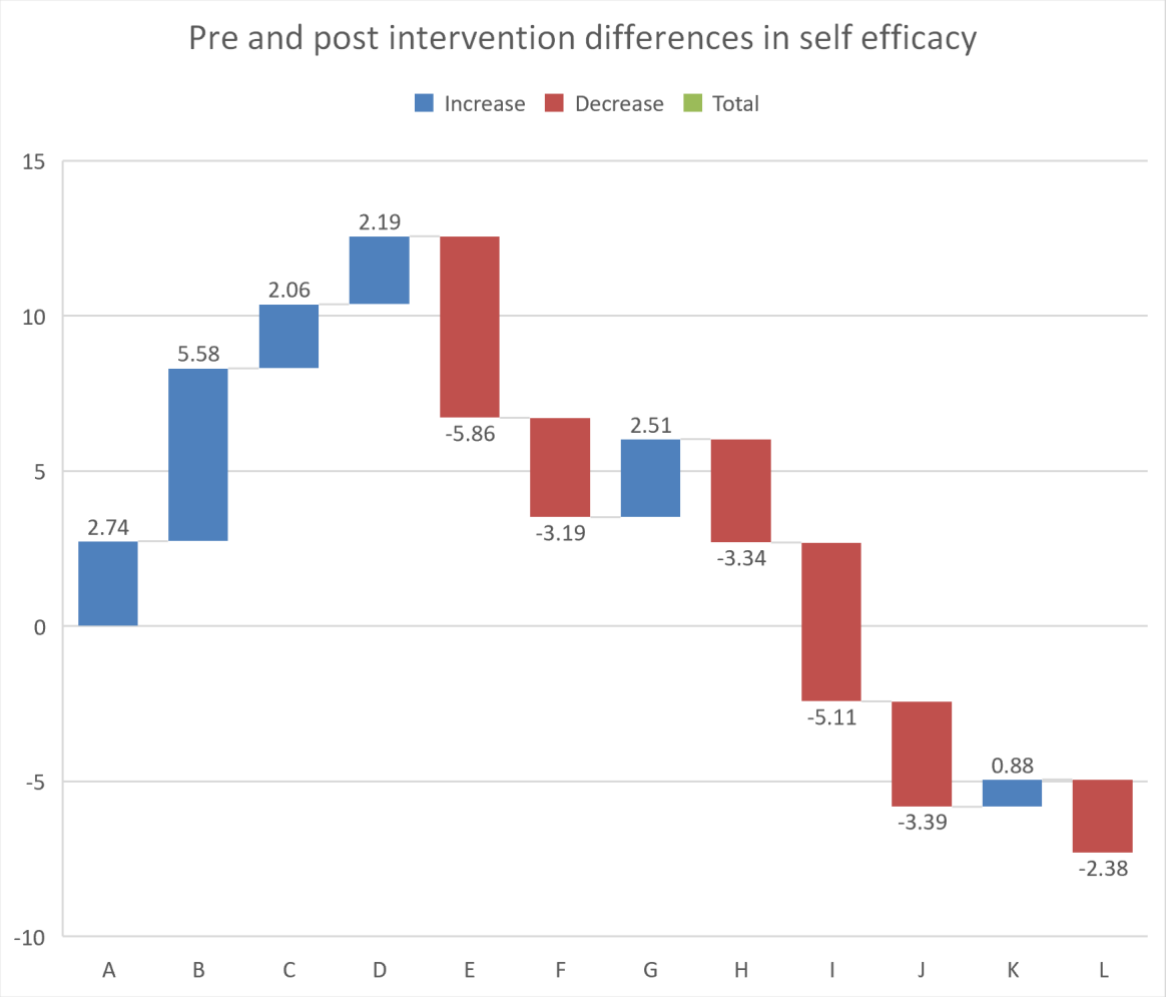


Figure 4 Pre and post intervention difference in self efficacy

KEY: Full statements from the Self efficacy measure
A: Identify the issues the patient wishes to address during the conversation.
B: Make and agenda/plan for the conversations with the patient.
C: Urge the patient to expand on his/her problems/worries.
D: Listen attentively to the patient.
E: Encourage the patient to express thoughts and feelings.
F: Structure the conversation with the patient.
G: Demonstrate appropriate non-verbal behaviour (eye contact, facial expressions, placement, posture and voicing).
H: Show empathy (acknowledgement of the patient's views and feelings)
I: Clarify what the patient knows in order to communicate the right amount of information
J: Check the patient's understanding of the information given.
K: Make a plan based on shared decisions between you and the patient.
L: Close the conversation by assuring that the patient's questions have been answered.

