

If you text them, will they come?

By Margaret Hagan, 2019

This article reviews the promise for mobile technology to improve people's participation in a government process and their legal capability while navigating it. When people get sued or charged with a crime, they do not necessarily participate in the legal process that follows. In many types of legal cases, from traffic tickets, to eviction and debt collection lawsuits, to criminal felonies, there are high 'Failure to Appear' rates, in which people do not attend a required hearing or respond by a deadline. Past interventions to lower FTA rates have included letter and phone calls, and have demonstrated that timely reminders can facilitate people's participation in the process and avoidance of FTA consequences (like fines, warrants, and judgments against them). This study presents a novel use of mobile technology, in the form of automated text message-based procedural coaches, to people going through a lengthy divorce process without a lawyer.

Text Messages for legal self-help

Our team at Stanford Law School — the Reg Lab and the Legal Design Lab — is working with public interest legal organizations who are interested in sending text message reminders to their clients about upcoming legal appointments. This could be for a hearing, a meeting, or other important event.

Our team is studying whether text-based reminders are effective in improving people's attendance at legal events. We provide the technology to send automated text message reminders, and we cover the costs of our partners' text messaging. This is part of a randomized control trial, in which our team examines the impact of text reminders on attendance.

Currently, we have established and are studying 4 different kinds of text messages for legal self-help:

- 1) Hearing reminders, that are one-way communications from a court, self help center, public defender's office, or legal aid organization to a litigant or defendant, about their upcoming date, time, location, and requirements for a hearing. Usually this 3-5 messages in the 10 days, 5 days, 3 days, and 1 day before the hearing.
- 2) Procedural coaching, that are from a self-help center to a litigant, and that regularly checks in with them about their case, deadlines, past filing's acceptance, etc. These are a series of messages that last over a longer term relationship with the litigant, like in the year or so that a divorce may take.
- 3) Intake line, in which a person asks a series of questions to determine if they are eligible for an organization's services, and are then put in a queue for that org's intake process
- 4) Services Referral hotline, that lets a user text in with a short keyword like 'EVICTION' or 'COURT', and then the organization automatically has them choose among what kinds of

help or referrals they need -- and then sends back the contact information on text messages

We are running these series of partnerships and studies to determine if text messages are effective ways to keep people engaged in their complicated legal process, and to ensure that they are able to correctly, efficiently comply with procedural requirements. It is also to see if it improves their sense of procedural justice and relationship with the justice system.

How can we measure text messages' effectiveness in legal self-help?

Our current study design has both quantitative measures of messages' effectiveness and qualitative ones. In our study, people who sign up to receive text message reminders are randomly selected to either receive them or to not receive them. This is the random assignment stage, to ensure that we have a control group (those who opted in but do not receive the texts) that is similar to the treatment group (those who opted in but do receive the texts). Once we have these two groups assigned, we can measure what differences occur based on the treatment of 'receiving procedural reminder text messages'

The quantitative measure is about **timely compliance with procedural requirements**. Do people who receive text messages (versus those who do not) better meet deadlines for filing, meetings, and other legal procedure? Do they finish their overall legal process more efficiently than those who do not? Do they complete the required procedural tasks correctly? This measurement occurs by comparing the lists of people who received messages with the case events and outcomes maintained in the case management system.

In our studies, we have study participants who have received text message updates about their procedure through their divorce case, as well as those who did not receive text messages. At a designated 6-month period after the litigant has filed a petition for divorce or replied to a divorce petition, we will send them (i) a **brief survey** to assess their experience of the court's divorce process, as well as (if applicable) their experience of the texting intervention. In addition, we will recruit some participants for (ii) a longer **in-person interview, phone interview, or video interview** about their experiences.

For all participants in the study, including both those who have received text reminders and those who have not, we will send them a brief set of survey questions over text message, and recruit for longer qualitative interviews. In the survey and interviews, we will inquire about their sense of procedural, informational, and outcome justice.

