

**Online Supplementary File 2:**

**Journal name:** The Patient – Patient Centered Outcomes Research

**Article title:** Identifying New Zealand public preferences for pharmacist prescribers in primary care—a discrete choice experiment

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**2.1). Supplementary Table S1:**

**Supplementary Table S1: WTP and trade off calculations based on mixed MNL output**

*Supplementary Table S 1 WTP and trade-off calculations based on mixed MNL output*

<b>Variable:</b>	<b>≤ 50K# WTP to AVOID (95% CI)</b>	<b>&gt; 50K<sup>†</sup> WTP to AVOID (95% CI)</b>	<b>≤ 50K# WTP (95% CI)</b>	<b>&gt; 50K<sup>†</sup> WTP (95% CI)</b>	<b>WTW days to AVOID (95% CI)</b>	<b>WTW days (95% CI)</b>
1). RNP_Waiting time (per 1 day increase)	\$3.43 (\$3.32– \$3.55)	\$3.68 (\$3.56– \$3.79)	-	-	-	-
2). PP_Waiting time (per 1 day increase)	\$5.41 (\$5.22– \$5.60)	\$5.92 (\$5.63– \$6.21)	-	-	-	-
3). GP_Waiting time (per 1 day increase)	\$5.16 (\$4.90– \$5.42)	\$5.52 (\$5.25– \$5.80)	-	-	-	-
4). RNP_ChangeCurrentMedsOnly	\$5.90 (\$5.71– \$6.09)	\$6.35 (\$6.14– \$6.56)	-	-	1.77 (1.75– 1.79)	-
5). PP_ChangeCurrentMedsOnly	-	-	\$3.76 (\$3.61– \$3.91)	\$4.13 (\$3.91– \$4.35)	-	0.75 (0.72– 0.78)
6). RNP_MedicinesOptimisation	-	-	\$9.99 (\$9.62– \$10.35)	\$10.82 (\$10.38– \$11.25)	-	2.94 (2.89– 2.99)
7). PP_MedicinesOptimisation	-	-	\$5.13 (\$4.97– \$5.29)	\$5.53 (\$5.33– \$5.72)	-	1.01 (0.99– 1.03)
8). GP_MedicinesOptimisation	-	-	\$3.16 (\$3.07– \$3.26)	\$3.42 (\$3.29– \$3.54)	-	1.47 (1.11– 1.83)

≤ 50K# = Respondents with an annual household income of ≤ \$50,000 per year

> 50K<sup>†</sup> = Respondents with an annual household income of > \$50,000 per year

PP = Pharmacist prescriber

RNP = Registered nurse prescriber

GP = GP prescriber

WTP = Willingness to pay

WTW = Willingness to wait in days

CI = Confidence interval

2.2). **Supplementary Table S2:**

**Supplementary Table S2: Summary of respondents' reasons for ranking their most preferred prescriber**

*Supplementary Table S 2 Summary of respondents' reasons for ranking their most preferred prescriber*

<b>Most preferred prescriber (MPRxer):</b>	<i>GP prescriber</i>	<i>Pharmacist prescriber</i>	<i>Nurse prescriber</i>
<b>% of sample with this ranking:</b>	82%	9%	9%
<b>Top 4 reasons for ranking the prescriber as most preferred:</b>	<ul style="list-style-type: none"> <li>● Training &amp; skills</li> <li>● Trust/emotional attachment</li> <li>● Access to medical history</li> <li>● Status quo</li> </ul>	<ul style="list-style-type: none"> <li>● Convenience</li> <li>● Training &amp; skills</li> <li>● Cost</li> <li>● Trust/emotional attachment</li> </ul>	<ul style="list-style-type: none"> <li>● Cost</li> <li>● Training &amp; skills</li> <li>● Convenience</li> <li>● Trust/emotional attachment</li> </ul>
<b>Notable respondent quotes:</b>	<ul style="list-style-type: none"> <li>● “Traditionally that is what everyone is used to.”</li> <li>● “They have access to medical history.”</li> </ul>	<ul style="list-style-type: none"> <li>● “It means that I could get the prescription and medication in the same location/shop/visit.”</li> <li>● “The GP is really busy so I like to let patients who need consultations first choice of their time. The pharmacist is not usually located in the same location as the GP or nurse and it is a lot easier to consult the Pharmacist and at the same time get the script filled.”</li> </ul>	<ul style="list-style-type: none"> <li>● “The condition being dealt with I felt can be safely dealt with by a nurse prescriber.”</li> <li>● “The convenience of being able to quickly sort prescriptions without having to wait up to 7 days to see say the GP.”</li> </ul>

