



**An executive summary of Motu Working Paper 19-21**Isabelle Sin and Bronwyn Bruce-Brand

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Despite union rules doctors' gender pay gap still stark. No clear reason.

### **INTRODUCTION**

In this paper we estimate the gender gap in hourly wages earned by medical specialists in their main jobs working for District Health Boards (DHBs) in New Zealand at the time of the 2013 Census. Despite specialist salaries being specified by the Multi Employer Collective Agreement (MECA) negotiated by the Association of Salaried Medical Specialists (ASMS), we find male specialists earn a large and statistically significant premium over their female colleagues. When we compare male and female specialists of the same age, in the same specialty, who work the same number of hours each week, we find female specialists earn on average 12.5 percent lower hourly wages than their male counterparts in their DHB employment.

### **RESULTS**

For specialists without children, there is a smaller but still statistically significant gender wage gap of 9.2 percent. This gender wage gap rises to 13.6 percent for those with one child and to 17.2 percent for those with two or more children. Given the average female medical specialist reduces her lifetime months worked by on average five months for each child she bears, and the ASMS MECA specifies that specialists on parental leave for up to 12 months will receive the same regular pay increases as they would receive were they not on leave, these wage gaps for parents cannot be explained by time out of the paid workforce for parental leave alone.

As well as being larger among parents, we find the wage gap increases with age and is higher for specialists who work fewer hours each week in their DHB job, reaching 22.9 percent for those who work 30 or fewer hours. There is weak evidence that the gap is larger in medical specialties than in surgical specialties, in specialties that are neither medical nor surgical, and among GPs.

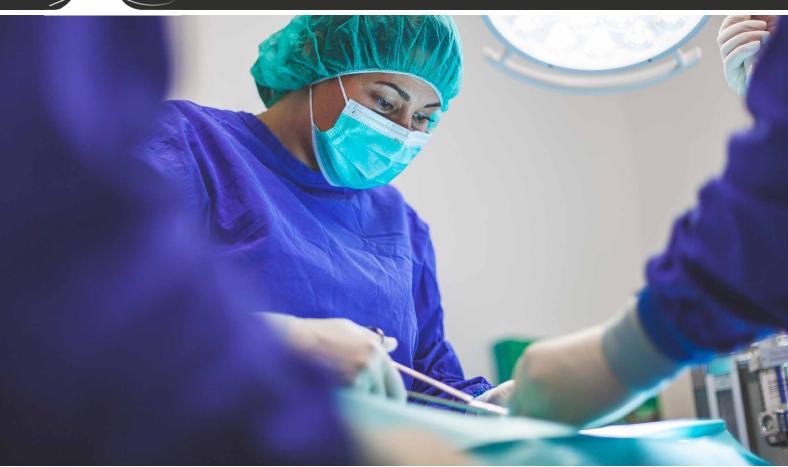
When we estimate a separate wage gap for each DHB, for eleven of the 20 DHBs we can rule out gender pay equality at the 95 percent confidence level. Small DHBs, defined as those that employ fewer than 200 doctors, have the largest wage gaps, averaging 18.9 percent. Large DHBs employing 500 or more doctors have smaller average wage gaps of 12.0 percent, and DHBs of intermediate size have the smallest average wage gaps of 9.2 percent. For all three DHB sizes we can reject gender pay equality at the 95 percent confidence level.

## **DATA CONTROLS AND ROBUSTNESS**

These wage gaps flexibly account for age, so are not driven by female specialists being younger on average than male specialists. They compare men and women in the same specialty, so are not driven by female specialists choosing to work in lower-paying specialties. Finally, they control for weekly hours worked, so are not driven by female specialists being more likely to work part-time and part-time employees earning lower hourly wages than full-time employees. In fact, although female specialists are more likely to work part-time in their DHB job, part-time specialists, especially men, tend to earn an hourly wage premium over full-time specialists.

This research was supported by the Association of Salaried Medical Specialists. Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results and opinions expressed in this study are the work of the authors.

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We conduct a number of robustness tests to determine whether gender differences in effective experience at the same age, driven by entering the profession at different ages or having different gaps in work experience, could explain the wage gap. Our results suggest that, at most, 20 percent of the 12.5 percent wage gap, or 2.5 percentage points, can be explained by differences in experience. Furthermore, the data show that hourly earnings are relatively stable for men and women beyond approximately 45 years of age, which suggests that beyond a certain level of seniority hourly wages are determined almost entirely by factors other than experience.

## WHY THE PAY GAP OCCURS

In the context of the MECA that governs the earnings of DHB-employed medical specialists, the gender wage gap we estimate could arise from one of two places. First, men with the same experience could be placed in higher bands on the salary scale on recruitment. Second, men could receive larger payments over and above the MECA minimum, which could include recruitment and retention benefits or special contributions benefits.

Although we do not find direct evidence that male specialists who migrate to New Zealand are initially placed in a higher pay band than similar female specialists, we do find a substantial gender pay gap among new immigrants, and are unable to rule out that such unequal treatment occurs. Our data do not allow us to distinguish base salary as specified by the MECA from the various additional payments, but our results are consistent with male specialists disproportionately receiving additional payments beyond the MECA minimum.

The broader literature on gender pay equality proposes employer discrimination and more successful salary negotiation on the part of men as two potential explanations for a gender wage gap such as that observed here. It is possible that both play a role in the gender wage gap for medical specialists.

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