Automated reminders reduce incarceration for missed court dates

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Joint work with Madison Coots, Joe Nudell, Julian Nyarko, Emma Brunskill, Todd Rogers, and Sharad Goel.

Background



https://www.thewinlawfirm.com/early-legal-represent ation-in-criminal-cases/

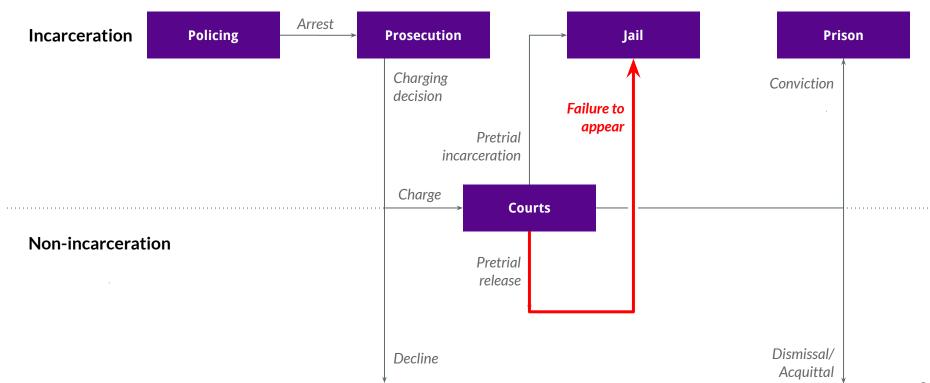
Have you ever forgotten an important date?

Many jurisdictions in the U.S. incarcerate people who miss mandatory court dates.

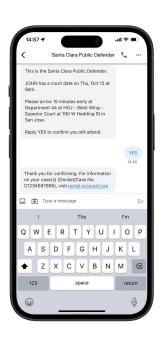
This pretrial incarceration can disrupt employment, pressure defendants into accepting a guilty plea, and can impose substantial collateral costs on their families.

Yet advocates have hypothesized that many people miss court for avoidable reasons—e.g., because they forgot about their court date, or due to financial or transportation barriers.

Incarceration for failure to appear (FTA)



Pretrial behavioral nudges



Text messages show great promise in addressing behavioral barriers and helping people make it to court.

But previous research provides **mixed evidence** that text message reminders are effective at increasing appearance.

[Chivers & Barnes, 2018; Lowenkamp et al., 2018; Fishbane et al., 2019; Emanuel & Ho, 2022; Owens & Sloan, 2023]

And none of these studies demonstrated impacts on pretrial incarceration, though this is arguably the key outcome of interest with these interventions.

Partnership with Santa Clara



To test this question—and help low-income clients make it to court—my lab established a partnership with the Santa Clara County Public Defender Office (SCCPDO).

(Santa Clara is home to San Jose and two million residents, making it one of the largest counties in the country.)

My lab created and deployed an open-source platform at SCCPDO that lets us run behavioral messaging experiments.

Today, I'll discuss three of these randomized experiments at SCCPDO. (One concluded, and two running.)

Experiment #1: Design



Our first experiment **tested whether reminders reduced pretrial incarceration**. (AsPredicted #96,402)

Between 2022–2023, we enrolled over 5,700 clients in our experiment, assigning clients with equal probability to either:

- a) receive automated reminders, or
- b) receive no reminders at all.

Clients in the reminder condition received automated reminders via SMS in the week before their court date.

Reminders cost the defender's office 60¢ per case.

Reminder condition

7-day reminder

This is the Santa Clara Public Defender.

ALEX has a court date on Mon, Nov 24 at 9am.

did not

confirm

confirmed

Please arrive 15 minutes early at Department 44 at HOJ - West Wing -Superior Court at 190 W Hedding St in San Jose.

Reply YES to confirm you will attend.

3-day reminder, did not confirm

REMINDER: ALEX has a court date at 9am on Monday (11/24).

Please arrive 15 minutes early at Department 44 at HOJ - West Wing -Superior Court at 190 W Hedding St in San Jose.

Reply YES to confirm you will attend.

ALEX: You have NOT confirmed you will attend court tomorrow. If you do not appear, the judge may issue a warrant for your arrest.