We will rely on established procedural justice survey instruments which originated with Tom Tyler's study of the quality of experiences in criminal justice,¹ and the effects this had on people's willingness to abide by agreements and their sense of the court's legitimacy. We will

¹ Sunshine, Jason, and Tom R. Tyler. 2003. "The Role of Procedural Justice and Legitimacy in Shaping Public Support for Policing." *Law & Society Review* 37 (3). Wiley/Blackwell (10.1111): 513-48.

use instruments that have been refined for divorce and family law situations, that evaluate the litigant's experience of the process, information, and outcomes.²

Typically, procedural justice in the courts is examined through several lenses, of how litigants experience the legal system in regard to:

- Voice in the process, Sense of Empowerment in the Process
- Neutrality of the system
- Respect given to people
- Trustworthiness of the system as an authority

Most survey and interview instruments evaluating the outcomes of a new litigant-facing court technology evaluate for whether the instrument changes litigants' satisfaction with the court's role in resolving disputes; their sense of informational transparency about the process; their satisfaction with the outcome; their willingness to abide by decisions and agreements that emerged; and their sense of the court's overall legitimacy.

- **Satisfaction with the Court's Role**
- **Outcome Satisfaction**
- **Willingness to abide by the decisions and agreements**
- **Sense of Court's Legitimacy**

For example, the Measuring Justice chapter of The Oxford Handbook of Justice in the Workplace,³ summarizes the past several decades of justice-measurement instruments from court, government, criminal justice, and organizational research. The authors Jason Colquitt and Jessica Rodell identify several main groups of justice questions to use in the evaluation of a new initiative intending to promote justice for people.

Procedural Justice -- is the procedure used to make decisions fair? To what extent:

- 1. Have you been able to express your views during your divorce case?
- 2. Have you been able to influence the decisions arrived at in your divorce case?

² This analysis of Dutch people's assessment of the justice they received in using standard divorce versus online divorce mediation treatment operationalizes the methodology proposed in the Handbook listed below, to measure procedures, outcomes, and costs of a legal process. Gramatikov, Martin, and Laura Klaming. n.d. "Getting Divorced Online: Procedural and Outcome Justice in Online Divorce Mediation TISCO Working Paper Series on Civil Law and Conflict Resolution Systems." This book builds upon the TISCO/HiiL group in Netherland's work in bringing more standard methodology for assessing the quality of justice in terms of procedure, outcomes, and costs. It is meant more for practitioners, but includes the survey instruments they have been refining. Gramatikov, Martin, Maurits Barendrecht, Malini Laxminarayan, Jin Ho Verdonshot, Laura Klaming, and Corry van Zeeland. 2010. A Handbook for Measuring the Costs and Quality of Access to Justice. Maklu and TISCO. <http://lawforlife.org.uk/wp-content/uploads/2013/05/handbook-for-measuring-the-costs-and-quality-of-access-to-justice-271.pdf>. This meta-analysis article examines how researchers have evaluated outcomes for people who have received the treatment of 'mediation' versus those without. Anne Shaw, Lori. 2010. "Divorce Mediation Outcome Research: A Meta-Analysis." *CONFLICT RESOLUTION QUARTERLY* 27 (4). doi:10.1002/crq.20006.

- 3. Was the divorce procedure carried out consistently?
- 4. Was the divorce procedure free of bias?
- 5. Was the divorce procedure based on accurate information?
- 6. Could you appeal the decree reached by the divorce procedure?
- 7. Did the divorce procedure uphold ethical and moral standards?

Distributive Justice -- were the outcomes fair? To what extent:

- 1. Did the divorce process' outcome reflect the work you put into the process?
- 2. Was the divorce process' outcome appropriate for the situation?

Interpersonal Justice -- were the interactions you had with people fair? To what extent:

- 1. Were you treated in a polite manner by the court staff?
- 2. Were you treated with dignity by the court staff?
- 3. Were you treated with respect during the divorce process?
- 4. Did anyone on the court staff make improper remarks or behavior?

Informational Justice -- did you get a fair explanation of the process? To what extent:

- 1. Was the court candid when communicating with you?
- 2. Did the court explain decision-making procedures thoroughly?
- 3. Was the court's explanations regarding procedures reasonable?
- 4. Did the court communicate details in a timely manner?
- 5. Did the court tailor communications to you to meet your needs?

We use a variation of these questions in our study design -- condensed to a brief set of questions for our 5 minute survey, and then asked more fully in our long interviews.

What other groups are using text messages for legal self-help?

