



Gender segregation in the workplace and its impact on women's economic equality

Submission by Level Medicine Inc.

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Senate Finance and Public Administration Committees
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Background to submission

Level Medicine Inc. (Level) is an organisation advocating for gender equity in the medical profession. Founded by a group of Sydney University medical students in 2015, Level is focused on policy development, professional culture change and building advocacy skills in medical students and junior doctors. We have recently conducted research into the nature of gender based discrepancies in the Australian medical workforce and are pleased to share this with the committee.

Despite large numbers of women entering medical education and the medical profession, female doctors are disproportionately concentrated in lower-earning and less prestigious specialities. Within the same specialities — such as general practice — women earn less than their male counterparts. There are a number of structural and cultural barriers to change, including training pathways that do not currently accommodate parents and caregivers, gendered norms within specialties, and gender-based discrimination. In some cases, such as general practice, payment incentives within the Medicare Benefits Schedule may also contribute to the gender pay gap, with female doctors managing more complex and time-consuming cases which are comparatively less well compensated.

It should be noted that analysis of gender in a medical workforce context is generally limited to comparisons between male and female employees. Similarly, analysis of earnings of doctors with children typically assumes they are in a heterosexual partnership. While comparisons between average male and female cohorts of medical students and doctors can be instructive, more detailed work is needed to understand how gender roles, family



responsibilities, and the demands of medical training interact to create the large disparities seen in medicine today.

1. The nature and extent of industrial and occupational gender segregation in Australian workplaces relative to comparable jurisdictions, including gender segregation in tertiary education courses

Since 1996, women have equalled or outnumbered men in Australian medical schools. Today, 51% of Australian medical students are women.¹ With medical school programs of 4-6 years, followed by specialty training approximating 5-6 years, it could be expected that this would have translated through into specialisation numbers by the mid-2000s. However, this has not been the case.

While 40% of doctors are women,² there are often wide disparities in representation of women across different medical specialties (see Figure 1). Although AIHW data demonstrates that women are becoming more evenly represented in specialist training programs, they remain far behind in many specialties at the consultant level.

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This is particularly the case in surgery (see Figure 2). Women form a very small minority in most surgical sub-specialities, from 3% in orthopaedics to about 12% in general surgery.³ However, there has been some improvement in this area in recent years, with the proportion of female surgical fellows rising from 7.7% to 9.8% between 2009 and 2015,⁴ and women now making up almost 30% of surgical trainees.⁵ Conversely, some fields are over-represented by female doctors. Obstetrics and Gynaecology, for instance, has a large majority (almost 80%) of female specialist trainees.⁶

¹ Medical Deans of Australia, '2016 Medical Students Statistics'. Available at <http://www.medicaldeans.org.au/wp-content/uploads/Table2.pdf>, accessed 3 February 2017

² AIHW, Medical Workforce 2015, Table 1

³ M. M Walton, 2015. 'Sexual equality, discrimination and harassment in medicine: it's time to act'. *Med J Aust* 2015; 203 (4): 167-169.

⁴ Ibid

⁵ IHW, Medical Workforce 2015, Table 24: Medical practitioners in specialist-in-training programs and employed specialists-in-training: specialty of training, selected characteristics, 2015

⁶ Ibid.



