

Working Lives: Supporting report on wellbeing













Contents

Introduction	3
Background - survey results	4
Context - the problem	9
Wellbeing landscape analysis	14
Individual factors and interventions	15
Societal/institutional/systemic factors and interventions	20
Limitations to wellbeing initiatives/research	31
The future	32
Building on existing recommendations	32
Our fundamental principles for the future	34
How will we know we've improved?	38
Acknowledgements	39
Bibliography	40

Introduction

When Paediatrics 2040 launched in Autumn 2018, nobody could have envisaged the rollercoaster of events that would ensue in the following years. Working lives have already been transformed and the wellbeing of paediatricians and those delivering care to our children needs to be pushed to the forefront of all future plans. Health is not just the absence of disease. Wellbeing is not just the absence of burnout. To deliver the best care, we need to be the best versions of ourselves and create an environment that not just acknowledges this but actively promotes it.

The NHS People Plan 20/21 recognises this and has overlapping complementary themes with Paediatrics 2040, stating that the NHS needs "more people, working differently in a compassionate and inclusive culture" (We are the NHS 2020). It is imperative that we look after our people, keeping them safe and well both physically and psychologically. This must occur in parallel with creating an organisational culture which makes people feel that they belong. These are the first aspects forming the foundation of the practical action plans. The united will and prioritisation of what the health service needs to survive and thrive can pump prime the potential for a happier, healthier paediatric workforce in 2040.

In this report, a landscape analysis was performed of where we are now and how we got there. We've taken a deeper dive looking into the wellbeing components of the RCPCH Paediatrics 2040 survey to truly understand how members feel. Only by doing this can we specifically work on the areas that most need change/improvement. A literature review of wellbeing initiatives allows critical assessment of what has evidence-based benefit and what remains theoretically/intuitively beneficial. Some of the fantastic work from around the UK has been showcased to enable more seamless sharing and spread.

The focus on wellbeing is positive and should create a ripple effect. How we work in the future is malleable and the importance of ensuring fewer people burnout needs to be replaced by maximising joy in work and facilitating humans to be their absolute best selves. The children of the future deserve the best health care possible and therefore we need to make sure that the wellbeing of those delivering it is prioritised.

Dr Seb Gray Consultant Paediatrician Lead for Wellbeing sub-group, Paediatrics 2040 Working Lives Workstream

Background - survey results

Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning – Albert Einstein

A survey was conducted to all UK RCPCH members in February 2020 to help guide all aspects of the Paediatrics 2040 project. Thematic analysis of 330 respondents has revealed a thread throughout focussing on improving all aspects of working lives and wellbeing.

At times of crisis, resorting back to the basic needs' foundation of Maslow's hierarchy of needs is necessitated (Figure 1). However, with predictable and inevitable potential crises we need to integrate the psychological and self-actualisation needs into our future working lives. As COVID-19 has demonstrated, we can't plan just for when things are rosy. We can hope for the best, but we need to prepare for the worst and make sure that those delivering paediatric care are looked after.



Figure 1. Replication of Maslow's hierarchy of needs

Areas for improvement

Looking back and reflecting on negativity has to be done in a timely manner to process the information and devise ways to change and move forward. When asked, "In 2040, what is the top thing you want to be different about the working lives of paediatricians?", the main responses related to wellbeing. Of the 294 who wrote comments, 68% referred to wellbeing, with "work-life balance" being the most common response. The mind map below summarises some of the responses:



Figure 2. Mind map categorising responses to question, "In 2040, what is the top thing you want to be different about the working lives of paediatricians?"

Overall, respondents are acutely aware that change is needed to make paediatric care sustainable. Some direct quotes are displayed in the word cloud (Figure 3).

With a question framed to ask for what could be different, it's understandable that responses focussed on current issues that need improving. It's therefore concerning that so many highlighted their wellbeing as their main concern. Whilst not all responses were negative, the vast majority were, clearly indicating that the tide needs to be turned. Aspirations for improving working lives are intertwined with the workforce and how care will be delivered, and to truly improve the working lives in 2040, significant systemic changes are required.



Figure 3. Word cloud of member responses relating to wellbeing

The last 10 years have seen a slip in morale. The survey question, "in the last ten years, what one change, initiative, idea or process has impacted the most on your working life?" isn't framed negatively and yet the vast majority of respondents focussed on deleterious factors, highlighting some of the key issues that need to be tackled. Rota gaps, fewer trainees, loss of continuity of care, four hour Accident and Emergency (A&E) targets and junior doctor contracts were all mentioned recurrently. The European Working Time Directive (EWTD), instigated to ensure patient safety by not over-working doctors, may have had some concerning adverse effect, with responses suggesting that continuity of care and a sense of belonging has been impacted, which reduces wellbeing.

Setting targets and goals allows us to work towards something. The four-hour A&E target, despite lacking significant scientific justification, has become pathognomic of a failing NHS. Fines and chastisement to those not meeting targets demoralises and devalues the efforts made, perpetuating the problem and leading to a viscious cycle. All targets introduced should have an evidence-base justifying their use, coupled with support packages and resources should teams fall short. Nobody likes to fail but failure is an event, not a person, and focus should be concentrated on improving the system.

Positive aspects

The survey wasn't all negative. Responses to the positively framed question, "in the last 10 years, what one change, initiative, idea or process has changed paediatrics for the better for you?" were fairly broad and provided areas that can be further developed (Figure 4). The enthusiasm for technology is exciting, with many recent developments being driven by individuals prior to wider adoption. The use of smartphones, apps and podcasts as well as seamless communication via emails and social media were all highlighted as positive factors. There are communities of practice for most paediatric specialties that transgress regional or even national training programmes and open up a world of possibilities for future collaboration and innovative learning. Genetic testing and sharing of e-records across domains of care were also highlighted. These aspects rely more heavily on the significant financial considerations necessary for upscaling and spread. In order for the NHS to remain cutting edge, investment will be required and technology is likely to be at the forefront of expenditure.



Figure 4. Thematic responses to RCPCH member survey question, "In the last ten years, what one change, initiative, idea or process has changed paediatrics for the better for you?"

Working less than full time (LTFT) and being able to train more flexibly was also flagged as a positive, alongside new models of care. Within the latter, integrated care, increased collaboration, sub-specialty service development and increased home care were all highlighted. Networks and team-based approaches also came up as recurring themes.

RCPCH was also mentioned as having had a positive impact on members over the last 10 years. Communication between the College and its members was highlighted as an area of particular improvement, with new communication methods utilised including the entry of RCPCH into the world of social media. RCPCH Milestones, the re-launched member magazine, has been well received and all members are actively encouraged to consider writing opinion pieces to ensure diversity of authorship and that all geographical regions have a voice. Wellbeing is a standing item in the magazine alongside regular contributions from the RCPCH &Us team which was also flagged as a positive development from the last 10 years.

Other positive themes included public health issues such as vaccine coverage and an increased awareness of wider determinants of health. The move toward evidence-based guidance focussing on research networks, safeguarding and improved, nationally produced guidelines were also cited as positive factors over the last 10 years. Consultant-delivered care was mentioned in both a positive and negative context. On a positive note, more support and learning opportunities for junior staff and trainees were reportedly facilitated by consultant-delivered care. However, increased consultant presence conversely has been shown to make the role less aspirational, particularly if associated with resident night shifts, and implementing change needs to ensure that a broad perspective is sought.

Member vision for 2040

The descriptions of visions for 2040 made fascinating reading. Members free text prose ranged from utopian to apocalyptic with a lot of aspirational fantastic ideas as well as some practical suggestions. Many visions embraced utilisation of new technology, different models of care and a more diverse workforce with greater collaboration with allied healthcare professionals. It was extremely apparent that the wider societal and worldwide issues weigh heavily on members minds and highlights the need for RCPCH to be the political advocate for child health. Climate change concerns a lot of members and the World Health Organization corroborates this stating that is it is "the defining health challenge of our time".

There were many who questioned the likelihood of sustaining the NHS to 2040 with commentary on how child healthcare would then be delivered. The lack of positives associated with the descriptions of a post-NHS era magnifies the high esteem that we hold the NHS in as a paediatric workforce. Alongside the under-funding of the NHS, concerns were raised about the widening poverty gap and the profound evidence-based effect this will have on child health.

The impact of external factors and global events on wellbeing is well defined, and this is explored further below, but comments were made relating to what would make their future brighter. Work-life balance, more flexibility and a focus on wellbeing in the workplace was frequently commented on. Many members remarked that they would be retired in 2040 and with the state pension age increasing to 67 by 2028, this needs to be factored in. The proportion of the paediatric workforce on older schemes without such significant financial penalties for early retirement will diminish over time but the more senior consultants expressed concerns about continuing in the same hands-on role. Flexibility was called for and novel models of working are necessitated to utilise the skills and experience of senior consultants in a way that doesn't decimate their wellbeing nor deter those junior from following the same career path.

Context - the problem

A problem well stated is a problem half solved – John Dewey

The Paediatrics 2040 member survey qualitatively highlighted sub-themes related to the current status of reduced wellbeing predisposing to burnout. The contributing factors to low morale, reduced wellbeing and increased burnout of the paediatric workforce are multifactorial. We have therefore used the survey results, including free text comments, to define the problem and develop a driver diagram of causative factors. Whilst this is not exhaustive, it potentiates focussed interventions on many aspects (Figure 5).

This section aims to explore the problem of burnout from the wealth of literature available stressing how essential it is to tackle. We tell our patients that if they drink plenty and eat a balanced diet they won't end up constipated. If you constantly under-drink and eat poorly, you will inexorably get constipated. In terms of wellbeing, the paediatric work-force currently requires the disimpaction regime equivalent whilst the systemic drivers can be addressed.

What is burnout?

Burnout is a work-related syndrome involving three domains (Maslach 1981):

- 1. Emotional exhaustion
- 2. Depersonalisation
- 3. A sense of reduced personal accomplishment.

Emotional exhaustion can lead to apathy and having nothing left to emotionally support patients and families. Depersonalisation can lead to seeing patients as numbers or diseases rather than human beings. Reduced personal accomplishment manifests in not valuing patient care or professional achievements. Burnout itself may not be synonymous with job satisfaction, fatigue, occupational stress and depression but it is closely correlated (Schaufeli 2001).

The World Health Organization (WHO) recognises burnout as an occupational phenomenon included in the latest International Classification of Disease (ICD-11; WHO 2019). By not classifying it as a medical condition, the need for societal and organisational policies are necessitated and the WHO also plan to develop evidence-based guidelines to augment mental wellbeing in the workplace.



Paediatrician Low Morale/ Wellbeing

Figure 5. Driver diagram of paediatrician low morale/ wellbeing causative factors. Made using FreeQuality.org's Fishbone Diagram Generator 2.0

How big is the problem?

Between 2011 and 2018 more than 56,000 people left NHS employment citing work-life balance as the reason (We are the NHS 2020). A Welsh prevalence study found 69.2% were at high risk of developing work-related burnout using the validated 'Oldenburg Burnout Inventory' (Astill 2020).

Quantifying burnout can be challenging. The 'gold-standard' Maslach Burnout Inventory (MBI) is long and time-consuming with its use therefore mainly limited to research studies (West 2018). Abbreviated versions with single questions mapping to the three domains (emotional exhaustion, depersonalisation and personal accomplishment) have been utilised but lack validation. Alternatives to the MBI include the Copenhagen Burnout Inventory (CBI; Kristensen 2005) and the Oldenburg Burnout Inventory (Halbesleben 2005) used above.

Numerous studies from across the world demonstrate similar high rates of burnout. Rather than this acting as a source of reassurance, it highlights an inherent problem within healthcare delivery that pre-disposes us to burnout. Even after adjusting for work hours and other factors, doctors experience much higher burnout rates than the general public (Drybye 2014, Shanafelt 2012, Shanafelt 2015). The Office for National Statistics already measures the general populations' personal wellbeing and has been since 2011 (Office for National Statistics 2020). For the first time since the measurements began, average ratings of life satisfaction, happiness and anxiety all deteriorated across the UK in 2020 which doesn't bode well for doctors.

What causes burnout?

The literature search identified numerous factors that drive burnout, many of which are demonstrated in the driver diagram formulated from the survey feedback (Balch 2009, Shanafelt 2009 & 2012, Peckham 2017, West 2018). Drivers include:

- Overall workload
- Poor work-life balance
- Lack of flexibility
- Lack of autonomy/ control
- Misalignment of individual and organisational values
- Lack of social support/ community at work
- Time at work
 - o 3% increased risk of burnout for each additional hour at work per week
- Out of hours (nights/ weekends)
 - o 3-9% increase risk for each additional night or weekend at work
- Working when at home
 - $_{\odot}$ $\,$ 2% increased risk for each additional hour per week
- Work-home conflicts
 - \circ >50% increased risk if present
- Loss of meaning in work & increased beureaucratic tasks
 - 3-fold increased risk if >20% of time at work spent on meaningful taks compared to those that spend <20% on tasks they feel are meaningful

Burnout is triggered by sources of chronic stressors in the workplace and whilst individual measures may be partly beneficial, interventions need to be systemic. Stressors include incivility, staff shortages and austerity measures. A failure of individual approaches without addressing the common workplace stressors can amplify an inidividuals feelings of inadequacy, further compounding the problem.