Cleveland Legal Aid outcome surveys

Staff from Legal Aid Society of Cleveland have presented on their LSC/TIG-funded work to use text messages to gather outcome data from clients. They received very high response rates from clients when using SMS, rather than paper-based or email-based surveys. Their work and survey design will directly influence how we set up our outcome surveys over text message in our project.

LSC's report on the program:

<https://medium.com/innovations-in-legal-aid/cleveland-legal-aid-learned-the-outcomes-of-its-brief-services-through-texting-4c24202d7a7b>

Legal Aid Society of Cleveland's program page: <https://lasclew.org/contact/textlegalaidcle/>

NYC Criminal Court FTA Rate

The University of Chicago worked with the courts in NYC to increase the rates of appearance of criminal defendants at their hearings, through the use of different kinds of text messages.

http://urbanlabs.uchicago.edu/attachments/store/f0f9210ecb1a295be0af54cee2c7364564c570a857a33d758a162d6faafd/142-954_NYCSummonsPaper_final.pdf

Their Protocol

This was a two-step study. First, the group redesigned the NYC summons forms to make the most relevant information stand out. Because the new summons was introduced in March 2016 and universally adopted by July 2016, the team focused on the narrow time window around the new form adoption, comparing people who received summonses just before and just after their issuing officer switched to the new form. The team used a regression discontinuity design to compare outcomes between people issued an old form and a new form. It determined that those who received the new summons form had an FTA rate of 13%, or 6.4 percentage points lower than those who happened to receive the old summons form because their officer hadn't switched yet.

Second, the team created text message reminders corresponding to various behavioral barriers that cause people to miss their court dates--i.e., people forget, have mistaken beliefs about how often people skip court, and overweigh the immediate hassles of attending court while ignoring the downstream consequences. It then designed multiple sets of text messages to determine which messaging is most effective at reducing FTA. Some were sent before a person's scheduled court-date (pre-court messages) and some messages were only sent if they had missed their court data (post-FTA messages). In order to test which messages were most impactful on FTA rates, summons-recipients who provided their phone number (only 13% of all summons recipients did so in NYC) were randomly assigned to receive some combination of pre-court and/or post-FTA messages, or no message at all.

The pre-court message sets consist of three different texts, sent seven, three, and one day(s) before the scheduled court date. This schedule was chosen in order to prompt recipients to take preemptive action for attending court (i.e. scheduling time away from work or securing childcare) without reminding them too early, which could lead to procrastination. Some pre-court messages emphasized the consequences of failing to appear and provided information about what to expect at court ("consequences"), while others focused on helping people develop concrete plans for appearing in court ("plan-making"). A third set combined consequences and plan-making messages. All messages helped to address inattention or forgetting the court date.

Anyone in NYC who was issued a summons and provided their cell phone number was eligible to receive text-message reminders. Approximately 20,000 summons recipients were randomized to receive one of the the pre-court or post-FTA message sets, or no messages (the "comparison group"). All effects observed were in addition to the gains in court attendance already realized through the behavioral summons form redesign.

Pre-Court Messages

CONSEQUENCES MESSAGES

7 days before court

Helpful reminder: go to court Mon Jun 03 9:30AM. We'll text to help you remember. [Show up to avoid an arrest warrant.]¹ Reply STOP to end texts. www.mysummons.nyc

3 days before court

Remember, you have court on Mon Jun 03 at 346 Broadway Manhattan. [Tickets could be dismissed or end in a fine (60 days to pay).] [Missing can lead to your arrest.]³

1 day before court

At court tomorrow at 9:30AM [a public defender will help you through the process.] [Resolve your summons (ID#####) to avoid an arrest warrant.]⁴

- ¹ Makes the costs of FTA more salient to overcome present bias.
- ² Reduces the ambiguity and perceived costs of attending court.
- ³ Highlights penalties to overcome present bias and the mental model that you don't need to go to court for minor violations.
- ⁴ Repeats the consequence to keep the cost of missing court top-of mind, reinforcing that despite the mismatch between crime and punishment, you must attend to avoid a warrant.

PLAN-MAKING MESSAGES

7 days before court

Helpful reminder: go to court on Mon Jun 03 9:30AM. [Mark the date on your calendar and set an alarm on your phone.] Reply STOP to end messages. www.mysummons.nyc

1

3 days before court

You have court on Mon Jun 03 at 346 Broadway Manhattan. [What time should you leave to get there by 9:30AM? Any other arrangements to make? Write out your plan.]