1-day reminder, did not confirm

You have court at 9am tomorrow. Please arrive 15 minutes early at Department 44 at HOJ - West Wing - Superior Court at 190 W Hedding St in San Jose.

If you will not be at court, call your attorney Jane Doe at 408-999-9999 or our office at 408-299-7700.

Reply YES to confirm you will attend.

confirmed

3-day reminder, confirmed

REMINDER: ALEX has a court date at 9am on Monday (11/24).

Please arrive 15 minutes early at Department 44 at HOJ - West Wing - Superior Court at 190 W Hedding St in San Jose.

1-day reminder, confirmed

REMINDER: ALEX has a court date at 9am tomorrow.

Please arrive 15 minutes early at Department 44 at HOJ - West Wing -Superior Court at 190 W Hedding St in San Jose.

Reminder condition (Vi.)

did not

confirm

confirmed

7-day reminder

Đây là Luật sư Biện hộ công Quận Santa Clara.

ALEX có ngày ra tòa vào Thứ Hai, ngày 24 tháng 11 lúc 9:00AM

Vui lòng đến sớm 15 phút tại Department 44 in HOJ - West Wing - Superior Court ở 190 W Hedding St tại San Jose.

Vui lòng trả lời ĐI để xác nhận rằng quý vị sẽ tham dự. 3-day reminder, did not confirm

LỜI NHẮC: ALEX có ngày ra tòa lúc 9:00AM Thứ Hai (11/24).

Vui lòng đến sớm 15 phút tại Department 44 in HOJ - West Wing - Superior Court ở 190 W Hedding St tại San Jose.

Vui lòng trả lời ĐI để xác nhận rằng quý vị sẽ tham dự.

ALEX: Quý vị CHƯA xác nhận rằng quý vị sẽ tham dự phiên tòa ngày mai. Nếu quý vị không ra tòa, thẩm phán có thể ra lênh bắt quý vi.

1-day reminder, did not confirm

Quý vị có phiên tòa vào lúc 9:00AM ngày mai. Vui lòng đến sớm 15 phút tại Department 44 in HOJ - West Wing -Superior Court ở 190 W Hedding St tại San Jose.

Nếu quý vị không ra tòa, vui lòng gọi cho luật sư của quý vị là Jane Doe at 408-999-9999 hoặc gọi cho văn phòng của chúng tôi theo số 408-299-7700...

confirmed

3-day reminder, confirmed

LỜI NHẮC: ALEX có ngày ra tòa lúc 9:00AM Thứ Hai (11/24).

Vui lòng đến sớm 15 phút tại Department 44 in HOJ - West Wing - Superior Court ở 190 W Hedding St tại San Jose. 1-day reminder, confirmed

LỜI NHẮC: ALEX có ngày ra tòa lúc 9:00AM ngày mai.

Vui lòng đến sớm 15 phút tại Department 44 in HOJ - West Wing - Superior Court ở 190 W Hedding St tại San Jose.

Experiment #1: Results



We found that reminders reduced the number of clients who were incarcerated for missing court by over 20%.

(6.2% of clients in control, vs. 4.8% of clients in treatment.)

This is the first study to find that automated court date reminders reduce pretrial incarceration.

We also found similar effects on appearance rates.

Our study was published in *Science Advances* last month.

(Co-authored with Madison Coots, Joe Nudell, Julian Nyarko, Emma Brunskill, Todd Rogers, and Sharad Goel.)

Experiment #2: Background

We're now running two new experiments to explore whether we can improve on the standard court date reminder.

Our first experiment is motivated by the fact that agencies across the U.S. are using consequence-focused reminders. (i.e., "if you fail to appear, you could end up in jail.")

Scaring people like this may be effective for many clients. But those with **anxiety or paranoia may be deterred by** consequence-focused reminders.

(About 10% of SCCPDO's client population.)

Experiment #2: Honey vs. vinegar

We want to see how a new **supportive reminder** compares with the standard, **consequence-focused reminder**.

(AsPredicted #124,602)

Is a supportive reminder:

- a) More effective for people with mental health issues?
- b) **Equally or more effective** for everyone else?

Informally, we call the new supportive message "honey", and the standard consequence-focused message "vinegar".

Experiment #2: Conditions

"Honey" 7-day reminder

ALEX:

This is the Santa Clara Public Defender.