Protective factors identified in the literature included having supportive managers and colleagues, with an emphasis on regular meetings. Barriers were environmental factors, workforce shortages and lack of team cohesion. Interventions to tackle this need to address the individual and systemic issues on a local, regional and national level.

Evidence from a small qualitative study found that patient experience and the doctor-patient relationship is affected by patients' perception of physician wellness (Lemaire 2018). By harnessing this knowledge, children, young people and their families have the potential to be powerful allies in ensuring that the wellbeing of healthcare professionals is supported so that we, in turn, can support them. Co-designing with meaningful patient engagement has the potential to ameliorate staff burnout both by instilling the sense of work pride whilst tackling pathways in a patient- and staff-focussed way.

The consequences of burnout

Evidence has shown the significant detrimental effects of burnout. The factors contributing to burnout are complex and inter-twined, making it difficult to remedy. The consequences of burnout can be broadly classified into those affecting the individual, patients and wider society:

Individual:

- Physical and mental health problems are closely correlated with levels of burnout (Bagheri Hosseinabadi 2019, McVicar 2016, Salvagioni 2017)
- Increased level of anxiety and depression (Bianchi 2015)
- Increased alcohol and substance misuse (Brown 2009, Oreskovich 2012)
- Increased suicidal ideation and completion rates (2.3- and 1.4-fold increased completion risk in females and males, respectively, compared to the general population) (Shanafelt 2009, Shanafelt 2011)
- Burnout is one of the strongest predictors to reducing clinical hours or leaving (nearly 20% of physicians with signs of burnout intended to reduce their clinical hours in the next year). (West 2014)
- Reduced productivity (Dewa 2014)
- Poor self-care (West 2012)
- Motor vehicle crashes (West 2012)
- Lower perceived quality of interpersonal teamwork (Welp 2016)
- Reduced job satisfaction (Sharma 2008, Shanafelt 2009, Siu 2012)

Patient:

- Lower quality care received (Firth-Cozens 1997, Shanafelt 2002, Williams et al 2007, Klein 2010)
- Doubled risk of medical error (Shanafelt 2010, West 2006, West 2009)
- 17% increase in being named in a medical malpractice suit (Balch 2011, West 2018)

- Higher standardised mortality rates (Welp 2015)
- Longer patient recovery times (Halbesleben 2008)
- Lower patient satisfaction (Haas 2000, Halbesleben 2008, Shanafelt 2009)
- Reduced adherence to medical advice from physicians demonstrating burnout (DiMatteo 1993)

Society:

- Reduced healthcare productivity (Drybye 2011, Dall'Ora 2015, Hall 2016, Shanafelt 2016, Emilia 2017, Canadas-De la Fuente 2018, Daigle 2018, Ramirez-Baena 2019)
- Increased healthcare professional turnover (Fibuch 2015)
- Less patient access to care
- Reduced clinical hours, attrition and early retirement results in significant loss in patient services equating to the equivalent of nearly £120 million (Dewa, 2014)
- Increased costs (due to increased medical errors, absenteeism and reduced productivity) (Letvak 2011, Sarafis 2016)

Problem statement

The morale and wellbeing of the paediatric workforce is currently extremely low, with negative sequalae for those individuals, the wider workforce and child health. A failure to address this will increase burnout and jeopardise the sustainability of paediatric care prior to 2040.

The problem is multi-faceted and the solution is therefore not quick nor a single intervention. The next section explores some of what's already been tried and what the evidence-base is.

Wellbeing landscape analysis

When it rains, look for rainbows. If you don't feel like dancing in the rain, get an umbrella. – SG

At the time of writing, it has rained a lot metaphorically - but through all the uncertainty, restrictions and devastation, rainbows have sprouted everywhere you look. In response to COVID-19, there has been an avalanche of resources, ideas and suggestions on wellbeing initiatives. Intuitively, doing something you enjoy, engulfing your mind with thoughts of positivity, and finding ways to release negative feelings all make sense. In this section, we sought to explore the evidence-base behind interventions purporting to improve wellbeing.

To highlight a disclaimer; a lack of strong evidence underpinning a certain intervention to improve wellbeing does not mean it is of no value, nor that it would not improve the wellbeing of certain people in a meaningful way. Everyone is different and wellness is not a one size fits all type of game. We've learnt that evidence evolves, sometimes so rapidly that it can leave your head spinning. However, establishing proof of effective interventions can streamline dissemination and wider implementation. We therefore encourage you to measure outcomes of any wellbeing initiatives you try and share the results – steal shamelessly and share seamlessly.

An initial literature search was performed using various databases, and bilbliographies were scrutinised for further relevant articles releated to improving wellbeing for healthcare professionals. The grey literature, including recent conference proceedings, has also been included to fully represent the great initiatives occurring across all four nations focussing on improving wellbeing.

Individual factors and interventions

Diversity amongst the paediatric healthcare professional workforce is fantastic and needs to be celebrated. Whilst there are undoubtedly wider issues that need addressing at the systemic or instituional level, numerous intiatives have focussed on an individual level. Interventions need to focus on tangible factors but pre-existing demographics, traits and experiences which cannot be changed need to be acknowledged and have been widely researched. There is potential to identify those at increased risk of developing burnout and put in additional personalised tailored protective measures to minimise risk. Balance between unnecessary intrusive questions to stratify risk requires an extremely sensitive approach and should be employed with caution as the evidence of measurable benefit has not been fully established. Some of the evidence is included to allow professionals to self-identify and acknowledge the potential for an increased predisposition.

The Precursors study, a longitudinal study of American doctors, found that having an older father predisposes people to depression (Thomas 1974). Thomas et al. also found a poor relationship with their father was also found to be associated with increased likelihood of junior doctors perceiving that a senior doctor was causing stress. Amongst GP's, the most significant stressors have been found to be the partners they work with and envious sibling relationships when young correlated with increased stress and depressive symptoms (Firth-Cozens 1998).

Other personal factors that have been shown to impact on the likelihood of burnout include (Toyry 2004, Lanballe 2011, West 2018):

- Gender
 - Increased rate of high emotional exhaustion in females with children (odds ratio: 1.74)
 - Females have 20-60% increased risk of burnout
- Age
 - Increased risk in those younger than 55 years (more than two-fold risk)
- Educational debt
- Relationship status
- Age of children
 - Having a child younger than 21 years-old increases burnout risk by 54%
- Occupation of partner
 - Having a non-medical partner who is a healthcare professional but not a doctor increases burnout risk by 23%
- Personality
- Interpersonal skills
- Personal experiences
- Ability to cope with stress

It's been shown that just because we became healthcare professionals, we were not preprogrammed to be more prone to stress and burnout (Brazeau 2014). Something happens along the journey and whilst its important to be aware of individual factors and mitigate against the risks if possible, the majority of work needs to focus on the wider picture. Nevertheless, there have been attempts to tackle indivudal factors with varying degrees of success.

Breaking point

Oliver highlighted some concerning statistics suggesting we're not even getting the bottom of Maslow's hierarchy of needs right (Oliver 2020). 40% of NHS doctors felt unable to take a break during the day to eat and drink. 45% of clinical staff were dehydrated by the end of their shift with associated impaired cognition. 59% of nurses hadn't taken enough breaks during their last shift. 25% of nurses reported policies banning drinking in patient areas. Preventing staff from looking after their basic needs cannot prevail. With the clear link identified between staff wellbeing and quality of patient care, it is in the patients' interest that healthcare workers' basic needs, such as hydration, are met in the workplace. Managers and leaders need to ensure the working environment doesn't just allow but encourages staff to stay hydrated.

Most industries provide their employees with a lunch break but the same can't be said for those working in paediatrics, where we regularly go hours without stopping for refreshments, sometimes not getting the chance at all. Protected lunch breaks have been adopted by the Royal Prince Alfred Hospital in Sydney whereby from midday to 1pm, a paged message goes out saying that the doctors are on their lunch break and non-urgent calls are banned (Robinson 2020). It's not hard to see how morale, productivity and the social interaction would all benefit from this alongside the longer-term benefits of reducing burnout and making the job more attractive.

Ahsan et al. found that junior doctors weren't taking their breaks during night shifts (Ahsan 2020). By introducing rota charts, utilising junior doctors' forums, commencing a WhatsApp group and designing posters, they were able to address this. Interestingly, negative attitudes towards taking breaks persisted. Transferability may only apply to similar sized large tertiary hospitals with multiple junior doctors at each level.

We know that patient safety and wellbeing are negatively impacted if we don't take our breaks. Stewart et al. found that only 44% of staff were always or mostly taking their break but were able to increase this by 13% through delivering HALT (Hungry Angry Late Tired) workshops (Stewart 2020). Many of the identified barriers, e.g. "guilt at handing over to someone else", require a cultural change with positive role modelling. Baverstock et al. calls for 'safety breaks' to adopt the same patient safety mentality as the hand-washing initiatives whereby just as patients and staff challenged doctors to wash their hands, doctors are challenged to ensure they take their breaks (Baverstock 2019). Again, work demands and acuity have a direct impact and need to be factored in to staffing levels and elective work planning.

Food for thought

Even sub-clinical symptoms of depression and anxiety have significant impact on wellbeing (Johnson 1992, Firth 2020). Studies have shown that adherence to a Mediterranean healthy dietary pattern is associated with a reduced risk of depression (Lassale 2019). Consuming more fruit, vegetables, nuts and legumes; moderate amounts of poultry, eggs and dairy products; and only rarely consuming other meat seems to be the best combination for wellbeing. However, there are many confounders in studies of dietary intake and the effect on mood/wellbeing. Unhealthy, ready meal options are more easily accessible and often cheaper. Free time and financial status are certainly significant in how you feel. There is also

the concept of 'comfort eating'. The craving for carbohydrate-heavy foods can be instigated by stress of feeling down but perpetuates a vicious cycle. Limited access to rest facilities with a fridge or microwave, being unable to take breaks and shift patterns all increase the likelihood of unhealthy snacking and opting for fast food options.

The most important meal of the day

A hospital trust in Belfast introduced a free breakfast for their night shift workers with 93% agreeing this was a great policy (Mullen 2020). The project was not just limited to medical and nursing staff, but all members of the trust working night shifts. This is a good example of a project where investing a relatively small amount of money to look after the workforce can improve morale, make staff feel more valued and promote a positive culture within the workplace.

Importance of sleep

Sleep is so important to function optimally. A longitudinal study found that junior doctors felt access to meals and hours of sleep were more important to them than number of hours worked (Firth-Cozens 2004). Despite the known deleterious effects that disrupted sleep has on physical and mental health, medical school training in the UK does not sufficiently educate the workforce about the importance of sleep to health (Urquhart 2011). Dr Michael Farquhar has helped to tackle the 'hero' attitude, that patient care is always more important than appropriate self-care deeming this "well intentioned but misguided" (Farquhar 2016).

Farquhar's suggestions for how hospitals can improve doctors working resident night shifts include forward-rotating rota designs (day-evening-night), minimising frequent transitions between day and night shifts, providing adequate recovery times following night shifts, ensuring staff get break entitlements and including sleep education in induction programs. Access to appropriate rest areas, good quality food at night and access to beds following nights shifts for those too tired to drive were also recommended. There has been a cultural shift toward napping during night shift work and rather than being tolerated, naps are becoming actively encouraged (Farquhar 2016).

Actively improving wellbeing

A trainee-led wellbeing-based quality improvement (QI) project introduced yoga, hip-hop dance and a running club into a wellbeing programme (Benzaken 2020). All respondents thought the classes were beneficial to team morale. Whilst we know exercise has a proven benefit in improving wellbeing and work-related mental health problems, the study design is limited by having a self-selected sample, limiting the transferability of findings and the overall impact needs to be considered (Mind 2014). The study team acknowledge limitations in terms of sustainability. Attendance was limited if out of working hours and session length during working hours was determined by workload. It's true that one size may not fit all so having a varied choice of some of the more popular sizes seems logical.

Mindfulness vs mind full

A recent systematic review found mindfulness training reduced levels of nursing burnout, resulting in lower scores for emotional exhaustion and depersonlisation and higher scores for personal accomplishment (Suleiman-Martos 2020). Another study has demonstrated decreased perceived stress, increased resilience to stressful work environments and enhanced work engagement following a mindfulness intervention (Ruotsalainen 2016).

