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EFFECT OF A GRADUATED DRIVER LICENSING DECAL PROVISION ON THE RATE OF CRASHES AND CITATIONS AMONG YOUNG PROBATIONARY DRIVERS

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Background Decal provisions have been implemented internationally to facilitate police enforcement of Graduated Driver Licensing (GDL) law restrictions (eg, passenger limits, nighttime curfew). However, a rigorous evaluation of this provision has not yet been conducted. The state of New Jersey (NJ) implemented the first-in-the-US decal provision on 1 May 2010.

Aims/Objectives/Purpose To evaluate the effect of NJ's decal provision on the rate of citations issued for violation of GDL restrictions and police-reported crashes among probationary drivers <21 years of age.

Methods We linked NJ's crash and licensing databases from 1 January 2008 through 31 May 2011 to identify each driver's monthly license status, age, and outcome status. Monthly rates were calculated as the proportion of licensed probationary drivers who experienced the outcome in that month. Negative binomial regression models with robust SEs were used to determine the decal's effect on crash and citation rates.

Results/Outcomes In the first year after the law's implementation, there was a two-fold increase in the GDL citation rate (adjusted RR (95% CI) 2.02 (1.79 to 2.27)), a 9% reduction in the rate of police-reported crashes (adjusted RR (95% CI) 0.91 (0.86 to 0.97)), and a predicted 1624 young probationary drivers whose crashes were prevented by the law.

Significance/Contribution to the field This study uniquely contributes to the international scientific evidence base for GDL by providing the first evidence of the effectiveness of a decal provision in enhancing enforcement of GDL restrictions and reducing probationary driver crashes.