Self-efficacy is a widely used construct for self-assessment of the outcome of communication skills training (Ammentorp *et al*., 2007; Doyle *et al*., 2011; Parle *et al.,* 1997). According to Bandura (1994), perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Bandura claims that people's beliefs about their efficacy can be developed by four main sources of influence: Mastery of experience social models, social persuasion, and reducing people's stress reactions. Bandura (1994 p2) adds that 'The most effective way of creating a strong sense of efficacy is through mastery experiences'. To do this, individuals must experience success, which builds robust belief and failure

which requires experiences in overcoming obstacles. Decreasing confidence in some measures illustrated in Figure 3 may be an opportunity to practice overcoming barriers and therefore build mastery.

The Social Trust question is represented in Figure 5 and visually shows the distribution of numerical data. It reveals the distribution of the responses and skewness through displaying the data quartiles (or percentiles) and averages.

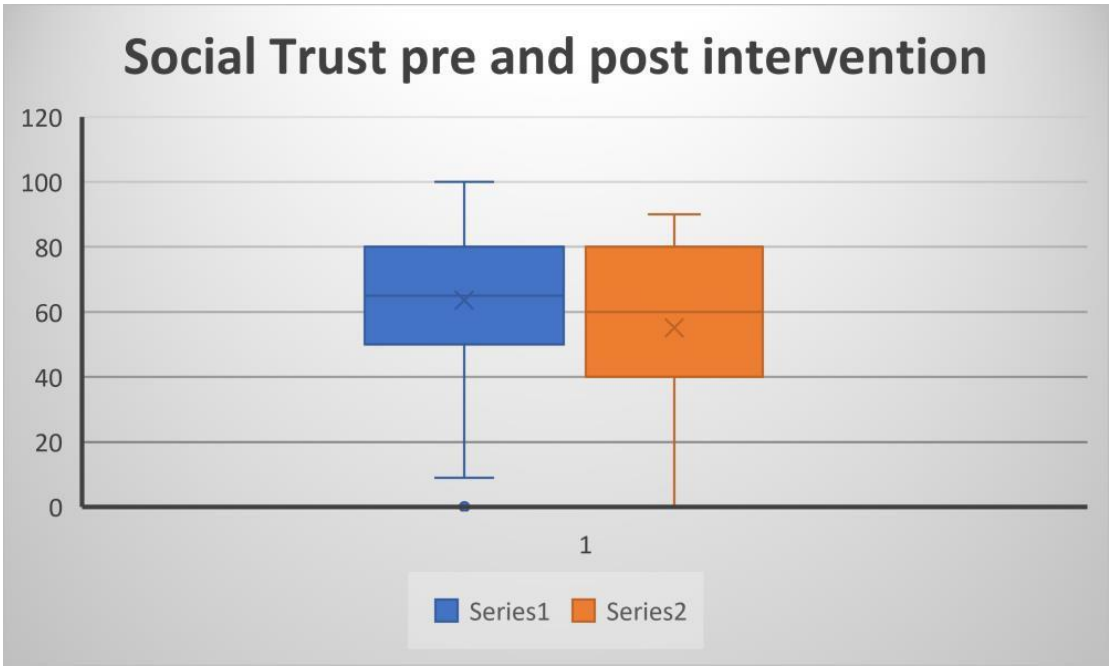


Figure 5. Social trust scores for participant pre-intervention (Series 1) and post-intervention (Series 2)

Both pre- and post-intervention are slightly negatively skewed by -0.7 and -0.9 respectively. This measure of social well-being is included as a headline measure of well-being given its importance within functioning to overall well-being. Functioning represents positive interactions with the world that an individual experiences. 'Social trust refers to an individual's beliefs about the general trustworthiness of others and it is part of a person's world view regarding the benevolence of other human beings' (Justwan *et al.,* 2017, p. 1).

Participants were asked to consider the impact of the programme on them in their new roles. Three emerging themes from open questions emerged. Firstly, the level of awareness of the challenges ahead and language differences; for example '*workplace integration training programme helped me*

to find my job easier by knowing more about British culture and how to have a good relationship with people' (participant comment) and '*It has really helped especially my level of awareness of language differences then, of challenges ahead as regards building and maintaining positive relationship/responsibilities*.' (participant comment). Furthermore, a participant commented that '*the programme helped me to know that I should pay more attention and listen attentively in order to get along with British accent*' (participant comment).

Secondly there were comments on language and challenges relating to integration into their departments, for example '*helped to make me more comfortable in communication with patients and colleagues hence improved my effectiveness in my workplace*' (participant comment) and '*It clarified for me the picture of working in the UK*'.

Thirdly, some comments were made on dealing practically with professional challenges relating to language and challenges within the workplace for example '*The programme prepared me to know what to expect such as different people's behaviour in the workplace and how to handle it*' (participant comment) and '*I learned some ideas through this training programme particularly in language and provocation within my workplace*' (participant comment).