Self-compassion

Self-compassion involves being touched by one's own suffering, generating the desire to alleviate this suffering and self-treating with understanding and concern (Neff 2003, Neff 2005). Workshops teaching self-compassion are positively associated with resilience among medical trainees and inversely associated with burnout amongst healthcare professionals (Gilbert 2010, Feldman 2011, Hofmann 2011, Olsen 2015). Increased self-compassion has been reported as a promising method of increasing resilience (Pidgeon 2014). Translating increasing self-compassion into practice in a way that is feasibly implemented merits further exploration. The government response to the Mid-Staffordshire Public Enquiry contained the word compassion 59 times in less than 70 pages highlighting the need for organisational awareness and change (Department of Health 2013). On a personal level, Baverstock et al. suggests developing an individualised compassion toolkit whereby you identify early warning signs of low compassion, acknowledge what could happen if these are not addressed and then embrace intensive rechargers (Baverstock 2016).

Active kindness

Salisbury suggests that practising and performing to make it look like you care might alter the way you feel (Salisbury 2019). Active listening increases your recall ability. Similarly, active kindness such as smiling and saying kind words creates the impression of a kind person to those you're interacting with and creates a positive interaction that reflects and reinforces. Caution is still required to ensure we're not just papering over cracks that could lead to destruction. We all have off days but depression isn't something you can act yourself out of, so knowing it's ok to not be ok and having signposts and permission to get help is fundamental.

A simple thankyou

The expression of gratitude from children, young people and their parents/carers is extremely heart-warming and can give that little boost whilst at work. Riskin et al. demonstrated through simulation that neonatal teams comprising of two doctors and two nurses performed significantly better if there was maternal gratitude expressed for the care of her preterm infant to the team (Riskin 2019). Interestingly, the team performance was not found to be significantly influenced by gratitude expressed by an expert doctor but may not have been adequately powered to detect this. Saying thankyou starts a ripple prosocial effect whereby it not only bonds teams intensifying their pride in practice but in turn, motivates them to reciprocate the process and build stronger feelings of social worth amongst the wider team (Grant 2010).

The art of wellbeing

Patients from the South London and Maudsley NHS Trust had their artwork exhibited in a gallery within London's Bethlem Royal psychiatric hospital (Brooks 2019). Using creativity engages a different part of our brain and art therapy has been effectively utilised in a complimentary fashion for many years. Further studies are required to assess whether healthcare professionals might benefit without it only being used as a rescue therapy.

Drowning your sorrows and maladaptive coping

Alcohol use is higher in doctors than in most other professions with a more significant difference in women, and correlates with depressive symptoms (Firth-Cozens 2020). Other maladaptive coping mechanisms include illicit drug use, gambling, partying, binge gaming or

other excessive screentime use alongside over-working. Like many factors discussed, there is a bi-directional causality but access to support needs to be more widely accessible.

And relax...

A Cochrane review exploring the use of physical relaxation methods such as massage were found to reduce stress in four studies (totalling 97 particpants) at one month follow-up by a standardised mean difference (SMD) of -0.48 (95% confidence interval (CI) -0.89 to 0.08; Ruotsalainen 2014). This benefit persisted in longer follow-up periods (one to six months) in six studies including 316 participants (SMD -0.47, 95%CI -0.7 to -0.24; Ruotsalainen 2014). Massage and taking extra breaks were found to have similar effects with two studies showning no considerable difference (Ruotsalainen 2014).

Six studies showed no significant differences in stress levels with mental relaxation methods such as meditation compared to no intervention at one to six months follow-up (SMD -0.5, 95%CI -1.15 to 0.15) but there was one study that showed less stress at more than six months follow-up (Ruotsalainen 2014). Mental relaxation was found in a single study to more effectively reduce stress than attending a course on theory analysis and in another study to be superior to just relaxing in a chair (Ruotsalainen 2014).

Imposter syndrome

The phenomenon of feeling like your peers know much more than you was first described in the 1970's and is now well recognised within the medical profession (Clance 1978). Paediatricians stereotypically have personalities that predispose to heightened imposter syndrome. This unhealthy perfectionism in medicine has some early warning signs which include a binary all or nothing approach, failure to delegate, self-chastisement and inability to forgive oneself for mistakes and procrastination to avoid the possibility of error (Peters 2012).

A recent survey of foundation year one doctors in Oxford found 94% exhibiting imposter phenomena (Warraich 2020). It's not clear whether the anecdotal increase in imposter syndrome is a genuine rise or an increase in openly discussing the issue. Either way, methods to build self-belief and confidence are required to ensure clinicians don't constantly live and work with self-doubt weighing on their shoulders. It's always easy to find someone who can do a task better than you or is more knowledgeable about a specific subject. When making these comparisons, there's a tendency to be biased against your own skills. We could all take a leaf from the learning from excellence movement and occasionally hold a rose-tinted mirror up. Slowly but surely, appraisals are starting to integrate some positivity and Baverstock et al. suggests we "go easy on yourself. Whatever you do today, let it be enough." (Baverstock 2019).

Dear diary

Journaling is now a well-recognised technique to re-focus thoughts on positive things; writing three good things every day makes you re-align your thought process. By looking for goodness, you'll see more goodness and it's certainly abundant within the paediatric workforce. Others find poetry or literature equally therapeutic both as a form of relective practice and as an uplifting process.

Other evidence-based individual interventions include (Shanafelt 2009):

- Stress management training
- Communication skills training
- Exercise programmes

- Self-care efforts
- Small group programmes focusing on promoting community, connectedness and meaning
- Specific attention to career fit
- Integration of home and work responsibilities
- Reflection of personal values and how one's work aligns with these
- Volunteering/ giving

Societal/institutional/systemic factors and interventions

Increasing the resilience of our workforce as an offered solution to burnout will not solve the problem. If a bath is over-flowing, no matter how good your mop is, you're going to continue mopping until someone turns off the tap. Better metaphorical mops are essential in the form of wellbeing interventions at individual levels to bide time but wider tap-turning changes will be necessitated to prevent the roof caving in. Fortunately, there are a growing number of people in positions of power able to convey this message and implement change with some of the evidence and interventions discussed below.

Equality, Disability & Inclusivity

The RCPCH continues to make strides to ensure there is equality and diversity within the College and throughout paediatric practice but even more is required to ensure this is reflected at every level of the paediatric workforce. The RCPCH Equality Diversity and Inclusion (EDI) Reference Group will work to ensure EDI is ingrained into every aspect of RCPCH work and has given a diverse range of members the opportunity to have their voice amplified. The population we serve are significantly diverse and by ensuring the workforce and leadership reflects this, children and young people will be better off. It would be naïve to think that we can solve the problem overnight but it's certainly a significant step in the right direction.

With so many references to inadequate job satisfaction and pride in practice correlating with burnout and impaired wellbeing, it is essential to ensure those with disabilities have every effort made to mitigate these. Feedback from a forum of healthcare professionals with disabilities was collated by paediatric clinical fellow¹, with the results broadly grouped into five themes:

- 1. Disability awareness and tangible support
- 2. Change in attitude to those with disability
- 3. Supporting safe practice
- 4. Occupational health and returning to work processes
- 5. Flexible training

We know that not all disabilities are visible and the cultural change in embracing these differences in a way that allows the individual to flourish and be their best self has been a slow

¹ Personal communication from Dr Tania Haynes, Paediatric Clinical Fellow

burner. Changes are required at an institutional level alongside an up-skilling and increased awareness from those in leadership and educational roles to make paediatrics the desirable choice for those with disabilities.

Feedback calls for an open culture whereby help can be requested and adjustments can be made to working lives to account for a disability without judgement. Flexibility is key and relies on a wider consideration of occupation health to ensure adjustments to working environments and patterns can be individualised. Nobody likes taking time off and everyone wants to fit in. Creating additional hoops for people to jump through for those with additional hurdles in life is unjust and people want to feel valued not a burden. Communication is key with those with disabilities wanting to be asked what help they need but also what skills they might have to augment services.

Experience of disability can offer a unique perspective, additional empathy and better care. Most importantly, all individuals are unique and the wants, needs and desires will vary from person to person. Whilst RCPCH guidance can likely ensure EDI training is mandated, regional training programs and individual trusts will need to ensure that their policies and processes truly allow inclusivity.

Morale building

Interventions that foster communication between the healthcare team, cultivating a sense of team cohesion and job control, have been found to be the most effective in reducing burnout (Regehr 2014, Ruotslainen 2016, West 2016, Panagioti 2017).

Mistakes Squared

Burnout has been shown to significantly increase the risk of medical errors but there is also strong evidence that adverse events can trigger many of the features of burnout (West 2006, West 2009, Seys 2013). Rather than a linear cause-effect relationship, a vicious cycle can be entered. The investigative process of any serious adverse incident is time-consuming and frequently strays from the idealistic no blame culture. For individuals involved, the black cloud follows them wherever they go and is difficult to shake. Cultural adjustments are occurring but need to be fast-tracked. We shouldn't have to acquire scars to prevent us repeating mistakes or even making them in the first place. Safety is fundamental to healthcare but if our current process of investigation triggers burnout symptoms with associated increased errors, then this process doesn't work. Positive practice examples are required to shape the way we should evolve this process. Human factors training including situational awareness should not only focus on mitigating against mistakes but equip the workforce with a skillset to avoid becoming the second victim.

Organisational wellbeing

Individual hospitals were found to have different levels of stress in their doctors', suggesting organisational culture plays a role (Firth-Cozens 2020). Interventions consisting of changes in working conditions, organising support, changing care, increasing communication skills and changing work schedules were grouped together as organisational interventions for the 2014 Cochrane review (Ruotsalainen 2014). Changing work schedules was the only one of these interventions to reduce stress, demonstrated in two trials involving 180 participants (SMD - 0.55, 95%CI -0.84 to -0.25). Other organisational interventions were not found to significantly affect stress. The review concluded that organisational interventions needed to be better focussed on addressing specific factors that cause stress.

Systematic error

The organisational climate consists of various factors that can affect burnout rates. For example, negative leadership behaviours, less inter-professional collaboration, limited opportunity for advancement and lack of social support all increase burnout rates (Shanafelt 2015). Engagement with teams through seeking input, keeping them informed, mentoring and recognising contributions all improve career satisfaction and reduce burnout. Handing over some of the control over the workplace issues to teams also leads to more satisfied and less stressed employees (Williams 2002).

The grass isn't always greener

Another issue to consider is the attrition of the paediatric workforce. Leaving is not a decision to be taken lightly; whether it's to switch to a different specialty or leave medicine entirely, we need to be able to support those toying with the idea. Many will have pondered the thought for long periods and have considered every eventuality. For some, the realisation that their earlier life decisions weren't the right ones for them will continue to fester until they take the plunge. Leaving will certainly be the right thing for some individuals and supporting them through that difficult transition period is a shared responsibility.

Choosing to work less than full time (LTFT)

The RCPCH was an early adopter of the Royal College of Emergency Medicine (RCEM) pilot from Spring 2017 whereby any trainee could choose to work LTFT (Clancy 2018). In this scheme 17 EM trainees elected to go down to 80% full time equivalent and it was found to be very popular with a reported improved work life balance. The particpants reported they were less likely to leave the specialty than if they had not taken part in the pilot. However, there was a 6% attrition in the cohort compared to a general attrition rate of 1.6-2.8% per year in those not partaking in the scheme. This was not statistically significant due to the small numbers but will need to be considered in further analyses. The individual impact of going LTFT was extremely positive but one of the biggest grievances about paediatrics in the survey was rota gaps. Facilitating paediatricians currently working full time to work LTFT would inevitably worsen rota gaps in the short-term and may make this proposition challenging to financially justify. This must be assessed in a balanced way considering measures such as potential longer-term reductions in burnout and attrition which are intrinsically linked with rota gaps and quality of care.

Choosing to retire

Studies have shown that being able to choose when you retire is associated with greater feelings of wellbeing in the general population (Arie 2017). This evidence helps inform the Department for Work and Pensions and despite this, the NHS pension age continues to creep up further making the financial penalty for earlier retirement negate this effect. Trying to balance the negative impact of prematurely shrinking the workforce versus attracting more into the NHS by providing more personal choice is tricky. A flexible approach is required to harness the skills and expertise of experienced clinicians to nurture younger colleagues in an attractive working pattern.

Tech aware

Whilst most would welcome new technological advances, it's worth acknowledging the frustrations we all experience with IT "solutions". New developments need to be tried, tested and ideally clinician co-designed before widespread implementation. For example, using

computerised communication systems have been shown to increase physician burnout by 29% (Shanafelt 2016).