2

1 day before court

You have court tomorrow for summons ID#####. [Did you look up directions to 346 Broadway Manhattan?] Know how you're getting there? Please arrive by 9:30AM.

3

- 1 Encourages people to set reminders to help them remember.
- 2 Aids people to think ahead and overcome potential barriers (or costs) to showing up to court.
- 3 Helps plan how to get there and makes the act of going more concrete.

COMBINATION MESSAGES

7 days before court

Helpful reminder: go to court Mon Jun 03 9:30AM. We'll text to help you remember. Show up to avoid an arrest warrant. Reply STOP to end texts. www.mysummons.nyc

3 days before court

You have court on Mon Jun 03 at 346 Broadway Manhattan. What time should you leave to get there by 9:30AM? Any other arrangements to make? Write out your plan.

1 day before court

Remember, you have court tomorrow at 9:30AM. Tickets could be dismissed or end in a fine (60 days to pay). Missing court for ##### can lead to your arrest.

These messages, combining elements from both sets above, address present bias, mental models, and plan-making as previously described.

Post-FTA Additions

CONSEQUENCE MESSAGE

- 1 [Since you missed court on Jun 03 (ID#####), a warrant was issued.]
- 2 [You won't be arrested for it if you clear it at 346 Broadway Manhattan.]
www.mysummons.nyc

Sent when a warrant is triggered by an FTA

- 1 Notifies of the serious consequence that has occurred.
- 2 Encourages action to resolve the open warrant.

SOCIAL NORMS MESSAGE

- 1 [Most people show up to clear their tickets but records show you missed court for yours (ID#####).]
Go to court at 346 Broadway Manhattan.
www.mysummons.nyc

Sent when a warrant is triggered by an FTA

- 1 Provides feedback that their behavior goes against the norm.

Treatment Groups

TEXT MESSAGE SETS

PRE-COURT MESSAGES

Combination Messages	Consequences Messages	Plan-making Messages	Comparison Group (No Messages)
1	1	1	
2	2	2	
3	3	3	

If FTA at initial summons court date

POST-FTA MESSAGES

Group A Consequences	Group B Consequences	Group C No Message	Group D Consequences	Group E No Message	Group F Consequences	Group G Social Norms	Comparison No Messages

Their Hypotheses

While no explanation was given for why the team chose to send the messages at 7, 3, and 1 day before court, the team conducted quantitative and qualitative research using a behavioral diagnosis methodology to uncover four main barriers contributing to FTAs: mental models, present bias, social norms, and inattention. Each of the barriers are explained below:



Mental Models

First, some recipients believe that receiving a ticket for a minor offense and having to attend court for it is unfair. The crime feels misaligned with the punishment. Other recipients receiving a ticket for a minor offense did not expect a warrant to be issued for not attending court. That is, having to go to court for a seemingly minor offense (e.g., being in a park after hours) doesn't match with people's "**mental model**" of what necessitates a court appearance, much less an arrest warrant.



Present Bias

Second, the immediate financial or psychological costs of attending court, such as taking time off work or fears around what may happen at court, outweigh the (often unknown) consequences of not appearing. Many people we interviewed weren't aware that a warrant was a consequence of FTA, but even among those who were aware of the warrant, some still reported missing court because immediate costs of going loomed larger than the risk of getting arrested in the future. This focus on immediate costs over future ones, even when those future costs are objectively larger, is known as "**present bias.**"



