eTable 5. Joinpoint results by broad opioid type, white population, 1979-2015

# eTable 5: Joinpoint results in white population by broad opioid type, 1979-2015

## Average APC

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time period | Race | Outcome | Average APC (95% CI) | *P* value |
| 1979-2016 | White | Heroin | 12.20 (10.00, 14.45) | < 0.001 |
| 1979-2016 | White | Methadone | 1.94 (0.33, 3.57) | < .05 |
| 1979-2016 | White | Non-heroin, non-methadone opioid | 10.14 (5.39, 15.09) | < 0.001 |

## Joinpoint Summary (Jump model)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time period | Race | Outcome | APC (95% CI) | *P* value |
| 1979-1999 | White | Heroin | 11.49 (10.13, 12.88) | < 0.001 |
| 1999-2005 | White | Heroin | 0.76 (-6.13, 8.17) | = 0.83 |
| 2005-2010 | White | Heroin | 11.52 (2.48, 21.36) | < .05 |
| 2010-2014 | White | Heroin | 33.47 (22.22, 45.76) | < 0.001 |
| 2014-2016 | White | Heroin | 18.42 (5.48, 32.96) | < .01 |
| 1979-1998 | White | Methadone | -5.39 (-7.26, -3.49) | < 0.001 |
| 1998-2003 | White | Methadone | 43.07 (36.42, 50.05) | < 0.001 |
| 2003-2006 | White | Methadone | 20.22 (10.54, 30.75) | < 0.001 |
| 2006-2011 | White | Methadone | -5.17 (-7.45, -2.84) | < 0.001 |
| 2011-2014 | White | Methadone | -9.35 (-17.17, -0.79) | < .05 |
| 2014-2016 | White | Methadone | -1.00 (-10.16, 9.09) | = 0.83 |
| 1979-1990 | White | Non-heroin, non-methadone opioid | 7.56 (2.18, 13.22) | < .01 |
| 1990-1993 | White | Non-heroin, non-methadone opioid | 22.97 (-27.06, 107.33) | = 0.42 |
| 1993-2009 | White | Non-heroin, non-methadone opioid | 9.31 (8.06, 10.58) | < 0.001 |
| 2009-2014 | White | Non-heroin, non-methadone opioid | 2.68 (-2.50, 8.13) | = 0.30 |
| 2014-2016 | White | Non-heroin, non-methadone opioid | 34.59 (18.37, 53.04) | < 0.001 |

## Joinpoint Model Estimates

### Estimates

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Race | Outcome | Year (95% CI) | Intercept (SE) | Intercept *P* Value | Slope (SE) | Slope *P* Value | Change in Slope (SE) | Slope Change *P* Value |
| White | Heroin | 1979 (Starting year) | -217.34 (11.90) | < 0.001 | 0.11 (0.01) | < 0.001 | NA | NA |
| White | Heroin | 1999 (1981, 2004) | -15.04 (68.81) | = 0.83 | 0.01 (0.03) | = 0.83 | -0.10 (0.03) | < .01 |
| White | Heroin | 2005 (1992, 2008) | -218.40 (82.24) | < .05 | 0.11 (0.04) | < .05 | 0.10 (0.05) | = 0.07 |
| White | Heroin | 2010 (2003, 2011) | -579.55 (85.89) | < 0.001 | 0.29 (0.04) | < 0.001 | 0.18 (0.06) | < .01 |
| White | Heroin | 2014 (2008, 2014) | -338.64 (113.05) | < .01 | 0.17 (0.06) | < .01 | -0.12 (0.07) | = 0.10 |
| White | Methadone | 1979 (Starting year) | 106.85 (19.01) | < 0.001 | -0.06 (0.01) | < 0.001 | NA | NA |
| White | Methadone | 1998 (1981, 2000) | -719.58 (45.81) | < 0.001 | 0.36 (0.02) | < 0.001 | 0.41 (0.02) | < 0.001 |
| White | Methadone | 2003 (1984, 2004) | -371.06 (80.94) | < 0.001 | 0.18 (0.04) | < 0.001 | -0.17 (0.05) | < .01 |
| White | Methadone | 2006 (1995, 2007) | 104.99 (23.47) | < 0.001 | -0.05 (0.01) | < 0.001 | -0.24 (0.04) | < 0.001 |
| White | Methadone | 2011 (2001, 2011) | 195.52 (87.27) | < .05 | -0.10 (0.04) | < .05 | -0.05 (0.04) | = 0.33 |
| White | Methadone | 2014 (2005, 2014) | 18.11 (94.10) | = 0.85 | -0.01 (0.05) | = 0.83 | 0.09 (0.06) | = 0.18 |
| White | Non-heroin, non-methadone opioid | 1979 (Starting year) | -145.74 (49.36) | < .01 | 0.07 (0.02) | < .01 | NA | NA |
| White | Non-heroin, non-methadone opioid | 1990 (1981, 1992) | -412.25 (504.03) | = 0.42 | 0.21 (0.25) | = 0.42 | 0.13 (0.25) | = 0.60 |
| White | Non-heroin, non-methadone opioid | 1993 (1990, 2004) | -177.54 (11.18) | < 0.001 | 0.09 (0.01) | < 0.001 | -0.12 (0.25) | = 0.65 |
| White | Non-heroin, non-methadone opioid | 2009 (2006, 2011) | -51.76 (50.43) | = 0.31 | 0.03 (0.03) | = 0.30 | -0.06 (0.03) | < .05 |
| White | Non-heroin, non-methadone opioid | 2014 (2012, 2014) | -596.89 (125.43) | < 0.001 | 0.30 (0.06) | < 0.001 | 0.27 (0.07) | < 0.001 |

### Summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Outcome | Race | Obs. (N) | Parameters | Degrees of Freedom | Sum of squared errors | Mean squared error |
| Heroin | White | 38 | 10 | 28 | 542.96297 | 19.391534 |
| Methadone | White | 38 | 12 | 26 | 91.00075 | 3.500029 |
| Non-heroin, non-methadone opioid | White | 38 | 10 | 28 | 377.92289 | 13.497246 |