Taking pride in what you do

When US President John F Kennedy first visited the NASA space centre, he asked what the janitor did for NASA. The janitor responded, "I'm helping put a man on the moon". The sense of impostor syndrome and feeling insignificant to the bigger picture is common in paediatrics. Klaber et al highlights the need to shift from a money-focus to kindness (Klaber 2019). Evidence already exists that kindness is beneficial to health outcomes but there isn't a validated kindness measure and tangible improvements can be more challenging to prove. Re-consideration of what outcomes are most important is necessary with concurrent development of an appropriately validated kindness measure to enable a robust evidence-base to be established.

'Performance protection' strategies are adopted to maintain the high priority clinical tasks when feeling burnt out. This may lead to neglect of secondary tasks such as reassuring patients or providing sufficient safety netting - with knock-on effects to the ongoing patient pathway (Montgomery 2019).

Money matters

Within the NHS, the financial implications of burnout and wellbeing on individuals should be less than in private healthcare systems. However, it has to be acknowledged that many members have expressed concerns about the sustainability of the NHS to 2040 and beyond. Should any new systems develop, the impact of different payment models will need to be addressed. Incentive or performance-based systems lead to significantly higher burnout rates than those on set salaries (Shanafelt 2009, Shanafelt 2014). Given those involved in academia have higher burnout rates, it may be the competitive element that is the driving factor (Drybye 2013).

Virtual improvements

The fast-tracking of virtual platforms for meetings, conferences, etc. due to COVID-19 has been widely well received. Pre-existing networks have been able to maintain connections, enabling sharing of policies, protocols and new clinical pathways seamlessly (when permitted by internet connection speeds). Being able to log-in and attend from home also creates the flexibility not previously present and saves on efficiency. Virtual conferences have had mixed successes. The social networking benefits of face-to-face conferences and audience interaction have been missed. However, there are significant advantages in terms of international reach, cost-saving and environmental considerations (RCPCH 2020).

The **#**FOMO (fear of missing out) component has diminished. That teaching session you really wanted to go to that's been scheduled during your annual leave can now be recorded on various platforms and watched at your convenience. By 2040, there's potential for collaborative cross-working across the UK and even globally to build a community of practice. However, caution needs to be taken not to expect greater participation given many of the physical barriers to attending events have been removed. The wellbeing impact of being "always available" needs to be considered, and the need for down-time respected.

Remaining connected has huge benefits for those utilising these resources, however caution will be required to ensure those less tech-savvy don't become excluded. With the economic

impact of COVID-19 likely to last decades, there is a potential for social gradients within paediatric teams to widen. Incorporating technology into our future working lives will need to be done in a way that is just, equitable and does not widen this gap further and contribute to a wellbeing bias towards affluence.

Whilst technology is evolving and will be the mainstay of our working lives in 2040, there will be a growing trend to find ways to escape it. Simple pleasures such as singing, gardening, baking, walking and reading are re-gaining popularity. Realistically, screen time will form the majority of our working time. After a day at work, our phone may be telling us our screen time is down by 20% but won't account for the digital world we'll be working in.

Rota issues

Amongst trainees, the timing of rotas being disseminated has been a source of upset and damage to morale for some time. Paediatrics has a high proportion of less than full time (LTFT) trainees, many of whom have childcare responsibilities or additional health needs, and this can create an additional layer of stress, despite BMA rota guidance being issued. Planning of childcare, for example, can be extremely anxiety-inducing for paediatric trainees, let alone the impact on morale from not being able to commit to significant personal events. Stories of trainees struggling to attend their own wedding or not being able to go on honeymoon are all too common. Workforce planning with a fluid workforce number is extremely challenging but novel methods are required to ensure trainees are not infantilised. Moving away from service provision to training models should facilitate greater flexibility providing sufficient service is covered by other means.

Rota gaps and wellbeing are intricately linked. A District General Hospital (DCH) in the East of England, managed to secure funding for an additional registrar during the winter period (Kirk 2020). The registrar managed this winter pressure rota as part of a management and leadership QI project. Impressively, 96% of the 182 overnight shifts were booked and resulted in their children's emergency department not going over their breach targets from October to March. Informally, staff felt the department was safer and morale improved. Incredible work by an individual trainee and short-term additional funding highlights the potential for systematic changes. Relying on rotational trainees to run rotas is not sustainable and detailed workforce planning with the potential for annualised rotas needs to be considered to ensure the improvements can become ingrained. Feedback consistently highlight that the enforced leadership role allocated to trainees of organising junior doctor rotas is a negative experience. Whilst this project highlights what is possible and the benefits, it should identify the need for managers to ensure sufficient staffing to cope with winter pressures rather than further assign managerial roles to trainees.

Sharing is Caring

Effective, high quality projects and initiatives now spread wider and faster than experienced by previous generations. With networks, a multitude of conferences and presentation platforms and the explosion of social media, successful projects can be shared seamlessly (and reproduced shamelessly). The Trainee Wellbeing Interest Group (TWIG) developed in the West Midlands conducted a survey based on the "8 high impact actions to improve the working environment for junior doctors" report by NHS improvement. Rather than just focusing on where the problems lie, this trainee group formulated recommendations and actions demonstrated in Figure 6 (Aguirre 2020).

	Emerging Themes	Recommendations and Actions
1. Tackling Work Pressures Pressure Team and structure Volume of Tasks Pressure Working Environment	 Heavy workload, regular tasks that could be done by non- medical practitioners and documentation duplication. 	 QI projects to streamline processes e.g. finding procedure consumables. Encouraging upskilling of non- medical professionals.
2. Rest Breaks and Safe Travel Home	 Excessive workload, rota gaps and poor/no rest facilities. 	 Sleep advice as part of all trusts' induction programmes. Changes to travel home arrangements due with 2019 Junior Doctor Contract changes.
3. Access to food and drink	 Difficult access to catering facilities (time/location) and drink restrictions in some clinical areas. 	 Encouraging water fountains/drink stations and promoting a take-your-breaks culture.
4 &5. Engagement between trust board, managers and trainees	 Few opportunities to network or attend meetings due to short rotations and busy rotas. 	 Encouraging trainees to participate in paired learning, shadowing schemes and on- the-job leadership training
6. Rotas promoting work life balance	 Rota gaps, lack of flexibility and trainees working beyond rostered hours; reluctance to exception report as concern about negative senior responses. 	 Promote culture of trainee involvement in rota design and exception reporting.
7. Promoting excellence Reporting Portfolio Verbal	 Trainees greatly value acknowledgement and gratitude for their hard work. 	 Continue promoting a positive culture, including more work- based assessment opportunities, excellence reporting and trust awards.
8. Wellbeing, support and mentoring	 Varied amount and knowledge of local and regional support 	 Designated wellbeing reps, signposting and wellbeing sessions

Figure 6. Eight high impact actions to improve the working environment for junior doctors' themes and recommendations. Reproduced with permission from West Midlands Trainee Wellbeing Interest Group (TWIG)

Training satisfaction - what's the problem?

Siu Fan et al. highlighted the results from the 2019 GMC national training survey (Siu Fan 2020). The overall satisfaction rate for paediatric trainees of 81.7% exceeded rates for core medical (73.22%) and core surgical training (74.59%). We need to overcome the temptation to be complacent about this and the authors went on to highlight the significantly lower scoring indicators; work load (47.08%), rota design (54.69%) and study leave (61%). Targeting these specific unsatisfactory areas would improve retention, recruitment and perpetuate a more satisfying, fruitful working environment.

Appraisal and revalidation

You'd be forgiven for assuming that the appraisal and revalisation processes themselves have been thoroughly appraised and validated with a strong evidence-base demonstrating their benefit. However, there is very little support behind the GMC statement that "revalidation gives your patients confidence that you're up to date" which is concerning for a process that costs £1 billion over 10 years in England alone (Brown 2020). Further studies and innovation are required to optimise this process and ensure that it is no longer viewed as a tick-box activity but one that not just maintains clinicians but supports, improves and enriches them. Ingraining wellbeing aspects into the appraisal process has the potential to act as a surrogate early warning system for those at risk of burnout and intervene early.

Learning from excellence - Achieving Clinical Excellence (ACE) initiatives

The move toward a Safety-II approach to patient safety has made a refreshing change and been utilised and expanded by various different groups and networks. There is a refocus on making sure "as many things as possible go right" compared to the traditional Safety-I approach whereby "as few things as possible go wrong". A trainee-led initiative at West Middlesex Hospital swapped the morbidity and mortality meeting for Achieving Clinical Excellence (ACE) meetings (Brent 2020). They augmented the learning from these meetings with an e-newsletter containing additional educational content. Culture changes are required to move systemically toward appreciative enquiry and away from the blame game. This project demonstrated that new methods are well received and can be trainee-led.

Learning from excellence initiatives have spread rapidly since pioneers like Dr Adrian Plunkett started the movement a few years back (Kelly 2016). Recognising hard work of team members in healthcare improves morale which in turn improves patient safety and can be implemented into even the most busy of environments (McKinnon 2019). Baverstock et al. suggests that appreciation needs to be genuine, succinct and concrete and encouragement is the key to success (Baverstock 2020). The Favourable Event Reporting (FERF) system, 'wow' boards, having a star of the week, employee of the month or shout-out for tasks done well are all examples of learning from excellence initiatives (Baverstock 2020). Key themes from "Greatix reporting" included supporting, keeping calm, showing compassion and being positive; all factors that contribute to our wellbeing.

Looking back to move forward

The complexity of some paediatric patients coupled with the ethical dilemmas and potential family conflicts was recognised to be negatively impacting on staff wellbeing at the Evelina Children's Hospital, London. A SuPPORT (Supporting Paediatric staff, Patients and families to be One Resilient Team) debrief pathway was introduced including immediate post-event huddle, 48 hours post-event follow-up and psychology-facilitated debrief one to three weeks later (Macaulay 2020). The feedback was hugely positive but the feasibility of creating a 0.3 working time equivalent (WTE) staff support psychologist outside of large tertiary units may limit transferability.

Reflection is central to paediatric practice but commonly only occurs as a compulsory component of appraisals. Whilst the primary goal of reflection is to critique and learn in order to optimise patient care, it's important to identify cases to reflect upon where things have gone well. Reflective writing helps avoid stress and poor job satisfaction and reduces burnout (Harding 2016). Focussing on the feelings invoked by significant events rather than the finer

details is a good tactic to avoid endlessly dwelling on flaws. Most importantly, an action plan is required either to re-inforce good practice or facilitate positive changes. Reflecting shouldn't be opening a can of worms or re-opening old wounds; it's a chance to learn and then start afresh knowing that what you learnt has made you better.

Career preparation

The Northern Ireland inaugural careers day arranged for those already within paediatric training was a huge success, being described as "the best thing we have done in years" (Molloy 2020). Investing time and interest in current trainees is fundamental to the future of paediatrics. Benefits reported from the day are likely multi-factorial; there is no doubt that learning about potential career options is insightful but the authors acknowledge a morale boost simply by "taking a step back from workload". Learning from initiatives like this and other specialty training programmes where non-clinical time is invested to develop trainees more holistically and prepare them for their future careers is money well spent.

Inspiring the future

Medical student paediatric placements are an opportunity to inspire and recruit future paediatricians. The experience during a few weeks can attract or put people off paediatrics and investing the time and effort into making the placement inspirational and educational is extremely important. A team at Sheffield took things one step further and found that scores for paediatric placements worsened as the commute distance increased (Bhangu 2020). Geographical considerations may improve both recruitment of medical students but also retainment of current trainees if regional adaptations can be made to minimise commuting without impacting on training opportunities.

Return to training

Health Education England (HEE) have introduced a Supported Return To Training (SuppoRTT) to help the transition of trainees back into clinical work after time out of programme. Pre and post-implementation surveys conducted in the North West region found that 73% of trainees and 63% of supervisors thought the policy improved trainee wellbeing (Wade 2020). The majority of trainees (77%) also felt the policy improved patient safety but supervisors were less convinced with only 50% agreeing. Interestingly, only 40% of trainees and 37% of supervisors felt the scheme improved trainee development. Whilst the beneficial aspects highlighted in the survey should be commended, there are also aspects of supporting professionals returning to clinical practice that could be further optimised.

Assessing supervised learning events

A big cultural change has been the switch from mandatary workplace-based assessments (WPBAs) to quality focussed supervised learning events (SLEs). A focus on quality more than quantity has been generally well received but there remains a generational lag between this fully being integrated into routine practice and training. A team from Croydon built on their findings that >70% of trainees reported praise contributed to overall job satisfaction and aimed to improve >50% of their trainees feeling unsupported in gaining SLE's (Dastur Mackenzie 2020). Using reward charts to motivate trainees and supervisors to complete SLE's resulted in more SLE's, a sense of being better supported and increased job satisfaction. The transparency of having a skills chart for all trainees allowed more equitable training to ensure all trainees experience similar opportunities.