Figure 1: Types of clinicians by gender, 2015⁷

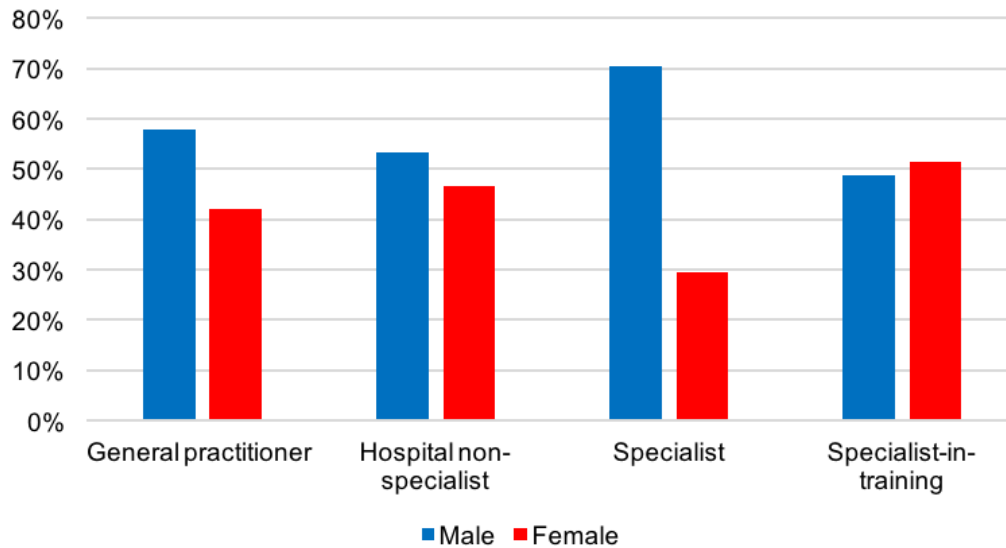
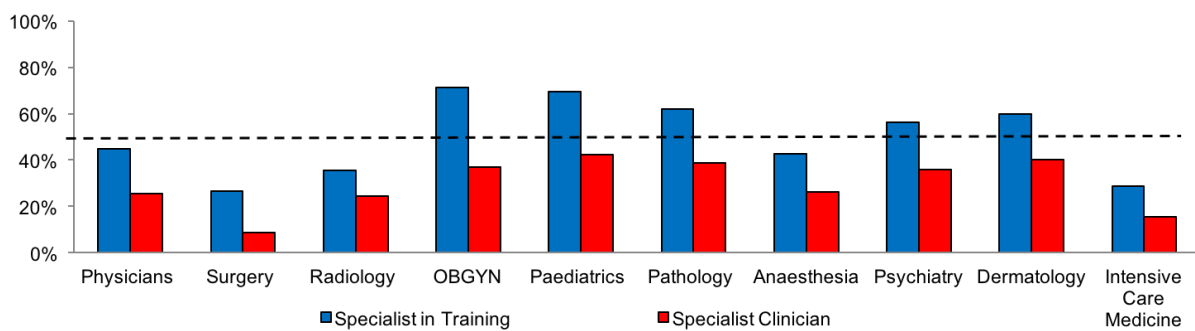


Figure 2: Proportion of women as specialists in training and specialists, 2012⁸



2. Factors driving industrial and occupational gender segregation in the Australian context

⁷ Ibid.

⁸ AIHW, Medical Workforce 2012.



There are a number of factors driving gender segregation in the Australian medical workforce. These include medical education, a lack of women in medical leadership positions, and specialty training that often coincides with caregiving responsibilities.

i. Experience at medical school

There is some research suggesting that female medical students and doctors are indirectly encouraged to pursue pathways that have traditionally been more 'friendly' to women. Research on American medical schools has shown the existence of a "hidden curriculum" within medical schools that encourages gender stereotypes, including the framing of demanding procedural specialties such as surgery as typically masculine, an 'old boys' club' that women are unable to join.⁹ As a result of this, female students may be more encouraged towards medical pathways that allow for part-time or flexible training, and specialties with more regular work hours. For example, while female medical students often have the same reasons as male students for being interested in surgery, they cite different reasons for their disinterest. These include barriers to flexible training, difficulty managing family and work commitments, perceptions of surgery as male-dominated with few female role models, and experiencing negative attitudes among surgical teams while on clinical placements.¹⁰

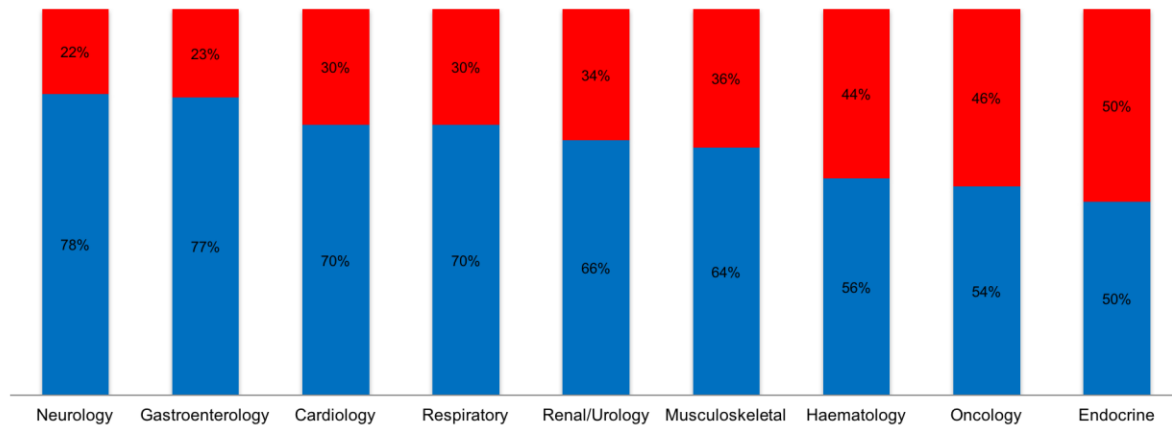
Although much of this data is American, it is likely that a similar hidden curriculum exists in Australian medical schools. In 2016, Level Medicine completed an audit of the gender of instructors in the first two years of teaching at Sydney Medical School. Two-thirds of teaching was delivered by male instructors, with the female instructors disproportionately more junior and concentrated in non-clinical specialties such as population medicine and public health.

