

# Estimating Dynamic Discrete Choice Models with Hyperbolic Discounting, with an Application to Mammography Decisions\*

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## Abstract

This paper extends the semi-parametric identification and estimation method for dynamic discrete choice models using Hotz and Miller's (1993) conditional choice probability (CCP) approach to the setting where individuals may have hyperbolic discounting time preferences and may be naive about their time inconsistency. We implement the proposed estimation method to the decisions of undertaking mammography to evaluate the importance of procrastination in the under-utilization of mammography. Preliminary results show evidence for both present bias and naivety.

**Keywords:** Time Inconsistent Preferences, Intrapersonal Games, Preventive Care

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\*Preliminary. All comments are welcome. Please do not circulate without the authors' permission.

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