Let's talk about Balint groups

The Balint method developed by Enid and Michael Balint supports clinicians in exploring complex interactions with patients utilising a structured facilitated discussion exploring thoughts and feelings. Schindler et al. describes the simple format consisting of five stages (Schindler 2018):

- 1. The doctor gives a factual description of a clinical case.
- 2. The group asks the doctor questions to ascertain a clear picture of the facts.
- 3. The doctor steps back and doesn't participate until the end.
- 4. The group share how they might have felt, challenge each other, explore ideas and share relevant anecdotes.
- 5. The doctor is invited to return and comment on discussions.

Colthorpe et al. found that 96% of the paediatric multi-disciplinary team (n=28) found Balint sessions useful or very useful with average stress scores reducing from 56% to 30% and fatigue reducing from 70% to 34% (Colthorpe 2019). Balint groups are most effective in an environment with high psychological safety with a skilled facilitator and despite their proven benefit, will require working pattern re-configuration in order to allow protected time and space without the distraction of clinical tasks.

Teaching and learning

Wales have demonstrated how novel methods of teaching can improve accessibility and learning through innovation (Harris 2020). The team responsible for DragonBytes, a group of paediatricians with a specialist interest in medical education from Wales, built on feedback from trainees who hadn't engaged in previous face-to-face teaching MRCPCH written exam teaching sessions and went digital. By recording sessions, making them accessible online alongside developing a trainee peer-support network and mentorship scheme, many of the initial barriers were overcome. DragonBytes is now a well-established podcast series and part of the growing paediatric free online access to medical education (FOAMed) movement. Making learning opportunities freely accessible allows them to be fitted in around other commitments rather than vice versa. The team-building and social aspects of regional peergroup training days needs to be balanced.

Happy meter!

Various methods have been utilised to try and capture in real-time the general mood of a workforce. Daniels et al. recently developed MOODSEY to assess whether staff were having a "good day" or "bad day" at North Middlesex University Hospital NHS Trust (Daniels 2020). Thematic analysis was in keeping with current literature: "good days" were associated with good teamwork, supportive seniors and good atmosphere; "bad days" were linked to poor staffing, incivility and unsupportive seniors. The 'Happy app' utilised in Bristol allows real-time monitoring of staff morale and flags issues to managers. The resultant positive culture change was commended by the CQC document, "Driving Improvement; Case studies from eight NHS trusts" (CQC 2017). Success of these monitors hinges on what is triggered. There is no point knowing your staff are constantly having a bad day unless it leads to changes or improvements. Many of the issues flagged up are not novel and require whole-system changes to avoid the inexorable recurrence. An appropriately validated tool for measuring mood and wellbeing in our population would allow us to quantitatively assess wellbeing and measure the effectiveness of interventions.

Positivity breeds positivity

A multi-disciplinary lunchtime event at the Royal Free Hospital focussing on positivity in paediatrics was found to be enjoyable by all attendees and 72% strongly agreed that the session was useful (Mooncey 2020). Building on successful projects like this and spreading seamlessly is necessitated to have a wider effect. Baverstock et al. have introduced a FriYAY event whereby every Friday lunchtime the paediatric team in Taunton gather to share lunch, cake, laughter and weekend plans serving as an "oasis of down time at the end of a busy week" (Baverstock 2020).

Lessons Learnt; More to Learn

The GMC national training survey periodically highlights outliers for trainee satisfaction and focus still remains on addressing those behind the curve. The team at Kingston Hospital showed that by using QI methodology, rapid changes can be made to address deficiencies, and they significantly improved in all areas from 2018 to 2019 (Zhu 2020). The learning from excellence movement encourages us to look at those outliers ahead of the curve. Addressing deficiencies is much simpler if you know what already works well. Transparent benchmarking and showcasing of exemplars is important to move the whole curve along.

External factors

We all know that watching the news hasn't been a cheery, joy inspiring event for some time now. A study of interns in United States medical centres unsurprisingly found that macrolevel factors correlated with the mood of young doctors (Frank 2019). Mitigating against the effect on our mood continues to present a significant challenge. Separating politics from healthcare may provide a partial solution but the widespread, constant access to media is unliklely to lessen.

Wellbeing/wobble rooms

Specific spaces for staff to relax and unwind during the first phase of COVID-19 were introduced and anecdotally well received in those centres with widespread praise on social media. It's important to ensure that the impact of these are measured appropriately to facilitate spread and sustainability.

Getting Help

The first Practitioner Health mental health service for NHS physicians was established by Clare Gerada et al. in October 2019 (Gerada 2019). This unique service followed on from the success of the NHS Practitioner Health Programme and General Practitioner Health Programme. Available to all doctors within England for free, self-referrals regarding mental health issues, this will hopefully extend to the four nations and wider paediatric workforce.

Bullying and Harrassment

NHS Improvement are developing a toolkit on civility and respect for all employers, to support them in creating a positive workplace culture. One would hope that this would be common sense and not necessary but unfortunately, incivility remains prevalent in the NHS and any support and guidance to eliminate it should be welcomed. Riskin et al. studied the impact of rudeness in a simulated scenario of managing a preterm infant who acutely deteriorated due to necrotising enterocolitis (Riskin 2015). Teams were randomly assigned to be exposed to rude statements unrelated to the teams' performance or neutral comments by an actor playing the role of a foreign expert on team reflexivity in medicine. Blinded assessment by three judges found diagnostic and procedural performance scores were significantly lower for teams exposed to rudeness. Katz et al. found similar findings that incivility hindered performance of anaesthetic trainees in simulated scenarios (Katz 2019).

Importantly, this study identified that whilst the objective performance measures were significantly different, there was no difference in self-reported performance using a Likert scale. This suggests that rudeness sub-consciously impairs performance without self awareness highlighting the need for systematic changes rather than individual adaptations or coping mechanisms.

Jacob et al. used focus groups to identify four professional scenarios where rudeness and incivility are more likely to happen in paediatrics: handover, educational supervision and feedback, language and communication, equality and diversity (Jacob 2020). A number of suggestions to tackle the problem were suggested. For example, developing some ground rules for the handover process, giving potentially challenging feedback privately and in person, adopting a professional approach to using social media and asking individuals about themselves, what adjustments they require and how they refer to themselves.

Compassionate leadership and psychological safety

Compassionate leadership is required to ensure people feel safe and connected as demonstrated by Google's Project Aristotle (Rozovsky 2015). Psychological safety, taking risks without feeling insecure or embarrassed, was overwhelmingly the most important team dynamic for a successful Google team. Edmondson describes an overlap of high psychological safety and high standards as the "learning and high performance zone" (Baverstock 2019). Teams reporting higher levels of psychological safety were found to be more likely to admit mistakes, less likely to leave, more likely to harness the power of diverse idease and ultimately, be more successful. Adopted new norms, such as starting each team meeting by sharing a risk taken in the previous week improved psychological safety ratings by 6%. Whilst, we wouldn't advocate increasing risk within paediatrics, it's not difficult to see how sharing of clinical conundrums, ethical dilemmas or safeguarding grey areas may have similar effects. Even simple small acts of kindness like a hand to hold or cup of tea when vulnerable can mean so much (Baverstock 2020).

Fitting in

Analysing workplaces where workers 'fit' has led to a framework for identifying possible systemic areas for improving the working environment. In the work-life model, six areas in which the job-person match is critical have been specified: workload, critical, reward, community, fairness and values (Leiter 2003). The greater the mismatch, the higher the chance of burnout.

Other evidence-based organisational strategies:

- Restrictions on trainee duty hours (align with excessive workload as a significant driver to burnout)
- Locally developed practice change to promote efficiency and satisfaction
- Institutional support and advocacy for peer support and community
- Careful attention to how well stated and lived values align with an organisation

Limitations to wellbeing initiatives/research

There is a growing body of evidence supporting many wellbeing intiatives - yet in spite of this, burnout is getting worse. There is, therefore, a thirst for interventions to be fast-tracked and for the lag from evidence to implementation to be dramatically shortened. However, for effective evidence-based interventions, studies need to be robust and incoportate long term follow-up and goals. Many studies purporting to improve wellbeing do so using a single intervention and a narrow focus. Doing this fails to recognise the complexity of the issue and is unlikely to provide a sustainable, measurable change.

A combined approach, considering both structural and organisational factors using a wellthought-out methodology is key. This may be achieved through formal research, such as randomised controlled trials, or well defined quality improvement methodology. The important factor is that the evaluation must be carried out in a rigorous way, avoiding shortcuts. One size does not fit all, and transparent scrutiny will be essential for assessing the applicability and transferability of findings to individuals, institutions or wider populations and whether they transcend training level and professional disciplines.

A Cochrane review looked at studies preventing occupational stress in healthcare workers with various interventions (Ruotsalainen 2014). These included:

- Cognitive behavioural therapy (CBT) techniques
- Mental relaxation techniques (including mindfulness and physical relaxation)
- Organisational interventions (including schedule changes and mentoring)

Overall, there was low quality evidence due to a number of factors. Blinding is difficult with the majority of studies introducing potential bias. Other issues included incomplete outcome data, selective reporting, poor compliance with interventions, and single intervention focus. When stress and burnout are multi-factorial in origin, single interventions are unlikely to tackle all aspects. In orthopaedic surgeons the factors contributing most significantly to stress were felt to be interpersonal relationships and responsibilities, sense of subjectivity around many decisions, and pressures of quality patient care (Ames 2017). It is unclear to what extent these findings can be transferred to paediatricians.

The majority of studies looking at wellbeing initiatives have been small. Less than half of the 58 studies included in the 2014 Cochrane review contained over 60 participants; for sufficient power the sample size would need at least 110 participants (Ruotsalainen 2014). The smaller the trial, the more difficult it is to elucidate subtle but potentially significant changes that may benefit wellbeing (Turner 2013).

The heterogeneity of wellbeing studies makes it challenging to draw conclusions. Even within paediatric specific studies, there remains significant variation which limits transferability. Paediatrics is also rich in its multi-disciplinary approach but each professional group has its unique pressures and challenges that may again limit reproducible changes when looking specifically at interventions for clinicians. Only 24% of the studies included in the Cochrane review included doctors (Ruotsalainen 2014). A reporting framework for wellbeing studies amongst doctors, or more specifically paediatricians, may improve the quality of evidence for future wellbeing intervention research.

The future...

To make paediatrics sustainable, physical, mental and psychological sustenance is essential. The child health engine can't run on empty and exploring all the innovative projects happening across the UK confirms that there are indeed different strokes for different folks. Defining individual wellbeing is a challenge and creating it is not a recipe that requires the same ingredients to make for all individuals. However, it is clear from the literature that there are certainly overlapping, fundamental principles which are required for people to not just survive but thrive.

COVID-19 has brought along significant challenges. The personal loss, bereavements and impacts will never and should never be forgotten. However, the re-ignition of respect for healthcare workers and intrinsic recognition by all medical bodies and groups that wellbeing is essential is a positive. We need to channel this momentum to ensure that it's not just a tokenistic tag-on to our working lives but ingrained into any and every plan moving forward. A thriving paediatric workforce will deliver the best care possible to the children and young people we serve.

Building on existing recommendations

It seems all the big governing and executive medical bodies within the UK are on the same page. Recent documents such as the NHS People Plan (We are the NHS 2020), the GMC's "Caring for doctors, caring for patients" (GMC 2019) and the King's fund report, "The courage of compassion" (The King's Fund 2020) unite in supporting the workforce. These words act as reassurance and plant the seed of hope in us, but this must be translated into action. Impacts of new policies and procedures need to consider the impact on morale and wellbeing. For example, the "Paediatricians of the future" document from the RCPCH include morale and job satisfaction as one of their 10 principles to delivering good training followed by practical suggestions/case studies on how this can be achieved (RCPCH 2020).

The NHS People Plan makes a number of recommendations for employers (We are the NHS 2020):

- Wellbeing Guardian in every organisation
- Support in getting to work (including cycle-to-work schemes)
- Rest and recuperation safe spaces for staff
- Psychological support and treatment
- Support staff through sickness
- Physically healthy work environments
- Support to switch off from work
- Personalised health and wellbeing annual plan for all staff
- Health and wellbeing induction for all new starters

The GMC commissioned a report, "Caring for doctors, caring for patients" which called for six urgent steps needed to address wellbeing broken down into an "ABC" approach (GMC 2019):

Autonomy (and control):

Voice, influence and fairness

• Introduction of mechanisms for doctors in primary and secondary care to influence the culture of their healthcare organisations and decisions about how medicine is delivered.

Work conditions

• Introduction of UK-wide minimum standards for basic facilities in healthcare.

Work schedule and rotas

• Introduction of UK-wide standards for the development and maintenance of work schedules and rotas based on realistic forecasting that supports safe shift swapping, enables breaks, takes account of fatigue and involves doctors with knowledge of the specialty to consider the demands that will be placed upon them.

Belonging:

Team working

• Development and support of effective multi-disciplinary team working across the healthcare service.