2.3). **Supplementary Table S3:**

**Supplementary Table S3: Summary of respondents' reasons for their preference in choice task 5**

*Supplementary Table S 3 Summary of respondents' reasons for their preference in choice task 5*

<b>Prescriber selected in choice task 5:</b>	<i><b>GP prescriber</b></i>	<i><b>Pharmacist prescriber</b></i>	<i><b>Nurse prescriber</b></i>
<b>% of sample with this selected prescriber:</b>	44%	22%	34%
<b>Top 5 reasons for respondent's choice:</b>	<ul style="list-style-type: none"> <li>● Lower cost</li> <li>● Training &amp; skills</li> <li>● Shorter waiting time for next consultation</li> <li>● Service type</li> <li>● Trust/emotive attachment</li> </ul>	<ul style="list-style-type: none"> <li>● Lower cost</li> <li>● Shorter waiting time for next consultation</li> <li>● Consultation type</li> <li>● Service type</li> <li>● Convenience</li> </ul>	<ul style="list-style-type: none"> <li>● Lower cost</li> <li>● Shorter waiting time for next consultation</li> <li>● Longer opening hours</li> <li>● Service type</li> <li>● Consultation type</li> </ul>
<b>Notable respondent quotes:</b>	<ul style="list-style-type: none"> <li>● “The GP and the registered Nurse prices were the same, so I chose the GP over the Nurse as in my opinion they have more training, and are more qualified to assess and prescribe medication. I don't mind waiting extra days to see a GP (who I trust) over a Nurse. I've never heard of a Pharmacist being able to prescribe medicine, and until I heard more about that, I wouldn't feel comfortable getting checked out by them.”</li> <li>● “Cheaper for my lower income.”</li> </ul>	<ul style="list-style-type: none"> <li>● “The cost was the largest factor and availability how soon I could see and how convenient the time they open.”</li> <li>● “It good and innovative.”</li> <li>● “I usually leave my appointment making until I have almost run out of pills. I am a firm believer that I do not need to see a GP to get repeat pills and would be extremely happy to see a Pharmacist or a Registered Nurse. Often a pharmacist has a tendency to know more about side effects of medications and what are the effects of mixing certain pills.”</li> </ul>	<ul style="list-style-type: none"> <li>● “I would choose the cheapest option ,on the least waiting time ,that met my needs. For myself, Doctor's visits are a luxury and I only go when absolutely necessary.”</li> <li>● “I choose that because it is reasonable quick time frame to health care professional, cheap and suits my current work situation.”</li> </ul>

**2.3). Supplementary Table S4:**

**Supplementary Table S4: NZ public preferences for a primary care prescriber relative to GP prescriber using mixed MNL model WITHOUT alternative-specific respondent characteristic - Most preferred prescriber variable (MPRxer)**

*Supplementary Table S 4 NZ public preferences for a primary care prescriber relative to GP prescriber using mixed MNL model WITHOUT alternative-specific respondent characteristic - Most preferred prescriber variable (MPRxer)*

<b>Preferences for primary care prescribers (mixed MNL model) – compared to reference utility level GP prescriber:</b> (WITHOUT alternative-specific respondent characteristic - Most preferred prescriber variable (MPRxer))			
<b>Variable:</b>			
<i>Alternative-specific attributes:</i>	<b>Estimated mean &amp; (Std Dev)</b>	<b>95% CI</b>	<b>p value</b>
1). Alternative-specific constant (ASC) (Reference level = GP prescriber)			
Pharmacist prescriber (PP)	-0.337	(-0.995 – 0.322)	0.3164
Nurse prescriber (RNP)	-1.181**	(-1.912 – -0.451)	0.0015
2). Location of prescribing consultation (Reference level = At GP practice)			
PP_ At community pharmacy	-0.078 (0.044)	(-0.221 – 0.064) (-0.476 – 0.564)	0.2824 0.8682
RNP_ At community pharmacy	-0.327** (0.390**)	(-0.455 – -0.199) (0.145 – 0.635)	<0.0001 0.0018
3). Waiting time for next available consultation (per 1 day increase)			
PP_ Waiting time	-0.307** (0.150**)	(-0.364 – -0.249) (0.098 – 0.202)	<0.0001 <0.0001
RNP_ Waiting time	-0.197** (0.113**)	(-0.259 – -0.134) (0.055 – 0.171)	<0.0001 0.0001
GP_ Waiting time	-0.282** (0.235**)	(-0.337 – -0.226) (0.184 – 0.286)	<0.0001 <0.0001
4). Type of service your consultation covers (Reference level = Repeat prescription)			
PP_Changes only to current medicines	0.207* (0.380)	(0.037 – 0.377) (-0.004 – 0.764)	0.0169 0.0526
RNP_Changes only to current medicines	-0.319** (0.007)	(-0.483 – -0.155) (-0.523 – 0.537)	0.0001 0.9784
GP_Changes only to current medicines	0.007 (0.018)	(-0.146 – 0.160) (-0.212 – 0.247)	0.9277 0.8810

