

Appendix 1 (as supplied by the authors): Full segmented regression model parameters showing trends before and after delisting of routine eye exams in The segmented linear regression models are

$$Y_t = \beta_0 + \beta_1 * \text{time}_t + \beta_2 * \text{intervention}_t + \beta_3 * \text{time after intervention}_t + \beta_4 * (\text{time after intervention}_t)^2 + e_t$$

where y_t stands for observed series and e_t represents an error term.

This regression models allow for a linear trend before intervention and a linear or quadratic trend after intervention. We tested for potential serial correlation prior to fitting the segmented linear regression models.

Table 1. Full segmented regression model parameters showing trends before and after delisting of routine eye exams in 2004

| Series | Intercept (β_0) | Baseline trend (β_1) | Level change after 2004 (β_2) | Linear term of trend change after 2004 (β_3) | Quadratic term of trend change after 2004 (β_4) | Absolute change in trend between 2002 and 2004 (95% CI) | Absolute change in trend between 2004 and 2006 (95% CI) |
|--------------------------|-------------------------|------------------------------|---------------------------------------|--|---|---|---|
| Eye Exam 65+ | 72.40*** | 1.30* | -0.10 | -0.69 | - | 0.51(-1.29 , 2.31) | 0.61(-0.04 , 1.26) |
| Eye Exam <65 | 68.53*** | - | 14.47** | -15.64** | 2.30** | 1.13(-1.39 , 3.64) | -8.74(-11.17 , -6.31) |
| Cholesterol testing 65+† | 21.51*** | 29.98*** | 1.95** | -2.34** | - | 4.16(3.49 , 4.83) | 1.96(1.85 , 2.07) |
| Cholesterol testing <65 | 45.20*** | 8.35** | 1.65 | -6.07** | - | 3.93(0.19 , 7.67) | 2.28(0.93 , 3.63) |
| HbA1C Testing 65+ | 24.10*** | 3.35** | 0.05 | -0.97 | - | 2.43(0.72 , 4.14) | 2.38(1.76 , 3.00) |
| HbA1C Testing <65 | 23.20*** | 2.50** | -0.20 | -1.65* | - | 0.65(-1.13 , 2.43) | 0.85(0.21 , 1.49) |
| Optometry visit <65 | 40.63** | 0.85 | 16.59 | -14.31 | 2.33 | 5.46(-8.66 , 19.58) | -6.48(-18.06 , 5.10) |
| Optometry visit <65†† | 29.30* | 5.10* | 15.18* | -18.56* | 2.33* | 4.04(0.47 , 7.62) | -6.48(-9.28 , -3.68) |
| Optometry visit 65+ | 34.07*** | 3.55** | 1.43 | -0.39 | - | 4.59(3.01 , 6.18) | 3.16(2.59 , 3.73) |
| Physician visit only <65 | 28.30*** | -1.05 | -1.80 | -1.26 | - | -4.11(-9.41 , 1.19) | -2.31(-4.22 , -0.40) |
| Physician visit only 65+ | 38.33*** | -2.25* | -1.48 | -0.33 | - | -4.06(-7.35 , -0.77) | -2.58(-3.77 , -1.39) |

Appendix to: Kiran T, Kopp A, Moineddin R, et al. Unintended consequences of delisting routine eye exams on retinopathy screening for people with diabetes in Ontario, Canada. *CMAJ* 2013; DOI:10.1503/cmaj.121080.

Copyright © 2013 Canadian Medical Association or its licensors

| | | | | | | | |
|----------------------------|----------|--------|---------|----------|--------|-------------------|-----------------------|
| Male age 40-65 | 65.63*** | - | 13.44** | -14.56** | 2.18** | 1.05(-1.12, 3.22) | -8.04(-10.14, -5.94) |
| Female age 40-65 | 72.20*** | - | 15.75** | -16.97** | 2.45* | 1.23(-1.91, 4.37) | -9.62(-12.66, -6.58) |
| Male age 65+ | 71.67*** | 1.45* | -0.07 | -0.83 | - | 0.55(-1.34, 2.46) | 0.62(-0.07, 1.31) |
| Female age 65+ | 73.13*** | 1.15* | -0.13 | -0.55 | - | 0.47(-1.25, 2.19) | 0.60(-0.02, 1.22) |
| Q1 (lowest), age 40-65 | 66.07*** | - | 12.01** | -13.01** | 2.02** | 1.02(-1.19, 3.23) | -6.94(-9.08, -4.80) |
| Q2, age 40-65 | 67.90*** | - | 14.97** | -15.44** | 2.32** | 1.74(-0.36, 3.85) | -8.58(-10.61, -6.55) |
| Q3, age 40-65 | 69.67*** | - | 15.23** | -16.57** | 2.45** | 1.11(-0.98, 3.21) | -9.22(-11.25, -7.19) |
| Q4, age 40-65 | 70.43*** | - | 15.62** | -16.76** | 2.40** | 1.56(-1.69, 4.21) | -9.56(-12.41, -6.71) |
| Q5(highest), age 40-65 | 71.40*** | - | 16.30* | -17.73** | 2.45* | 1.02(-2.68, 4.72) | -10.38(-13.96, -6.80) |
| Q1 (lowest), age 65+ | 70.43*** | 1.25 | 0.07 | -0.75 | - | 0.57(-1.68, 2.81) | 0.50(-0.31, 1.31) |
| Q2, Age 65+ | 71.40*** | 1.60* | -0.40 | -0.91 | - | 0.29(-2.02, 2.60) | 0.69(-0.14, 1.52) |
| Q3, Age 65+ | 73.10*** | 1.30* | 0.10 | -0.77 | - | 0.63(-1.41, 2.67) | 0.53(-0.21, 1.27) |
| Q4, Age 65+ | 73.37*** | 1.65* | -0.12 | -1.20 | - | 0.33(-2.03, 2.69) | 0.45(-0.40, 1.30) |
| Q5, Age 65+ | 76.07*** | 0.90** | 0.08 | -0.35* | - | 0.63(0.17, 1.10) | 0.55(0.38, 0.72) |
| Major Urban, age 40-65 | 68.17*** | - | 14.95** | -16.07** | 2.33** | 1.21(-1.36, 3.77) | -9.10(-11.58, -6.62) |
| Non-major Urban, age 40-65 | 70.60*** | - | 13.22** | -14.51** | 2.22** | 0.93(-0.74, 2.61) | -7.84(-9.45, -6.22) |
| Rural, Age 40-65 | 70.13*** | - | 12.24* | -13.28* | 2.07* | 1.03(-2.24, 4.30) | -7.06(-10.22, -3.90) |
| Major Urban, age 65+ | 71.97*** | 1.15* | -0.12 | -0.60 | - | 0.43(-1.38, 2.45) | 0.55(-0.11, 1.21) |
| Non-major Urban, age 65+ | 73.90*** | 1.90* | 0.15 | -1.23 | - | 0.82(-1.00, 2.64) | 0.67(0.01, 1.33) |
| Rural, Age 65+ | 74.47*** | 1.45* | -0.02 | -0.81 | - | 0.62(-1.64, 2.89) | 0.64(-0.18, 1.46) |

*P<0.05

** P<0.01

*** P<0.001

† Time is on log scale to better approximate a linear trend before 2004

††First observation is excluded to better approximate a linear trend before 2004