Culture and leadership

• Implementation of a program to ensure healthcare environments have nurturing cultures enabling high-quality, continually improving and compassionate patient care and staff wellbeing.

Competence:

Workload

• To tackle the fundamental problems of excessive work demands in medicine that exceed the capacity of doctors to deliver high-quality care.

The King's Fund report, "The courage of compassion" outlines eight key recommendations in another 'ABC' variant approach to meet the three core work needs they identified as being essential to wellbeing at work: autonomy, belonging and contribution (The King's Fund 2020). Whilst this was targeted at midwives and nurses, there is no doubt that there is significant overlap and the systemic overhaul to evoke improved wellbeing in health-care professionals needs to be NHS-wide. It is essential to not create disparity between departments/ specialities/ professional groups whilst making specific adaptations to facilitate effective transferability.

Our fundamental principles for the future

Organisational wellbeing needs to be a recognised quality marker to ensure that aspirational thoughts manifest into practice. Free validated tools are available and have been shown to prompt reflection and facilitate action to prevent burnout (Shanafelt 2014).

It has been previously highlighted that further work is needed to rigorously assess the quality of wellbeing interventions and to ensure that their application is carried out in consideration of the complex interplaying factors to maximise success, sustainability and transferability. For many aspects, one size will not fit all and the potential ideas are endless. However, there are some fundamental principles that are essential to ensure universal wellbeing that neatly fit within the mnemonic, **PAEDIATRICS**:

Physical health Autonomy Equality Diversity Inclusivity Adaptability/flexibility Team (sense of belonging) Rest Individualised Culture (open) Safety (psychological, physical and work)

We'd encourage all paediatric teams to use this mnemonic to support their reflective practice. Practical frameworks targeted at the individual (Figure 7), employer/trust (Figure 8) and national/societal (Figure 9) have been developed.

Physical health and rest	 Recognise own personal traits, risk factors for burnout and limitations and mitigate against these where possible Healthy eating Exercise regularly Sufficient good quality sleep Take breaks and annual leave
Autonomy and team (sense of belonging)	 Communicate with team Highlight personal skillset Highlight personal learning needs Ensure sufficient time in job plan for effective supervision Lead by example and be the change you want to see Be kind to everyone
Equality, diversity and inclusivity	 Treat others with respect and dignity Challenge any unacceptable actions/behaviour Support and encourage under-represented groups to apply for leadership roles Engage with occupational health. Flag any disabilities that require workplace adaptations
Adaptability/ flexibility and individualised	 Personalised job plan Consider personal circumstance and geography when applying for jobs Communicate clearly with employer/school board any specific requests/requirements Use keeping in touch days and engage with SuppoRTT courses when returning to practice
Culture (open) and safety	 Exception report Report both negative and positive events Voice concerns as they arise Ask for help when needed Engage with occupational health if required

Individual framework

Figure 7. Indiviuda	l framework for	improving	wellbeing
---------------------	-----------------	-----------	-----------

Employer/Trust framework

Physical health and rest	 Provide rest and recuperation facilities. Provide healthy food options 24 hours a day Wellbeing guardian in every organisation Support in getting to work (including cycle-to-work schemes) Psychological support and treatment
	 Support staff through sickness (including maladaptive coping) Provide physically health work environments
	 Support staff to switch off from work
	Personalised health and wellbeing annual plan
	Health and wellbeing induction for all new starters
	Access to a range of wellbeing resources/facilities
Autonomy and team (sense of belonging)	 Introduction of mechanisms for doctors to influence the culture of their organisations and decisions about how medicine is delivered Monitor team health and zero tolerance of bullying Be kind to everyone
Equality, diversity and inclusivity	 Treat everyone with respect and dignity Zero tolerance of any unacceptable actions/behaviour Ensure leadership roles have equal representation Make workplace adaptations to facilitate those with disabilities
Adaptability/	Personalised job plan
individualised	 Personalised health and wellbeing annual plan Consider flexible working patterns (including annualised rotas)
Culture (open) and safety	 Guardian of safe working in every trust Exception report monitoring and appropriate action taking Prompt, sensitive handling of serious incidents Process for learning from excellence with widespread dissemination Confidential, accessible occupational health

Figure 8. Employer/trust framework for impr

National/Societal framework

Physical health and rest	 Introduction of UK-wide minimum standards for basic rest facilities in healthcare settings Ensure any new working patterns have sufficient rest time incorporated National support network for doctors in crisis or needing help Annual review process guidelines to include health and wellbeing
Autonomy and team (sense of belonging)	 Development and support of effective multi-disciplinary team working across the healthcare service Engagement and transparent communication between RCPCH and members Zero tolerance of bullying Be kind to everyone
Equality, diversity and inclusivity	 Ensure leadership roles have equal representation Ensure that national processes and policies do not discriminate against any individual group Mandate that physical adaptations to workplaces are made when necessitated due to disabilities
Adaptability/ flexibility and individualised	 Introduction of UK-wide standards for the development and maintenance of work schedules and rotas based on realistic forecasting that involves doctors with knowledge of the specialty to consider the demands that will be placed upon them Clear expectations for job roles as trainees at different training levels, staff grades/associate specialists and consultants
Culture (open) and safety	 Implementation of a program to ensure healthcare environments have nurturing cultures enabling high quality, continually improving and compassionate patient care and staff wellbeing To tackle the fundamental problems of excessive work demands in medicine that exceeds capacity of doctors to deliver high-quality care Standardised, supportive, sensitive process for serious incident investigations Widespread dissemination of areas of excellence and how to reproduce

Figure 9. National/scoletal framework for improving wellbeing

How will we know we've improved?

Suggesting changes and interventions is all well and good but in order to know whether the changes result in improvement, careful thought needs to be given to outcome measurements. What we measure matters. Direct wellbeing measurements using validated scoring will help but, with productivity directly related to wellbeing and inversely to burnout, wider outcome measurements need to be utilised.

More efficient healthcare does not equate to better healthcare, so using patient throughput, admission numbers or even mortality rates may not be the best outcome measurement. With more focus on population health and making every contact count, time needs to be allocated to deliver the best, most holisitic care to those who need it. To take pride in the work we do and earn the sense of accomplishment you get when you know you've positively impacted on families, we need to acknowledge this takes time. Investing time doesn't just optimise the chance of longer lasting health for the family but will make our work more patient-focussed and fulfilling, augmenting our wellbeing.

Assigning causality is inherently challenging. Measuring data using multiple consecutive and ongoing measurements are needed and dependent variables included with regression analysis of more formal studies. Interestingly, Dewa et al postulated that there may be an element of publication bias exaggerating the negative association between burnout and productivity outcomes if insignificant findings have not reached publication (Dewa 2014). All studies on wellbeing should therefore be widely disseminated to minimise potential bias.

From 2021, the annual NHS Staff Survey will be realigned with Our People Promise allowing progress to be accurately measured (We are the NHS 2020). Departments and hospitals can utlise this alongside other potential wellbeing measures as key metrics of quality and safety of care. Individual support needs to be signposted to and maintained but we also need to stop putting the canaries in the mine in the first place.

We've attempted to lay out the big picture here and the breadth of information can easily overwhelm. There will, however, be parts of the picture that we can all chip away at. The wellbeing movement is here to stay - it's good for us and it's good for patients. Starting small can grow into big changes, and there's too much at stake not to start now.

Attitudes to wellbeing initiatives need more research. One size might not fit all but what are the barriers to those who don't engage? Are they the group more or less likely to burnout? How do we ensure that what's offered does not create inequality? In a world where there is a widening gap between the haves and have nots, artificially introducing wellbeing fundamentals into select centres only will worsen disparity. Regulatory requirements detract away from patient care irrespective of how well-intended their design was. Introducing mandatory wellbeing training needs to be carefully considered in an already over-whelmed workforce.

Burnout directly impacts on the care we provide. In this report, we've reviewed what drives burnout, what the current members feel, what's been tried, what has worked and what we need to ensure is in place to enable paediatric care to be delivered in 2040 by a happy, healthy workforce.

Acknowledgements

There are so many incredible, innovative people that unknowingly influenced this report. People who demonstrate their passion for wellbeing and ingrain it into everyday practice and life are inspirational and aspirational.

Special thanks goes to the Paediatrics 2040 wellbeing sub-group whose honesty and ideas were invaluable throughout the process; Paula De Sousa, Eva Wooding, Sanjay Suri, Tania Haynes. The constant help, support and encouragement from Judith Van Der Voort and Alison Firth has exemplified how to coordinate and motivate people. Their championing has provided this opportunity for which I'm extremely grateful.

I'd also like to thank the Yale Global Health Leadership team for all their coaching and support as part of the International Paediatric Association (IPA) Emerging LEADers programme alongside my IPA LEAD peers who recognised my passion for wellbeing and prompted this journey.

Finally, I'd like to thank my friends, family and work family who bring me so much joy on a daily basis and augment my own personal wellbeing.

Dr Seb Gray Consultant Paediatrician Lead for Wellbeing sub-group, Paediatrics 2040 Working Lives Workstream

Bibliography

Aguirre D, Steadman S, O'Keefe M, Kenyon-Blair D, Cooper H. 8 high impact interventions – a regional survey of trainee experience. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/RCPCH-Posters-</u> <u>HII.pdf</u> (Accessed 13 August 2020)

Ahsan, SD, Khanderia N, Mirza BB, Butler M, Roueche A. Time for a KitKat? An analysis of night shift break habits in Junior Doctors at Evelina London. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/Time-for-a-KitKat-An-analysis-of-night-shift-break-habits-in-Junior-Doctors-at-Evelina-London-Final-Poster.pdf</u> (Accessed 13 August 2020)

Ames SE, Cowan JB, Kenter K, Emery S, Halsey D. Burnout in orthopaedic surgeons: a challenge for leaders, learners, and colleagues: AOA critical issues. JBJS. 2017 Jul 19;99(14):e78.

Arie S. What's the point of happiness research? BMJ. 2017; 357

Astill FL, Harris, SM, Lewis H. Evaluation of Burnout in Paediatric Staff: A Welsh Prevalence Study. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/RCPCH-Poster-Astill.pdf</u> (Accessed 13 August 2020)

Bagheri Hosseinabadi M, Ebrahimi MH, Khanjani N, Biganeh J, Mohammadi S, Abdolahfard M. The effects of amplitude and stability of circadian rhythm and occupational stress on burnout syndrome and job dissatisfaction among irregular shift working nurses. Journal of clinical nursing. 2019 May 28(9-10):1868-78.

Balch CM, Freischlag JA, Shanafelt TD. Stress and burnout among surgeons: understanding and managing the syndrome and avoiding the adverse consequences. Archives of surgery. 2009 Apr 20;144(4):371-6.

Balch CM, Oreskovich MR, Dyrbye LN, Colaiano JM, Satele DV, Sloan JA, Shanafelt TD. Personal consequences of malpractice lawsuits on American surgeons. Journal of the American College of Surgeons. 2011 Nov 1;213(5):657-67.

Baverstock AC, Finlay FO. Maintaining compassion and preventing compassion fatigue: a practical guide. Archives of Disease in Childhood - Education and Practice. 2016 Aug 1;101(4):170-4.

Baverstock A, Finlay F. Take a break: HALT–are you Hungry, Angry, Late or Tired?. Archives of Disease in Childhood - Education and Practice. 2019 Mar 16;104:195-200

Baverstock A, Finlay F. Positivity and reward. Archives of Disease in Childhood - Education and Practice. 2019 Aug 1;104(4):182.

Baverstock A, Finlay F. Thriving at work. Archives of Disease in Childhood - Education and Practice. 2019 Sep 25;0:1

Baverstock A, Finlay F. A good enough doctor. Archives of Disease in Childhood - Education and Practice. 2019 Sep 25;0:1

Baverstock A, Finlay F. Compassion. Archives of Disease in Childhood - Education and Practice. 2019 Dec 30.105:185-188

Baverstock A, Finlay F. Clinical armour. Archives of disease in childhood - Education and practice edition. 2020 Jun 1;105(3):174-176.

Baverstock A, Finlay F. Time to think. Archives of Disease in Childhood - Education and Practice. 2020 Sep 15.0:1

Benzaken T, Roe L, Talker R, Fukari-Irvine E, Williams B. Nurturing Your Inner Child: Paediatric Staff Well Being Porgramme. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/Nurturing-Your-Inner-Child-Paediatric-Staff-Well-Being-Project-2020.pdf</u> (Accessed 13 August 2020)

Bhangu K, Nutt R, Arshad F. Paediatric placements – have we gone too far? RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/Paediatric-Placements-Have-we-gone-too-far.pdf</u> (Accessed 13 August 2020)

Bianchi R, Schonfield IS, Laurent E. Burnout-depression overlap: A review. Clin Psychol Rev 2015; 36:28-41

Brazeau CM, Shanafelt T, Durning SJ et al. Distress among matriculating medical students relative to the general population. Acad Med. 2014;89:1520-5

Brent L, Tran S, Soo A, Pakkiri L. Achieving Clinical Excellence (ACE) Educational Newsletter. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/ACE-Newsletter-Poster-v-final.pdf</u> (accessed 13 August 2020)

Brooks N. The art of wellbeing. BMJ. 2019;367:16772

Brown SD, Goske MJ, Johnson CM. Beyond substance abuse: stress, burnout, and depression as causes of physician impairment and disruptive behaviour. J Am Coll Radiol. 2009;6:479-85

Brown, V.T., McCartney, M. and Heneghan, C. Appraisal and revalidation for UK doctors– time to assess the evidence. BMJ. 2020;370.