PP_Optimisation of medicines	0.298** (0.016)	(0.132 – 0.464) (-0.470 – 0.502)	0.0004 0.9490
RNP_Optimisation of medicines	0.571** (0.429*)	(0.403 – 0.739) (0.091 – 0.767)	<0.0001 0.0130
GP_Optimisation of medicines	0.180* (0.080)	(0.019 – 0.341) (-0.318 – 0.479)	0.0280 0.6930
5). Type of consultation (Reference level = By appointment)			
PP_Walk-in and wait clinic	-0.172** (0.624**)	(-0.297 – -0.047) (0.429 – 0.819)	0.0068 <0.0001
RNP_Walk-in and wait clinic	0.155** (0.064)	(0.044 – 0.267) (-0.546 – 0.675)	0.0065 0.8361
GP_Walk-in and wait clinic	-0.106 (0.359*)	(-0.226 – 0.015) (0.060 – 0.657)	0.0858 0.0186
6). Prescribing service operating hours (per 1 hour increase)			
PP_Operating hours	0.022* (0.013)	(0.002 – 0.042) (-0.015 – 0.040)	0.0304 0.3620
RNP_Operating hours	0.052** (0.005)	(0.034 – 0.070) (-0.020 – 0.030)	<0.0001 0.6890
GP_Operating hours	-0.023* (0.027)	(-0.041 – -0.005) (-0.003 – 0.058)	0.0114 0.0810
<b>Generic choice attribute_sociodemographic interaction terms:</b>			
	<b>Estimated mean &amp; (Std Dev)</b>	<b>95% CI</b>	<b>p value</b>
7). Cost of consultation_annual household income (per \$1 increase)			
Cost (income ≤\$50, 000 /year)	-0.062** (0.062**)	(-0.070 – -0.054) (0.054 – 0.070)	<0.0001 <0.0001
Cost (income > \$50, 000/year)	-0.059** (0.059**)	(-0.065 – -0.052) (0.052 – 0.065)	<0.0001 <0.0001
<b>Alternative-specific respondent characteristics: (Reference utility level = GP prescriber)</b>			
	<b>Estimated mean &amp; (Std Dev)</b>	<b>95% CI</b>	<b>p value</b>
8). Age (per year increase)			

PP_Age	-0.023**	(-0.031 – -0.015)	<0.0001
RNP_Age	-0.019**	(-0.026 – -0.011)	<0.0001
9). Employment type (Reference level = employed)			
PP_Unemployed	-0.165*	(-0.305 – -0.026)	0.0204
RNP_Unemployed	-0.139*	(-0.274 – -0.005)	0.0424
10). Residential location (Reference level = major/provincial city)			
PP_Town/rural	0.014	(-0.129 – 0.156)	0.8523
RNP_Town/rural	-0.001	(-0.138 – 0.137)	0.9935
11). Number regular medicines taken per day (Meds)			
PP_Meds	-0.046	(-0.096 – 0.004)	0.0699
RNP_Meds	-0.087**	(-0.136 – -0.037)	0.0006
12). Number of diagnosed chronic/long term conditions (LTCS)			
PP_LTCS	0.102**	(0.041 – 0.163)	0.0010
RNP_LTCS	0.086**	(0.026 – 0.146)	0.0052
13). Type of community pharmacy usually visited (Reference level = Different community pharmacies most of the time)			
PP_Same pharmacy most of the time	0.123*	(0.001 – 0.245)	0.0488
<b>Generic respondent characteristics:</b> (Reference utility level = GP prescriber)	<b>Estimated mean &amp; (Std Dev)</b>	<b>95% CI</b>	<b>p value</b>
14). GP visit frequency (Reference level = Less often than once every 3 months)			
Once every 3 months or more often	-0.143*	(-0.263 – -0.022)	0.0200
<b>Model goodness of fit measures:</b>			
Log likelihood function	-3855.04761		
McFadden Pseudo R-squared	0.2404728		
AIC	7810.1		
AIC/N	1.690		
N	4620		
K	50		

PP = Pharmacist prescriber

RNP = Registered nurse prescriber

GP = GP prescriber

Std Dev = standard deviation

\*\* = significance at 1% level

\* = significance at 5% level

CI = confidence interval

AIC = Akaike information criterion