Figure 3. Proportion of teaching delivered by female teachers at Sydney Medical School, 2016 (female teachers in red)¹¹

⁹ J.A.Giles and E.J.R. Hill, 'Examining our hidden curricula: powerful, visible, gendered and discriminatory', *Medical Education*, vol. 49, no. 3, 2015; E.J.R. Hill et al., 'Can I cut it? Medical students' perceptions of surgeons and surgical careers', *The American Journal of Surgery*, vol. 208, no. 5, 2014; Victoria Cook (2015), 'Strategies for increasing recruitment of female medical graduates to surgical specialties: a role for medical schools', unpublished paper submitted to Global Voices Scholarship Program (copy available on request).

¹⁰ J. Fitzgerald, et al. 'Gender- related perceptions of careers in surgery among new medical graduates: results of a cross- sectional study', *The American Journal of Surgery*, vol. 206, no. 1, 2013, pp. 112- 119, as cited in Cook, above n 9, 7.

¹¹ Level medicine analysis (forthcoming, available on request)



These results reinforce to medical students that leadership and teaching roles remain male-dominated, particularly in the more prestigious specialties.

While recognising these results reflect established patterns in academia,¹² Level would like to see equal representation in teaching and leadership in the future. Increasing exposure of students to female role models will better encourage all students to pursue academic leadership opportunities in the future. This requires a commitment to correcting the imbalance and increasing exposure of students to more female researchers and clinicians, across all specialties of medicine.

ii. **Lack of parental leave policy and part-time training policies**

Australian medical training is a full-time commitment that typically takes at least ten years to complete. With medical students and young doctors usually being in their 20s and 30s, the impact of having a family needs to be considered as a factor in workforce participation. It is much more common for female doctors to have interrupted their career (65% of female consultants compared with 9% of male consultants and 47% of female trainee doctors compared with 16% of male trainee doctors) or to have worked part-time. Career interruptions affect earning potential in a range of ways. Shorter periods of job tenure is associated with lower pay. The deteriorating value of human capital while out of the workforce results in a lower likelihood of promotion or lower wage in the absence of re-training. A history of having had a career break - or even the assumption that females are

¹² Only 30% of professors (Level E) and associate professors (Level D) are women. See Universities Australia, 2015, 'Selected Inter-Institutional Gender Equity Statistics', available at <https://www.universitiesaustralia.edu.au/uni-participation-quality/Equity-and-Participation/Women-in-universities/Selected-Inter-Institutional#.VIZj1t8rJV0>



more likely to take career breaks - may increase the likelihood of discrimination in future appointments.

Women are more likely than men to assume childcare responsibilities following the birth of children.¹³ This has been identified as the most significant structural barrier to female doctors moving into roles of higher status and higher pay.¹⁴ In Australia, doctors who plan to start a family face structural barriers in the form of rigid 12 or 24 month contracts with state hospital employers that do not include provisions for return to work following the birth of a child, should the contract expire in the period of parental leave. Given the increasing age of medical graduates this is a challenge not only for accredited trainees but also for junior doctors.

Those doctors in speciality training must also navigate the program requirements of specialist colleges, such as requirements to demonstrate currency of skills after periods of extended leave, as well as cultural values that can see female doctors subjected to discrimination and harassment should they take parental leave. If female doctors are to assume cultural and economic equality, employers, colleges and the medical profession must address these barriers.