Cañadas-De la Fuente GA, Gómez-Urquiza JL, Ortega-Campos EM, Cañadas GR, Albendín-García L, De la Fuente-Solana EI. Prevalence of burnout syndrome in oncology nursing: A meta-analytic study. Psycho-oncology. 2018 May;27(5):1426-33.

Care Quality Commission (CQC). Driving Improvement - Case studies from eight NHS trusts. 2017 Jun. Available at:

https://www.cqc.org.uk/sites/default/files/20170614_drivingimprovement.pdf (Accessed 13 August 2020)

Clance PR, Imes SA. The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. Psychotherapy: Theory, Research & Practice. 1978;15(3):241

Clancy M. The Less Than Full Time (LTFT(3)) working in Emergency Medicine Pilot. Final report. Available at: <u>https://www.rcem.ac.uk/docs/Training/LTFT_pilot_FINAL_REPORT-for_website.pdf</u> (Accessed 12 November 2020)

Colthorpe A, Sakhinia F, Shackley E. Use of multidisciplinary Balint groups in paediatrics and neonates to enhance well-being. Archives of Disease in Childhood - Education and Practice. 2020 Oct 8.

Daigle S, Talbot F, French DJ. Mindfulness-based stress reduction training yields improvements in well-being and rates of perceived nursing errors among hospital nurses. Journal of advanced nursing. 2018 Oct;74(10):2427-30.

Dall'Ora, C., Griffiths, P., Ball, J., Simon, M., & Aiken, L. H. (2015). Association of 12 h shifts and nurses' job satisfaction, burnout and intention to leave: findings from a cross-sectional study of 12 European countries. BMJ open, 5(9).

Daniels R, Bhatt R, Bulmer S, Nousheh-Moore A, Jones V. MOODSEY: Developing a thematic real-time staff morale tracking model. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/RCPCH-MOODSEY-poster.pdf</u> (Accessed 13 August 2020)

Dastur Mackenzie F, Charles E. Seeing Stars - The introduction of work placed based assessment motivational reward charts: A quality improvement project. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u>

<u>content/uploads/sites/7/2020/07/Seeing-stars-RCPCH-poster.pdf</u> (Accessed 13 August 2020)

Department of Health. Patients first and foremost. The initial government response to the report of the Mid Staffordshire NHS Foundation Trust public inquiry, Cm 8576 2013 Mar. Available at:

<u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen</u> <u>t_data/file/170701/Patients_First_and_Foremost.pdf</u> (Accessed 31 December 2020)

Dewa CS, Jacobs P, Thanh NX, Loong D. An estimate of the cost of burnout on early retirement and reduction in clinical hours of practicing physicians in Canada. BMC Health Services Research. 2014 Dec 1;14(1):254.

Dewa CS, Loong D, Bonato S, Thanh NX, Jacobs P. How does burnout affect physician productivity? A systematic literature review. BMC health services research. 2014 Dec 1;14(1):325.

DiMatteo MR, Sherbourne CD, Hays RD, Ordway L, Kravitz RL, McGlynn EA, Kaplan S, Rogers WH. Physicians' characteristics influence patients' adherence to medical treatment: results from the Medical Outcomes Study. Health psychology. 1993 Mar;12(2):93.

Dyrbye LN, Shanafelt TD. Physician burnout: a potential threat to successful health care reform. JAMA. 2011 May 18;305(19):2009-10.

Drybye LN, Varkey P, Boone SL, Satele DV, Sloan JA, Shanafelt TD. Physician satisfaction and burnout at different career stages. Mayo Clinic Proc 2013;88:1358-67

Dyrbye LN, West CP, Satele D, Boone S, Tan L, Sloan J, Shanafelt TD. Burnout among US medical students, residents, and early career physicians relative to the general US population. Academic medicine. 2014 Mar 1;89(3):443-51.

Emilia I, Gómez-Urquiza JL, Cañadas GR, Albendín-García L, Ortega-Campos E, Cañadas-De la Fuente GA. Burnout and its relationship with personality factors in oncology nurses. European Journal of Oncology Nursing. 2017 Oct 1;30:91-6.

Farquhar M. Fifteen-minute consultation on problems in the healthy paediatrician: managing the effects of shift work on your health. Archives of Disease in Childhood -Education and Practice. 2016 Dec 16;102:127-132

Feldman C, Kuyken W. Compassion in the landscape of suffering. Contemporary Buddhism. 2011 May 1;12(1):143-55.

Fibuch E, Ahmed A. Physician turnover: a costly problem. Physician Leadersh J. 2015;2:22-5

Firth J, Gangwisch JE, Borisini A, Wootton RE, Mayer EA. Food and mood: how do diet and nutrition affect mental wellbeing? BMJ. 2020 Jun 29;369.

Firth-Cozens J, Greenhalgh J. Doctors' perceptions of the links between stress and lowered clinical care. Social science & medicine. 1997 Apr 1;44(7):1017-22.

Firth-Cozens J. Individual and organizational predictors of depression in general practitioners. British Journal of General Practice. 1998 Oct 1;48(435):1647-51.

Firth-Cozens J, Cording H. What matters more in patient care? Giving doctors shorter hours of work or a good night's sleep?. Qual Saf Health Care. 2004;13:165-6

Firth-Cozens J. What I learnt from studying doctors' mental health over 20 years-an essay by Jenny Firth-Cozens. BMJ. 2020 Apr 9;369.

Frank E, Nallamothu BK, Zhao Z, Sen S. Political events and mood among young physicians: a prospective cohort study. BMJ. 2019 Dec 9;367.

Gerada C, Ashworth M, Warner L, Willis J, Keen J. Mental health outcomes for doctors treated at UK Practitioner Health Service: a pilot study. Res Adv Psychiatry. 2019;6:7-14.

Gilbert P. An introduction to compassion focused therapy in cognitive behavior therapy. International Journal of Cognitive Therapy. 2010 Jun;3(2):97-112.

Grant AM, Gino F. A little thanks goes a long way: Explaining why gratitude expressions motivate prosocial behavior. Journal of personality and social psychology. 2010 Jun;98(6):946.

Haas JS, Cook EF, Puopolo AL, Burstin HR, Cleary PD, Brennan TA. Is the professional satisfaction of general internists associated with patient satisfaction?. Journal of general internal medicine. 2000 Feb 1;15(2):122-8.

Halbesleben JR, Demerouti E. The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. Work & Stress. 2005 Jul 1;19(3):208-20.

Halbesleben JR, Rathert C. Linking physician burnout and patient outcomes: exploring the dyadic relationship between physicians and patients. Health care management review. 2008 Jan 1;33(1):29-39.

Hall LH, Johnson J, Watt I, Tsipa A, O'Connor DB. Healthcare staff wellbeing, burnout, and patient safety: a systematic review. PloS one. 2016 Jul 8;11(7):e0159015.

Harding F, Charlton R. Reflective writing as an agent for change. BMJ. 2016;353:i2918

Harris S, Javaid A, Constantinou S. Using digital media to improve access to teaching. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/Using-digital-media-to-improve-access-to-teaching-</u> <u>3.pdf</u> (Accessed 13 August 2020)

Hofmann SG, Grossman P, Hinton DE. Loving-kindness and compassion meditation: Potential for psychological interventions. Clinical psychology review. 2011 Nov 1;31(7):1126-32.

Jacob H, Baverstock A, Kingdon CC. Fifteen-minute consultation: recognising and addressing rude, undermining and bullying behaviour. Archives of Disease in Childhood - Education and Practice. 2020 May 13;105:331-335

Johnson J, Weissman MM, Klerman GL. Service utilization and social morbidity associated with depressive symptoms in the community. JAMA. 1992 Mar 18;267(11):1478-83.

Katz D, Blasius K, Isaak R, Lipps J, Kushelev M, Goldberg A, Fastman J, Marsh B, DeMaria S. Exposure to incivility hinders clinical performance in a simulated operative crisis. BMJ quality & safety. 2019 Sep 1;28(9):750-7.

Kelly N, Blake S, Plunkett A. Learning from excellence in healthcare: a new approach to incident reporting. Archives of Disease in Childhood. 2016 Sep 1;101(9):788-91.

Kirk R, Chandershekar P, Jain G. Managing the Winter-Pressure Rota: Our Experience. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/Rachel-Kirk-Managing-the-winter-pressure-rota.pdf</u> (Accessed 13 August 2020)

Klaber RE, Bailey S. Kindness: an underrated currency. BMJ. 2019;367:16099

Klein J, Grosse Frie K, Blum K, von dem Knesebeck O. Burnout and perceived quality of care among German clinicians in surgery. International Journal for Quality in Health Care. 2010 Dec 1;22(6):525-30.

Kristensen TS, Borritz M, Villadsen E, Christensen KB. The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. Work & Stress. 2005 Jul 1;19(3):192-207.

Lanballe EM, Innstrand ST, Aasland OG, Falkum E. The predictive value of individual factors, work-related factors, and work-home interaction on burnout in female and male physicians; a longitudinal study. Stress Health. 2011;27:73-87

Lassale C, Batty GD, Baghdadli A, Jacka F, Sánchez-Villegas A, Kivimäki M, Akbaraly T. Healthy dietary indices and risk of depressive outcomes: a systematic review and metaanalysis of observational studies. Molecular psychiatry. 2019 Jul;24(7):965-86.

Leiter MP, Maslach C. Areas of worklife: A structured approach to organizational predictors of job burnout. Research in occupational stress and well being. 2003 Jan 1;3(1):91-134.

Lemaire JB, Ewashina D, Polachek AJ, Dixit J, Yiu V. Understanding how patients perceive physician wellness and its links to patient care: A qualitative study. PloS one. 2018 May 15;13(5):e0196888.

Letvak S, Ruhm C, Lane S. The impact of nurses' health on productivity and quality of care. JONA: The Journal of Nursing Administration. 2011 Apr 1;41(4):162-7.

Macaulay C, Conniff H. Developing a framework of staff support across a paediatric hospital: the SuPPORT programme. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/RCPCH-abstract-697-</u> <u>C-Macaulay.pdf</u> (Accessed 13 August 2020)

Maslach C, Jackson SE. The measurement of experienced burnout. Journal of organizational behavior. 1981 Apr;2(2):99-113.

Mckinnon K, Waddington A, Schofield J, Davis T. Positive feedback in the paediatric emergency department. Archives of disease in childhood. 2019 Nov 1;104(11):1120-2.

McVicar A. Scoping the common antecedents of job stress and job satisfaction for nurses (2000-2013) using the job demands-resources model of stress. Journal of nursing management. 2016 Mar;24(2):E112-36.

Mind. Resource 3 – How to promote wellbeing and tackle the causes of work-related mental health problems. 2014. Available at: <u>https://www.mind.org.uk/media-</u> <u>a/4662/resource3_howtopromotewellbeingfinal.pdf</u> (Accessed 13 August 2020) Molloy S, Skehin K, Lewis J, Christie S, Thompson A, Bourke T, Richardson J. #Choose Paediatrics: N.Ireland's inaugural career's fair. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/Choose-paediatrics-poster-RCPCH.pdf</u> (Accessed 13 August 2020)

Montgomery A, Panagopoulou E, Esmail A, Richards T, Maslach C. Burnout in healthcare: the case for organisational change. Bmj. 2019 Jul 30;366:l4774.

Mooncey M, Pervez A, Wilson E, Dilworth P, Bestwick C, Heath R, Sabale J. Project Positivity. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/Poster-Project-Positivity-Mumtaz-Mooncey.pdf</u> (Accessed 13 August 2020)

Mullen S, Bartholome B, Kearney M. Trust provided breakfast for night staff in a Children's Hospital - a well being initiative. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/Breakfast.poster.pdf</u> (Accessed 13 August 2020)

Neff KD. The development and validation of a scale to measure self-compassion. Self and identity. 2003 Jul 1;2(3):223-50.

Neff KD, Hsieh YP, Dejitterat K. Self-compassion, achievement goals, and coping with academic failure. Self and identity. 2005 Jul 1;4(3):263-87.