Finally, there were some general comments about the topics and their effect, for example, '*It has made me more receptive of the difference in the language and given me an understanding of some phrases that are commonly used thereby improving my communication skills with especially patients*' (participant comment).

Conclusions

Helping working individuals to feel happy, competent, and satisfied in their roles presents a valuable opportunity to benefit societies and is an outcome of focusing on well-being at work. New Economics Foundation (NEF) (2014, p.6) suggested that '*Improving well-being at work implies a more rounded approach, which focuses on helping employees to:*

- *strengthen their personal resources*
- *flourish and take pride in their roles within the organisational system*
- *function to the best of their abilities, both as individuals and in collaboration with their colleagues*
- *have a positive overall experience of work.'*

For new professionals joining the National Health Service (NHS) as radiographers, having completed their training and gained experience in countries other than the UK, a key aspect of this is to allay fears, apprehensions and anxiety by ensuring effective work place integration. As suggested in the research by Axobe *et al.,* (2016), focusing on language skills and communication has been shown to have positive impacts on several aspects of patient outcome and improvements in self efficacy of the work force. This aligns to the NEF (2014) focus on functioning at work, which includes the extent to which workers feel they can express themselves, use their strengths, and have a sense of control over their work. Xie and Johns (1995) found that individuals who perceive their jobs to match their skills tend to report lower levels of stress. By reducing anxiety and raising awareness of challenges imposed by language and communication barriers, we can create positive interactions with their surroundings and improve functioning and feelings of control. In 2002, Casady and Dowd reported on a successful initiative to support the retention of radiologists, highlighting an operational objective of improving communication inter- and intra-departmentally, for new recruits into the profession, particularly those from other countries. This approach can only be successful if language and communication barriers are addressed and team leaders and management teams have appreciation of the challenges facing the new recruits, combined with an awareness of how to help. This awareness to help can be usefully put into practice through the induction and orientation stages. Verlander and Evans (2007) suggested that successful 'retention on-boarding' should enable a sense of attachment to the workplace, a sense of familiarity with the new environment, comfort with co-workers, pride in the job and satisfaction. Their twelve components of retention onboarding conversations at induction and orientation stages

are crucial to enabling new employees to form a bond and sense of belonging. For international recruits, the focus on language and communication barriers, challenges and solutions should be at the heart of this process.

The workplace integration programme embedded many of Verlander and Evans' (2007) suggestions for induction and orientation, namely establishing procedures and policies, through stories, examples, and anecdotes, exploring the strengths and continuing changes and challenges relating to integration in the workplace. The programme's three-phase strategy that focused on a targeted 'before, during and after' has seen an impact on a number of self-efficacy measures, a raised awareness of challenges and personal awareness of implications for practice. It has acted to support a smooth transition through onboarding and beyond to both new recruits and their residing departments.

> '*If all international Radiographers can be introduced to this course upon entry into the United Kingdom or once they've been employed, it would help integration into the system better and ease pressure.*' (participant comment).

Recommendations

The principal recommendations gained from the development and implementation of this Workplace Integration Support Package are as follows:

1. **Ensuring digital accessibility for new recruits as part of the on-boarding process is essential:**
    a. Digital accessibility for individual recruits before, and on arrival in the UK should be evaluated
    b. Future projects should also include the option of providing mobile network-enabled IT hardware on a short-term loan basis (e.g. a tablet with learning materials pre-loaded or accessible through a link to an externally-hosted Learning Management System). This will ensure access to both the learning materials and any online, connected support sessions provided
2. **Consider the timing of any online, connected tutor support sessions to facilitate positive engagement:**
    a. Scheduling connected sessions during evenings and/or weekends where possible may serve to improve engagement by removing scheduling conflicts caused by operational pressures during working hours

b. Furthermore, individuals who have recently arrived in the UK having left family and friends behind may welcome the opportunity for additional contact outside working hours, when they can feel isolated and lonely, particularly at the early stages of their integration journey

3. **Provision of long-term pastoral support:**
    a. The study has highlighted the need for consideration of long term pastoral support. It has been suggested by individuals that a self-sustaining forum would be of benefit and would address a multitude of pastoral based support requirements
4. **Mandate the training requirement for managers and team leaders to improve engagement:**
    a. Due to operational pressures post pandemic, it was difficult to gauge the true opinions of those individuals who accessed the managers and departmental resources. It is suggested that engagement and uptake could be increased by including/embedding these resources within the mandatory training requirement of the departments. Further evaluation is recommended to investigate and assess the effectiveness and relevance of the content