Some colleges have developed policies on flexible training pathways that support parents and others who need to take time away from full-time training. For instance, the Women in Surgery section of the Royal Australian College of Surgeons (RACS) has published a white paper, "Flexible Surgical Training in Australia: It's Time for Change", and RACs now has a policy supporting flexible surgical training. However, RACS also acknowledges that the current surgical clinical training environment is not conducive to establishing posts that are less than full-time.¹⁵ RACS recently established the 'Flexible Training Working Party' to look at how to make part-time training a possibility for surgical trainees. It is important to note that while the College can accredit trainee posts and may play a role in advocating for trainees in industrial matters with employers, it does not create posts or employ trainees.

iii. **Female doctors work fewer hours and are less likely to establish their own businesses**

¹³ Workplace Gender Equality Agency (2014). Parenting, work and the gender pay gap Perspective Paper. Available at https://www.wgea.gov.au/sites/default/files/2014-03-04_PP_Pay_Gap_and_Parenting.pdf

¹⁴ Bismark M, Morris J, Thomas L, *et al* (2015) Reasons and remedies for underrepresentation of women in medical leadership roles: a qualitative study from Australia *BMJ Open*.

¹⁵ [34] Emily?



A key factor driving the earnings gap in medicine is that female doctors work fewer hours, due in large part to the child care responsibilities discussed above. In 2015, for instance, male doctors on average worked 6.3 hours more per week than female doctors, which has obvious implications for earnings as well as career progression.

Female doctors are also less likely to be in leadership roles and less likely to be practice owners.¹⁶ According to Bismarck et al., the disparity is driven by a “range of potential barriers across three broad domains—perceptions of capability, capacity and credibility”.¹⁷ Little is known about the specific barriers to female doctors establishing their own businesses, however a similar trend is observed across Australia where only a third of businesses are owned by women.¹⁸

When women are underrepresented in organisational management roles, and over-represented in more junior and part-time roles, they hold less power in changing organisational policy and practice.

3. Economic consequences of gender segregation for women, including the contribution of industrial and occupational gender segregation to the gender pay gap

2016 Australian figures demonstrate a 33.6% pay gap for full-time medical specialists, and a 24.7% pay gap among full-time general practitioners.¹⁹ When controlling for hours worked, the annual gross personal earnings for female specialists was on average 16.6% less than their male counterparts, and female GPs earned on average 25% less than male GPs.²⁰

The factors contributing to pay inequity are complex and interwoven. Determinants of the wage gap include productivity-related characteristics such as hours worked, training opportunities, years of work experience and breaks in labour market experience. Other labour market factors include undervaluing of traditionally female-dominated industries,

¹⁶ Bismarck M, Morris J, Thomas L, *et al* (2015) Reasons and remedies for underrepresentation of women in medical leadership roles: a qualitative study from Australia *BMJ Open*; Schurer, S., Kuehnle, D., Scott, A. and Cheng, T. C. (2016), A Man's Blessing or a Woman's Curse? The Family Earnings Gap of Doctors. *Ind Relat*, 55: 385–414. doi:10.1111/irel.12143

¹⁷ Bismarck M, Morris J, Thomas L, *et al* (2015) Reasons and remedies for underrepresentation of women in medical leadership roles: a qualitative study from Australia *BMJ Open*.

¹⁸ NSW Department of Industry, 2015. 'Key statistics about women entrepreneurs in Australia'

¹⁹ Workplace Gender Equality Agency. WGEA Data Explorer <http://data.wgea.gov.au>

²⁰ Cheng TC, Scott A, Jeon SH, Kalb G, Humphreys J, Joyce C. What factors influence the earnings of general practitioners and medical specialists? Evidence from the medicine in Australia: balancing employment and life survey. *Health economics*. 2012;21(11):1300-17



inflexibility in the labour market that excludes those women attempting to combine work child rearing and public versus private sector employment.

Comparing male and female doctors, each of these factors plays a role. As discussed above, female doctors as a group work fewer hours per week, and are less likely to pursue the more lucrative medical specialties. Across their careers, many female doctors work for fewer years, particularly if they take time off work to raise children.²¹

However, these factors do not fully explain the gender pay gap in medicine. For instance, between a quarter and a half of the earnings gap between male and female GPs in Australia is not attributable to differences in hours worked, career interruptions or employment type.²² A UK analysis of medical consultants suggests that only 40% of the pay gap is due to different returns for the same characteristics, and for trainees differences in experience, grade and other factors explained only half of reported salary differences.²³

Importantly, the pay gap does not disappear even for those women in higher-paid specialties, but it is unclear how much this is a function of differences in hours worked. Income reported to the Australian Taxation Office indicates that in some medical specialties such as orthopaedic surgery, ophthalmology, radiation oncology and thoracic medicine, the pay gap in taxable income is at least 60%, or an average difference of between \$190,000-\$280,000.²⁴ While the ATO figures do not control for hours worked, seniority of roles or access to discretionary pay, international analysis demonstrates that within-specialty discrimination exists even when controlled for other observable characteristics.²⁵