Office for National Statistics. Personal well-being in the UK: April 2019 to March 2020. 2020 Jul. Available at

https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/measuring nationalwellbeing/april2019tomarch2020 (Accessed September 17 2020)

Oliver D. Hydration, not appearance, matters. BMJ. 2020;368:I7088

Olson K, Kemper KJ, Mahan JD. What factors promote resilience and protect against burnout in first-year pediatric and medicine-pediatric residents?. Journal of evidence-based complementary & alternative medicine. 2015 Jul;20(3):192-8.

Oreskovitch MR, Kaups KL, Balch Cm et al. Prevalence of alcohol use disroders among American surgeons. Arch Surg. 2012; 147:168-74

Panagioti M, Panagopoulou E, Bower P, Lewith G, Kontopantelis E, Chew-Graham C, Dawson S, Van Marwijk H, Geraghty K, Esmail A. Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. JAMA internal medicine. 2017 Feb 1;177(2):195-205.

Peckham C, Grisham S. Medscape lifestyle report 2017: race and ethnicity, bias and burnout. 2017 Jan. Available at: <u>http://www.medscape.com/features/slideshow/lifestyle/2017/overview</u> (Accessed August 12, 2020)

Peters M, King J. Perfectionism in doctors. BMJ. 2012;344:e1674

Pidgeon AM, Ford L, Klaassen F. Evaluating the effectiveness of enhancing resilience in human service professionals using a retreat-based Mindfulness with Metta Training Program: a randomised control trial. Psychology, health & medicine. 2014 May 4;19(3):355-64.

Ramirez-Baena L, Ortega-Campos E, Gomez-Urquiza JL, la Fuente-Solana D, Emilia I. A multicentre study of burnout prevalence and related psychological variables in medical area hospital nurses. Journal of clinical medicine. 2019 Jan;8(1):92.

Regehr C, Glancy D, Pitts A, LeBlanc VR. Interventions to reduce the consequences of stress in physicians: a review and meta-analysis. The Journal of nervous and mental disease. 2014 May 1;202(5):353-9.

Riskin A, Erez A, Foulk TA, Kugelman A, Gover A, Shoris I, Riskin KS, Bamberger PA. The impact of rudeness on medical team performance: a randomized trial. Pediatrics. 2015 Sep 1;136(3):487-95.

Riskin A, Bamberger P, Erez A, Riskin-Guez K, Riskin Y, Sela R, Foulk T, Cooper B, Ziv A, Pessach-Gelblum L, Bamberger E. Expressions of gratitude and medical team performance. Pediatrics. 2019 Apr 1;143(4):e20182043.

Robinson F. Why I...take a lunch break. BMJ. 2020;368:m238

Royal College of Paediatrics and Child Health. Reimagining the future of paediatric care post-COVID-19 – A reflective report of rapid learning from the Paediatrics 2040 project team. 2020 Jun. Available at: <u>http://www.rcpch.ac.uk/resources/reimagining-futurepaediatric-care-post-covid-19-reflective-report-rapid-learning</u> (Accessed December 16, 2020)

Royal College of Paediatrics and Child Health. Paediatrician of the future: Delivering really good training. 2020 Oct. Available at: <u>https://www.rcpch.ac.uk/sites/default/files/2020-10/rcpch-paediatrician-of-the-future-delivering-really-good-training.pdf</u>)Accessed January 7, 2020)

Rozovsky J. The five keys to a successful Google team. 2015 Nov. Available at: <u>https://rework.withgoogle.com/blog/five-keys-to-a-successful-google-team/</u> (Accessed December 31 2020)

Ruotsalainen JH, Verbeek JH, Mariné A, Serra C. Preventing occupational stress in healthcare workers. Cochrane Database of Systematic Reviews. 2014(11).

Salisbury H. The performance of kindness. BMJ. 2019;367:16341

Salvagioni DA, Melanda FN, Mesas AE, González AD, Gabani FL, Andrade SM. Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. PloS one. 2017 Oct 4;12(10):e0185781.

Sarafis P, Rousaki E, Tsounis A, Malliarou M, Lahana L, Bamidis P, Niakas D, Papastavrou E. The impact of occupational stress on nurses' caring behaviors and their health related quality of life. BMC nursing. 2016 Dec 1;15(1):56.

Schaufeli WB, Bakker AB, Hoogduin K, Schaap C, Kladler A. On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. Psychology & health. 2001 Sep 1;16(5):565-82.

Schindler N, Pountney L. Any other word than resilience - Balint groups for paediatric trainees. 2018 Sep. Available at: <u>https://www.rcpch.ac.uk/news-events/news/any-other-word-resilience-balint-groups-paediatric-trainees</u> (Accessed December 31 2020)

Seys D, Wu AW, Gerven EV, Vleugels A, Euwema M, Panella M, Scott SD, Conway J, Sermeus W, Vanhaecht K. Health care professionals as second victims after adverse events: a systematic review. Evaluation & the health professions. 2013 Jun;36(2):135-62.

Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. Annals of internal medicine. 2002 Mar 5;136(5):358-67.

Shanafelt TD. Enhancing meaning in work: a prescription for preventing physician burnout and promoting patient-centered care. JAMA. 2009 Sep 23;302(12):1338-40.

Shanafelt TD, Balch CM, Bechamps GJ, Russell T, Dyrbye L, Satele D, Collicott P, Novotny PJ, Sloan J, Freischlag JA. Burnout and career satisfaction among American surgeons. Annals of surgery. 2009 Sep 1;250(3):463-71.

Shanafelt TD, West CP, Sloan JA, Novotny PJ, Poland GA, Menaker R, Rummans TA, Dyrbye LN. Career fit and burnout among academic faculty. Archives of Internal Medicine. 2009 May 25;169(10):990-5.

Shanafelt TD, Balch CM, Bechamps G, Russell T, Dyrbye L, Satele D, Collicott P, Novotny PJ, Sloan J, Freischlag J. Burnout and medical errors among American surgeons. Annals of surgery. 2010 Jun 1;251(6):995-1000.

Shanafelt TD, Balch CM, Dyrbye L, Bechamps G, Russell T, Satele D, Rummans T, Swartz K, Novotny PJ, Sloan J, Oreskovich MR. Special report: suicidal ideation among American surgeons. Archives of surgery. 2011 Jan 1;146(1):54-62.

Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, West CP, Sloan J, Oreskovich MR. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Archives of internal medicine. 2012 Oct 8;172(18):1377-85.

Shanafelt TD, Gradishar WJ, Kosty M et al. Burnout and career satisfaction among US oncologists. J Clin Oncol 2014;32:678-86

Shanafelt TD, Hasan O, Dyrbye LN, Sinsky C, Satele D, Sloan J, West CP. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. In Mayo clinic proceedings 2015 Dec 1 (Vol. 90, No. 12, pp. 1600-1613). Elsevier. Shanafelt TD, Kaups KL, Nelson H et al. An interactive individualized intervention to promote behavioural change to increase personal well-being in US surgeons. Ann Surg. 2014;259:82-8

Shanafelt TD, Gorringe G, Menaker R et al. Impact of organizational leadership on physician burnout and satisfaction. Mayo Clin Proc. 2015;90:432-40

Shanafelt TD, Mungo M, Schmitgen J, Storz KA, Reeves D, Hayes SN, Sloan JA, Swensen SJ, Buskirk SJ. Longitudinal study evaluating the association between physician burnout and changes in professional work effort. In Mayo Clinic Proceedings 2016 Apr 1 (Vol. 91, No. 4, pp. 422-431). Elsevier.

Sharma A, Sharp DM, Walker LG, Monson JR. Stress and burnout in colorectal and vascular surgical consultants working in the UK National Health Service. Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer. 2008 Jun;17(6):570-6.

Siu, C, Yuen SK, Cheung A. Burnout among public doctors in Hong Kong: cross-sectional survey. Hong Kong Med J. 2012 Jun;18(3):186-92.

Siu Fan K, Leung HCK, Hay Fan K, Chan J. Variations in Paediatric Training: national training surgery evaluation. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/RCPCH-GMC-NTS-Poster.pdf</u> (Accessed 13 August 2020)

Stewart L, Baverstock A, White C. Hungry angry late tired project poster. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-</u> <u>content/uploads/sites/7/2020/07/HALT-poster-v.5.pdf</u> (Accessed 13 August 2020)

Suleiman-Martos N, Gomez-Urquiza JL, Aguayo-Estremera R, Cañadas-De La Fuente GA, De La Fuente-Solana EI, Albendín-García L. The effect of mindfulness training on burnout syndrome in nursing: A systematic review and meta-analysis. Journal of Advanced Nursing. 2020 May;76(5):1124-40.

The King's Fund. The courage of compassion: Supporting nurses and midwives to deliver high-quality care. Sep 2020. Available at: <u>https://www.kingsfund.org.uk/publications/courage-compassion-supporting-nurses-</u> <u>midwives</u> (Accessed 15 October 2020)

Thomas CB, Duszynski KR. Closeness to parents and the family constellation in a prospective study of five disease states: suicide, mental illness, malignant tumor, hypertension and coronary heart disease. The Johns Hopkins Medical Journal. 1974 May;134(5):251.

Toyry S, Kalimo R, Aarimaa M, Juntunen J, Seuri M, Rasanen K. Children and work-related stress among physicians. Stress Health. 2004;20:213-21

Turner RM, Bird SM, Higgins JP. The impact of study size on meta-analyses: examination of underpowered studies in Cochrane reviews. PloS one. 2013 Mar 27;8(3):e59202.

Urquhart DS, Orme J, Suresh S. P27 Undergraduate sleep medicine teaching in UK medical schools: A questionnaire survey. Thorax. 2011 Dec 1;66(Suppl 4):A78.

Wade L, Keane M, Ogden S, Mehta F, Jobling A. Return to training policy improves trainee experience after time out of programme. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/Return-to-work-Rpt-survey-Poster-RCPCH-2020.pdf</u> (Accessed 13 August 2020)

Warraich S, Park E, O'Leary D. A survey of imposter phenomena in UK foundation year 1 doctors. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/07/RCPCH-IPS-Poster-2020-compressed.pdf</u> (Accessed 13 August 2020)

We are the NHS: People Plan for 2020/21 - action for us all. 2020 Jul. Available at: <u>https://www.england.nhs.uk/wp-</u>

<u>content/uploads/2020/07/We Are The NHS Action For us all-updated-0608.pdf</u> (Accessed 17 August 2020)

Welp A, Meier LL, Manser T. Emotional exhaustion and workload predict clinician-rated and objective patient safety. Frontiers in psychology. 2015 Jan 22;5:1573.

Welp A, Meier LL, Manser T. The interplay between teamwork, clinicians' emotional exhaustion, and clinician-rated patient safety: a longitudinal study. Critical Care. 2016 Dec 1;20(1):110.

West CP, Huschka MM, Novotny PJ, Sloan JA, Kolars JC, Habermann TM, Shanafelt TD. Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. JAMA. 2006 Sep 6;296(9):1071-8.

West CP, Tan AD, Habermann TM, Sloan JA, Shanafelt TD. Association of resident fatigue and distress with perceived medical errors. JAMA. 2009 Sep 23;302(12):1294-300.

West CP, Tan AD, Shanafelt TD. Association of resident fatigue and distress with occupational blood and body fluid exposures and motor vehicle incidents. InMayo Clinic Proceedings 2012 Dec 1 (Vol. 87, No. 12, pp. 1138-1144). Elsevier.

West CP, Dyrbye LN, Rabatin JT, Call TG, Davidson JH, Multari A, Romanski SA, Hellyer JM, Sloan JA, Shanafelt TD. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. JAMA internal medicine. 2014 Apr 1;174(4):527-33.

West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. The Lancet. 2016 Nov 5;388(10057):2272-81.

West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. Journal of internal medicine. 2018 Jun;283(6):516-29.

West M, Coia D. Caring for doctors Caring for patients. General Medical Council. 2019 Nov. Available at <u>https://www.gmc-uk.org/-/media/documents/caring-for-doctors-caring-for-patients_pdf-80706341.pdf</u> (Accessed 20 August 2020) Williams ES, Konrad TR, Linzer M et al. Physician, practice, and patient characteristics related to primary care physician physical and mental health: results from the Physician Worklife Study. Health Serv Res. 2002;37:119-41

Williams ES, Manwell LB, Konrad TR, Linzer M. The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: results from the MEMO study. Health care management review. 2007 Jul 1;32(3):203-12.

World Health Organization. Burn-out an "occupational phenomenon": International Classification of Diseases. World Health Organization, Geneva, Switzerland. 2019 May.

Zhu H, Ng I, Walker R, Cooke S, Roberts AC, Routh E, Morris J. Transforming education and trainee experience using quality improvement. RCPCH ePoster. 2020. Available at: <u>https://eposters.rcpch.ac.uk/wp-content/uploads/sites/7/2020/06/ePoster-QIP-final.pdf</u> (Accessed 13 August 2020)