You have a court date Mon, Nov 24 at 9am. Please arrive 15 minutes early.

Location: Department 44 @ HOJ - West Wing - Superior Court 190 W Hedding St, San Jose.

If you are worried about your court date, please contact your attorney Todd Rogers at 408-999-9999, or our office at 408-299-7700.

We know court can be stressful. When you appear, we can help you fight or settle your case.

"Vinegar" 7-day reminder

ALEX:

This is the Santa Clara Public Defender.

You have a court date Mon, Nov 24 at 9am. Please arrive 15 minutes early.

Location: Department 44 @ HOJ - West Wing - Superior Court 190 W Hedding St, San Jose.

If you have questions about your court date, please contact your attorney Todd Rogers at 408-999-9999, or our office at 408-299-7700.

If you do not appear, you could be arrested on a warrant and might spend time in jail.

Control (no reminder)

^{*} Similar treatments occur three days and one day before the client's court date.

Experiment #2: Pre-survey

Before we started, we asked public defenders at SCCPDO whether they thought honey or vinegar would be more effective, and for whom.

The 20+ responses were equally split on which variant they thought would be more effective overall.

But nearly 80% of respondents said clients with anxiety, paranoia, or other mental health issues were likely to respond poorly to the **vinegar** variant.

(Results from this experiment expected next year.)

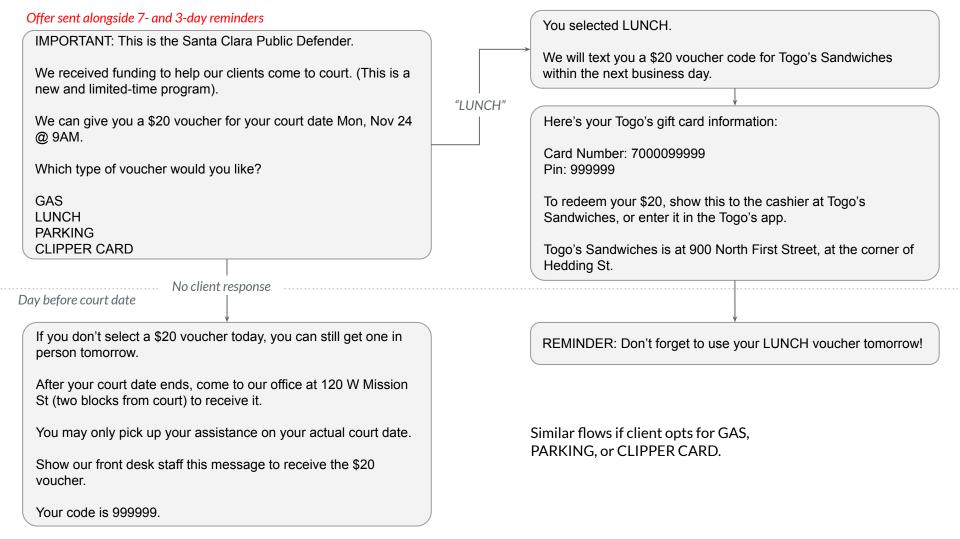
Experiment #3: Background

Our third behavioral messaging experiment is a test to see if **offers for financial assistance** can improve pretrial outcomes. (Open Science Foundation #c8tq4)

We are testing whether an offer to receive \$20 before each court date is more effective than reminders alone.

The benefit is provided via gas, lunch, parking, or transit vouchers. We endeavor to get vouchers in the hands of clients however possible.

(Results from this experiment also expected next year.)



Takeaways

Imagine someone who made a bad mistake one night—and then forgot to attend an important court date.

A temporary brush with the justice system can quickly ramp up to something much more serious.

We've shown that behavioral messaging is an inexpensive and effective way to avoid harmful outcomes for low-income people in the justice system.

Our research is now focused on identifying best practices for behavioral messaging in the pretrial context.

Thank you!

This research is joint work with Madison Coots, Joe Nudell, Julian Nyarko, Emma Brunskill, Todd Rogers, and Sharad Goel.