5. Remedies appropriate for Australia, including but not limited to measures to encourage women's participation in male - dominated occupations and industries

²¹ Schurer S, Kuehnle D, Scott A, Cheng TC. One man's blessing, another woman's curse? Family factors and the gender-earnings gap of doctors. Bonn: Institute for the Study of Labor (IZA), 2012 Contract No.: IZA Discussion Paper No. 7017

²² Schurer S, Kuehnle D, Scott A, Cheng TC. One man's blessing, another woman's curse? Family factors and the gender-earnings gap of doctors. Bonn: Institute for the Study of Labor (IZA), 2012 Contract No.: IZA Discussion Paper No. 7017.

²³ Connolly S, Holdcroft A. The Pay Gap for Women in Medicine and Academic Medicine. British Medical Association,, 2009.

²⁴ Taxation Statistics 2013-14. In: Australian Taxation Office, editor. <http://data.gov.au/dataset/25e81c18-2083-4abe-81b6-0f530053c63f/resource/c506c052-be2f-4fba-8a65-90f9e60f7775/download/taxstats2014individual14occupationgendertaxableincome.xlsx>

²⁵ Desai T, Ali S, Fang X, Thompson W, Jawa P, Vachharajani T. Equal work for unequal pay: the gender reimbursement gap for healthcare providers in the United States. *Postgraduate Medical Journal*. 2016;92(1092):571.



Within medicine, there is diffuse policy responsibility for gender equity. Change needs to come from all levels — at medical schools, within colleges and within hospitals.

Medical schools and hospitals play an important role as the facilitators of the first formal contact of medical students with the medical profession during hospital-based rotations. This represents a time where gendered perceptions of all specialties, including surgery, may be contradicted or reinforced. Therefore, medical schools need to expose students to a diverse range of surgical role models, as clinical tutors, lecturers or student mentors.

At the **government** level, the demand for flexible training needs to be systematically assessed.²⁶ Potential models that can be adapted for medical training purposes should be audited, including: full-time flexible (start late, finish late), part-time flexible (including supernumerary positions, i.e. positions created on top of pre-existing positions), and a job-share.²⁷ Identify which model may be the most satisfactory. Current research, although limited, has shown a high level of satisfaction with no evidence of compromised care.²⁸ However, extensive research will need to be conducted to determine the impact on educational outcomes, the minimum level of training required to maintain skills, and how competencies may be affected by intermittent breaks in training. This can be assisted through the colleges and governments increasing the transparency of their information regarding previously successful programs.

Specialist colleges, hospital administrators and state health departments need to address the barriers to changing advanced training programs. Some of the suggested ways to overcome barriers to flexible training positions include:²⁹

- Creating a job-share register to overcome the difficulty in finding job-share partners.
- Ensuring funding through the adaptation of pre-existing funding of positions or introduce a government scheme, such as the UK's Flexible Careers Scheme,³⁰ which aims to support trainees with family commitments to work rather than leave the workforce.

²⁶ Carling, P.C., et al., Part-time residency training in internal medicine: analysis of a ten-year experience. *Acad Med*, 1999. **74**(3): p. 282-4.

²⁷ Mahady, S.E., *Adding flexibility to physician training*. *Med J Aust*, 2011. **194**(9): p. 460-2.

²⁸ Whitelaw, C.M. and M.C. Nash, Job-sharing in paediatric training in Australia: availability and trainee perceptions. *Med J Aust*, 2001. **174**(8): p. 407-9.

²⁹ Mahady, S.E., *Adding flexibility to physician training*. *Med J Aust*, 2011. **194**(9): p. 460-2.

³⁰ NHS, *Flexible Careers Scheme for NHS Hospital Doctors 2004*, FCS Guideleines for Hospital Doctors: <http://www.nhsprofessionals.nhs.uk/download/doctors-services/fcs-for-doctors.pdf>.



- Purposefully structuring training positions in such a way that ensures opportunities for meeting the minimal educational requirements of an individual at that training level.

iii. **measures to professionalise and improve conditions in female - dominated occupations and industries**

Within healthcare, as in other professions, more ‘caring’ work has typically been valued less than more ‘technical’ work, and is correspondingly associated with more women in these roles.³¹ For instance within general practice (42% female), studies show that female GPs do more ‘unbillable’ work and often have longer and more complex consults, which are not currently incentivised under existing payment schemes. This non-billable time is spent in provision of holistic care, including advising and educating patients about various problems, counselling and liaising with allied health professionals.³²

General practice is a crucial part of the health system, preventing costly hospital admissions and ill-health³³. However, GP earnings are currently squeezed, with concerns that the freeze on primary care rebates will adversely impact the viability of GP practices, and potentially patient care over the long term. The type of complex care disproportionately delivered by female GPs should be favoured over short consults.

