

Financial support provided to male and female physicians by pharmaceutical companies in New Zealand: a cross-sectional study

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Despite progress, gender differences persist in many areas of medicine. In the United States, female physicians are paid less, are promoted more slowly, and fewer hold leadership or senior academic positions than male physicians.¹

Pharmaceutical companies can influence prescribing by physicians through financial support of specific activities, including professional services (eg, consultancy, medical education) and conference attendance.² The transparency of such funding has been improved in the United States by the 2012 *Physician Payment Sunshine Act*³ and in Australia by the 2015 Medicines Australia code of conduct.⁴

Since 2021, pharmaceutical companies are encouraged to disclose financial support (transfers of value) provided to individual health care professionals in New Zealand.⁵ To examine whether

they support similar numbers of male and female physicians, I extracted payment details from eight publicly available funding reports for 2021. Eight further companies reported no payments to physicians, and no report was available for one company (Supporting Information).⁵ Multiple payments to an individual for the same activity were counted as separate payments. Only payments to physicians were included in the analysis (ie, not payments to nurses or other medical professionals); support type was classified as advisory and consultancy fees, registration, travel, and accommodation fees, or speaker and educator fees. Year of graduation (to estimate professional experience) and medical specialty were obtained from the New Zealand Medical Council Register;⁶ the subspecialties for physicians with “internal medicine” as their specialty were identified in internet searches. Gender was determined from first names or,

Financial support for individual New Zealand physicians by eight pharmaceutical companies during 2021: grant characteristics, by gender of recipient

Characteristic	All grants	Grants to male physicians	Grants to female physicians	Workforce proportion (women)*
All physicians supported	283	197 (70%)	86 (30%)	47%
Pharmaceutical company				
AbbVie	105 [37%]	73 (70%)	32 (30%)	
AstraZeneca	28 [10%]	26 (93%)	2 (2%)	
Boehringer Ingelheim	42 [15%]	31 (73%)	11 (26%)	
GSK [†]	60 [21%]	37 (62%)	23 (38%)	
Janssen	31 [11%]	22 (71%)	9 (7%)	
Roche	5 [2%]	2 (40%)	3 (60%)	
Sanofi	10 [4%]	4 (40%)	6 (60%)	
Seqirus	2 [1%]	2 (100%)	0	
Medical specialty				
Internal medicine (all)	210 [74%]	152 (73%)	58 (28%)	42%
Gastroenterology	55 [19%]	40 (73%)	15 (27%)	NA
Respiratory medicine	49 [17%]	42 (86%)	7 (14%)	NA
Endocrinology	42 [15%]	26 (62%)	16 (38%)	NA
Haematology	29 [10%]	17 (59%)	12 (41%)	NA
Rheumatology	20 [7%]	17 (85%)	3 (15%)	NA
Infectious disease/immunology	9 [3%]	8 (89%)	1 (11%)	NA
Medical oncology	5 [2%]	2 (40%)	3 (60%)	NA
General medicine	1 [$<$ 1%]	0	1 (100%)	NA

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Characteristic	All grants	Grants to male physicians	Grants to female physicians	Workforce proportion (women)*
General practice	25 [9%]	12 (48%)	13 (52%)	53%
Psychiatry	15 [5%]	7 (47%)	8 (53%)	45%
Dermatology	9 [3%]	8 (89%)	1 (11%)	NR
Paediatrics	9 [3%]	8 (89%)	1 (11%)	64%
Ophthalmology	4 [1%]	0	4 (100%)	33%
No registered specialty	2 [1%]	1 (50%)	1 (50%)	—
Unknown	9 [3%]	9 (100%)	0 (0%)	—
Time since medical graduation (years), mean (SD)	29 [9.6]	30 (9.7)	26 (8.7)	
Support received (NZ\$), mean (SD)	964 [812]	956 (859)	986 (685)	
Support type				
Advisory/consultancy fees	117 [41%]	81 (69%)	36 (31%)	
Registration/travel/accommodation	69 [24%]	43 (62%)	26 (38%)	
Speaker/educator fees	97 [34%]	73 (75%)	24 (25%)	

NA = not available (workforce gender proportion not available by internal medicine subspecialty); NR = not reported (by New Zealand Medical Council, because of small number of physicians in this category) SD = standard deviation. * Source: New Zealand Medical Council 2021 workforce survey.⁷ † Missing data (gender undetermined): two people. ♦

if ambiguous, in internet searches for personal pronouns. The Health and Disabilities Committee of New Zealand did not require formal ethics approval for this study.

A total of 283 transfers of value were reported: 197 to men (70%; 119 individuals), 86 to women (30%; 55 individuals). The most frequent (sub)specialties of recipients were gastroenterology (55 payments, 19%) and respiratory medicine (49, 17%). Mean time from graduation was longer for male (30 years; standard deviation [SD], 9.7 years) than for female recipients (26 years; SD, 8.7 years). The proportions of men supported were greater than 50% for six companies, but the overall median payment was similar for male (NZ\$773; interquartile range [IQR], NZ\$382–1380) and female physicians (NZ\$975; IQR, NZ\$337–1397). Female physicians received 38% of meeting attendance cost payments (26 of 69 payments), but only 25% of those for speaker and educator fees (24 of 97 payments) (Box).

Female physicians received 30% of payments by eight pharmaceutical companies to individual New Zealand physicians during 2021; the overall proportion of women among New Zealand physicians is 47%.⁷ Of the five (sub)specialties that received 70% of transfers of value, general practice was the only one in which most grants were to female physicians (thirteen of 25), perhaps reflecting the lower proportions of women in some subspecialties.⁸ However, gender composition was not available for internal medicine subspecialties (overall proportion of women: 42%).⁷ The low proportion of speaker or educator fee payments to female physicians could indicate fewer women in

leadership roles, which could be related to their slightly shorter mean period of professional experience.

Interpretation of these findings is limited by the number of payments, the limited study period (particularly given COVID-19-related disruptions during 2019), and differences between pharmaceutical companies in their classification of support; the time commitment required to obtain funding was unknown. One company did not provide a 2021 report; it is anticipated that most companies will comply with the reporting guidelines from 2022. The reasons for the gender differences in support, and their implications for prescribing behaviour, are unknown. Finally, as gender was not self-reported, misclassification was possible.

Female physicians received fewer support payments from pharmaceutical companies than their male colleagues, and a larger proportion of payments to women subsidised event attendance rather than representative activities. The median payment level, however, was similar for men and women. Transparency of pharmaceutical company support provides an opportunity to assess gender differences, and should encourage companies to consider social equity when making funding decisions.

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5 Medicines New Zealand. Medicines New Zealand guidelines for disclosure of transfers of value from pharmaceutical companies to healthcare professionals. <https://www.medicinesnz.co.nz/>

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 - 8 Burgess S, Shaw E, Ellenberger KA, et al. Gender equity within medical specialties of Australia and New Zealand: cardiology's outlier status. *Intern Med J* 2020; 50: 412-419. ■

Supporting Information

Additional Supporting Information is included with the online version of this article.