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SCIENCE ADVANCES | RESEARCH ARTICLE

PUBLIC POLICY

Automated reminders reduce incarceration for missed court dates: Evidence from a text message experiment

Alex Chohlas-Wood¹*, Madison Coots², Joe Nudell², Julian Nyarko³, Emma Brunskill⁴, Todd Rogers². Sharad Goel²

Millions of Americans must attend mandatory court dates every year. To boost appearance rates, jurisdictions nationwide are increasingly turning to automated reminders. However, previous research paints an incomplete picture of their effectiveness—in particular, there has been little work assessing the impact of reminders on downstream arrests and incarceration. In partnership with the Santa Clara County Public Defender's Office, we randomly assigned 750P public defender clients to either receive automated bett message reminders (treatment) or not receive reminders (control). We found that reminders reduced warrant issued for missed court dates by -20%, with 1.21% of clients in control issued a warrant companed to 9.7% of clients in treatment. Further, we found that incarceration from missed ocurt dates dropped by a similar amount, from 6.6% in control to 5.2% in treatment. The effectiveness of reminders bolsters the theory that lapses in memory or comprehension contribute to missed ocurt appearances.

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NTRODUCTION

In the United States, after a person is arrested and charged with a crime, they are either held in jail as their case proceeds or they are released and asked to attend court of their own accord. While many released defendants to indeed attend court—as is legally required—some fail to do so. Failing to appear (FFA) at a required court date is a crime in nearly every state (1). FFA rates typically range from 10 to 20% per court date, so, FFA rates are proting rates as high as 50% per court date, so, FFA screase inefficiency for the court system more broadly, increasing costs and exacerbating delays in US courts (4).

An FTA can prompt judges to issue a warrant mandating the defendant's arrest—hereafter called a"bench warrant"—at their next encounter with law enforcement, Judges often issue a bench warrant when a defendant does not attend a mandatory cour date, although in some states they can decline to do so if they believe the client has sufficient justification for not being present (e.g., due to sickness), Although FTA itself is a minor infraction, bench warrants are the most common open warrant type across much of the United States (5-8).

Once a person is arrested on a bench warrant, they are often held in jail to guarantee their appearance in court. Arrests on open bench warrants are the most common reason for jail admission in many American jurisdictions, comprising 14 to 30% of all bookings (9-14). This pretrial incarceration can impose social and economic hardships on defendants and their families—including housing loss, family strain, and social stigma (15, 16)—even as evidence suggests that time in jail may not deter future court absences (17). Pertrail incarceration has also been found to increase recidivism and reduce employment and wealth (18–22). The consequences of missed court dates may fall particularly hard on racial minorities, given the disproportionate involvement of magninalized communities in the criminal legal system (5, 16, 23, 24). Missed court dates likely result from a combination of intentional noncompliance, logistical challenges (e.g., siesues arranging) intentional noncompliance, logistical challenges (e.g., siesues arranging).

work schedules, finding childcare, or securing transportation to court), and forgetfulnes (25-28). This last hypothesis—forgetfulnes established patterns of human behavior in other domains, including health care, finance, politics, and education (20-38). Court date reminders are intended to mitigate this forgetfulness and help neonle shall for uncomine court oblesations (39).

Nearly half of all counties nationwide have implemented or plan to implement court date reminders via text message, phone call, mall, or some other method (40). Studies have shown that text message reminders can be effective for nondefendant participants in the criminal legal system (41, 42). For example, an experiment in Arkanass found that text message reminders reduced missed probation and parole appointments by more than 40% (42). There are also several studies on the effectiveness of reminders sett to defendants via resource-intensive methods like a letter or a telephone call (43–51). Does such study found that postcard reminders reduced nonappearance rates by up to 34% in an experiment with misdementor defendants in Nebraska (31) [see (25, 35) for reviews of the measure defendants in Nebraska (31)] see (25, 35) for reviews of the measure defendants in Nebraska (31) [see (25, 35)] for reviews of the measure defendants in Nebraska (31) [see (32, 35)] for reviews of the measure reminders is limited, although it is one of the most cost-effective wave of sendiff

jurisdictions nationwid Previous randomiz plete picture of the ef court appearance rates missing court (Table 1 nificant and meaningfu reminders (54, 55), v in FTA rates, althoug cant (3, 56). Another significant-warrant r sage reminder (57). In a statistically significant violations and misde cases often comprise a Only one of the above reminders on pretrial significant effect on ja ture raises questions a



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