To make primary care a more attractive career, additional and targeted investment is needed. Policy changes could include:

- Changing remuneration by altering the relativities which award value to procedural work over “cognitive” work such as general practice in the Medicare Benefits Schedule (MBS).³⁴
- Provision of more funding to primary care might offer a better career structure and better career progression.³⁵
- A capitation-style model of Primary care funding might place financial value in successful management of chronic and complex medical issues and thus be more rewarding to female work characteristics.³⁶

³¹ Bankwest Curtin Economics Centre and the Workplace Gender Equality Agency, 2016

³² Henderson J, Valenti LA, Britt HC, Bayram C, Wong C, Harrison C, et al. Estimating non-billable time in Australian general practice. *Med J Aust.* 2016;205(2):79-83.

³³ Britt H, Miller GC, Henderson J, Bayram C, Valenti L, Harrison C, Pan Y, Wong C, Charles J, Gordon J, Pollack AJ. A decade of Australian general practice activity 2005–06 to 2014–15.

³⁴ Scott, A. 2014. Getting the balance right between generalism and specialisation Does remuneration matter? *Australian Family Physician*, 43, 229-232.

³⁵ *Ibid.*

³⁶ Harrison C BC, Charles J, Britt H. . Why do female GPs earn less? In: Program & Abstracts, editor. 2016 Primary Health Care Research Conference; Australia. phcris.org.au/conference/abstract/8366



iv. measures to promote pay equity

At the **healthcare service** level, suggested policies to promote pay equity include:

- Pay auditing or disclosure of salaries in organizations employing doctors would draw attention to pay gaps where they exist, and allow employees to challenge inequities in line with their legal entitlements.³⁷ Frameworks for auditing and reporting on pay equity are clearly outlined by the Workplace Gender Equity Agency.
- Formal commitments by hospitals and healthcare services to ensure equal remuneration for equal work, irrespective of gender would enshrine pay equity in organizational norms.³⁸
- Increased representation of women on executive Boards and in leadership positions is associated with significant reductions in gender pay gaps.³⁹ An imbalance of women in leadership positions in medicine might contribute to the persistence of conservative social norms and rigid career pathways, rendering it difficult for professionals to achieve a balance between career, family and other caring roles.⁴⁰
- Support for flexible training and working options might minimize the obstacles to career progression faced by those doctors with family and domestic commitments outside of medicine.^{41,42} Flexible training and working options must be made to both male and female doctors if we are to meaningfully tackle the burden of traditional gender roles.
- Challenging the systematic discrimination which encourages women to work in only some specialties and encourages men into others is critical to tackling the social biases which perpetuate wage inequity.⁴³ At a hospital level, this might entail provision of training around unconscious bias, accessible and responsive systems for

³⁷ Bankwest Curtin Economics Centre and the Workplace Gender Equality Agency. Gender Equity Insights 2016: Inside Australia's Gender Pay Gap. https://www.wgea.gov.au/sites/default/files/BCEC_WGEA_Gender_Pay_Equity_Insights_2016_Report.pdf. Bankwest Curtin Economics Centre and the Workplace Gender Equality Agency, 2016.

³⁸ Peetz D. Regulation distance, labour segmentation and gender gaps. *Cambridge Journal of Economics*. 2014;39(2):345-62.

³⁹ Bankwest Curtin Economics Centre and the Workplace Gender Equality Agency, 2016

⁴⁰ Bismark M, Morris J, Thomas L, Loh E, Phelps G, Dickinson H. Reasons and remedies for under-representation of women in medical leadership roles: a qualitative study from Australia. *BMJ Open*. 2015;5(11).

⁴¹ Connolly S, Holdcroft A. *The Pay Gap for Women in Medicine and Academic Medicine*. British Medical Association, 2009.

⁴² Bankwest Curtin Economics Centre and the Workplace Gender Equality Agency, 2016

⁴³ KPMG. *She's Price(d)less: The economics of the gender pay gap*. kpmg.com/au/paygap: 2016.



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reporting and addressing instances of gendered discrimination, and proactive celebration of the benefits of gender diversity.

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