References

Ammentorp J, Sabroe S, Kofoed PE, Mainz J. (2007) The effect of training in communication skills on medical doctors' and nurses' self-efficacy. A randomized controlled trial. *Patient Educ Couns.;66:270–7.*

Axboe, M.K; Christense K.S; Kofoed, PE. & Ammentorp, J. (2016) Development and validation of a self-efficacy questionnaire (SE-12) measuring the clinical communication skills of health care professionals *BMC Medical Education (2016) 16:272*

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Blythe J, Baumann A, Rheaume A, McIntosh K. Nurse migration to Canada: Pathways and pitfalls of workforce integration. Journal of Transcultural Nursing: Official Journal of the Transcultural Nursing Society / Transcultural Nursing Society, 2009; 20(2): 202-210. doi:10.1177/1043659608330349

Casady WM & Dowd TA. (2002) Staff retention and recruitment: "one great department". *Radiol Manage. 2002 Sep-Oct;24(5):18-25*. PMID: 12422659.

Doyle D, Copeland HL, Bush D, Stein L, Thompson S. (2011) A course for nurses to handle difficult communication situations. A randomized controlled trial of impact on self-efficacy and performance.*Patient Educ Couns.;82:100–9.*

Halliday K, Maskell G, Beeley L, Quick E. (2020) Radiology. GIRFT Programme National Specialty Report. *GIRFT (Getting It Right First Time)* https://www.gettingitrightfirsttime.co.uk/radiology-report/

Health Education England (nd) Developing a flexible workforce that embraces research and innovation: Research and Innovation Strategy https://www.hee.nhs.uk/sites/default/files/documents/HEE%20research%20and%20innovation%20strategy.pdf

Justwan, F., et al. (2017) Measuring social trust and trusting the measure. *The Social Science Journal*

https://doi.org/10.1016/j.soscij.2017.10.00

Lum, L. (2009). Accommodating learning styles in bridging education programs for internationally educated professionals. Ottawa: Canadian Council on Learning. Retrieved December 6, 2012, from www.ccl.cca.ca/ ccl/Research/.../project-funding-work.html

Magnusdottir H. (2005) Overcoming strangeness and communication barriers: A phenomenological study of becoming a foreign nurse *International Nursing Review* 52(4):263 - 269

New Economics Foundation (NEF) (2012) *Measuring Well-being: a guide for practitioners* London: NEFNew Economics Foundation (NEF) (2014) *Well-being at work: a review of Literature* London: NEF

ONS (2019) Measuring national well-being in the UK: international comparisons, 2019 accessed fromhttps://www.ons.gov.uk/peoplepopulationandcommunity/ well-being/articles/measuringnationalwellbeing/internationalcomparisons2019#personal-well-being

Organization for Economic Co-operation and Development. (2004). Towards high performing health systems . Retrieved December 6, 2012, from www.oecd.org/dataoecd/7/58/31785551.pdf

Parle M, Maguire P, Heaven C. (1997) The development of a training model to improve health professionals' skills, self-efficacy and outcome expectancies when communicating with cancer patients. *Soc Sci Med.;44:231–40*

Ramji Z. & Etowa, J. (2014) Current Perspectives On Integration Of Internationally Educated Nurses Into The Healthcare Workforce *Humanities and Social Sciences Review*, 03(03):225–233 (2014)

Ramji , Z.; Etowa, J. & St Pierre I. (2018) Unpacking Two-Way Workplace Integration *Aporia* Vol.10, Issue 2·

Richards, M.; (2020) Diagnostics: Recovery and Renewal. Report of the Independent Review of Diagnostic Services for NHS England *NHS England*, Publication approval reference: PAR242

Silverman J, Kurtz S, Draper J. (2005) *Skills for communicating with patients*. 2nd ed. Abingdon: Radcliffe Medical.

Skills for Care (2014) *The principles of workforce integration* Leeds: Skills for Care

Verlander E & Evans M (2007) Strategies for improving employee retention *Clinical leadership & management review: the journal of CLMA 21(2):E4*

Waddell, G & Burton AK (2006) Is work good for your health and well-being London: TSO (The Stationery Office)

World Health Organization. (2013). Nursing and midwifery progress report 2008 - 2012. Geneva: WHOPress

Xie, J. L., & Johns, G. (1995). Job Scope and Stress: Can Job Scope Be Too High? *The Academy of Management Journal, 38(5), 1288–1309.*

Xu, Y., & Kwak, C. (2007). Comparative trend analysis of characteristics of internationally educated nurses and U.S. educated nurses in the United States. International Nursing Review, 54(1), 78-84.

Xu Y. Transition as a salient area of inquiry in healthcare: Asian nurses working in western countries. Home Health Care Management & Practice 2007; 19(6): 485-487. doi:10.1177/1084822307304249Yuand Canton, 2020