Social Norms

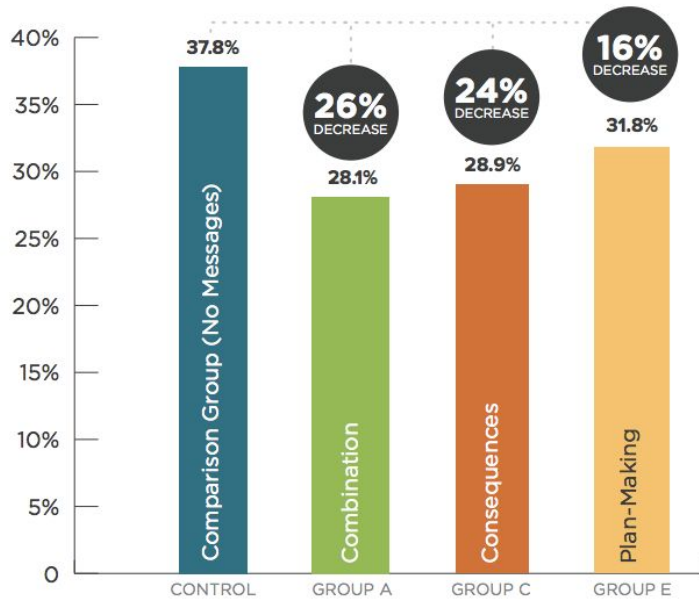
Third, there is a misperception about court attendance. A majority of interviewees hold the misperception that most people do not attend their court dates, which (consciously or unconsciously) may influence their own decision to attend or not. Prior work from behavioral science shows that the perceived behavior of peers ("**social norms**") can have a strong influence on our decisions and actions.



Inattention

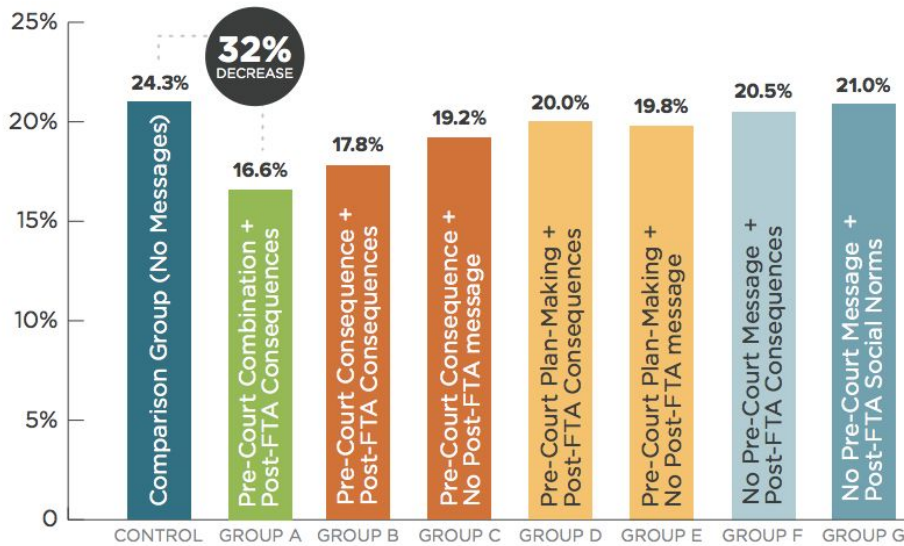
Fourth, the long lag time between receiving the summons and attending court leads many to forget. In NYC, the court date is typically 60 to 90 days after the ticket was issued, which is plenty of time for people to forget about their court date or the summons altogether. This forgetting can be attributed to "**inattention.**"

FTA Rate by Type of Message



The difference in FTA rates between the comparison group and any treatment arm is significant at the 1% level ($p < 0.01$)

Open Warrant Rate 30 Days After Court Dates



The difference in FTA rates between the comparison group and any treatment arm is significant at the 1% level ($p < 0.01$)

Outcomes

(taken from their study directly):

We found that receiving any pre-court message reduces FTA on the court date by 21%. The combination messages, using elements of both the consequences and plan-making

sets, were the most effective, reducing FTA by 26% (from 38% to 28%). This 26% FTA reduction is measured on the court date, and comes after receiving the sequence of three pre-court messages.

We also looked at the impact 30 days after the court date, as some summons recipients show up to court to clear their warrants after their scheduled court date. Individuals receiving the combination messages receive a post-FTA message if they fail to appear in court on their scheduled date. Relative to receiving no text message, we find a 32% reduction in open warrants for people who received a combination message set and a post-FTA message (from 24% to 17%). This reflects both the change in FTA on the court date, as well as subsequent court appearances to clear warrants within 30 days of the scheduled court date.

There is also a question of whether timing of messages matters for reducing FTA—are messages more effective when they are sent before missing a court date or after? We find that post-FTA messages alone are helpful, leading to a 15% reduction in failures to return to court within 30 days, but not as helpful as pre-court messages. Among post-FTA messages, the consequences message (16% reduction) was more effective than the social norms message (14% reduction).

Setup/Scaling

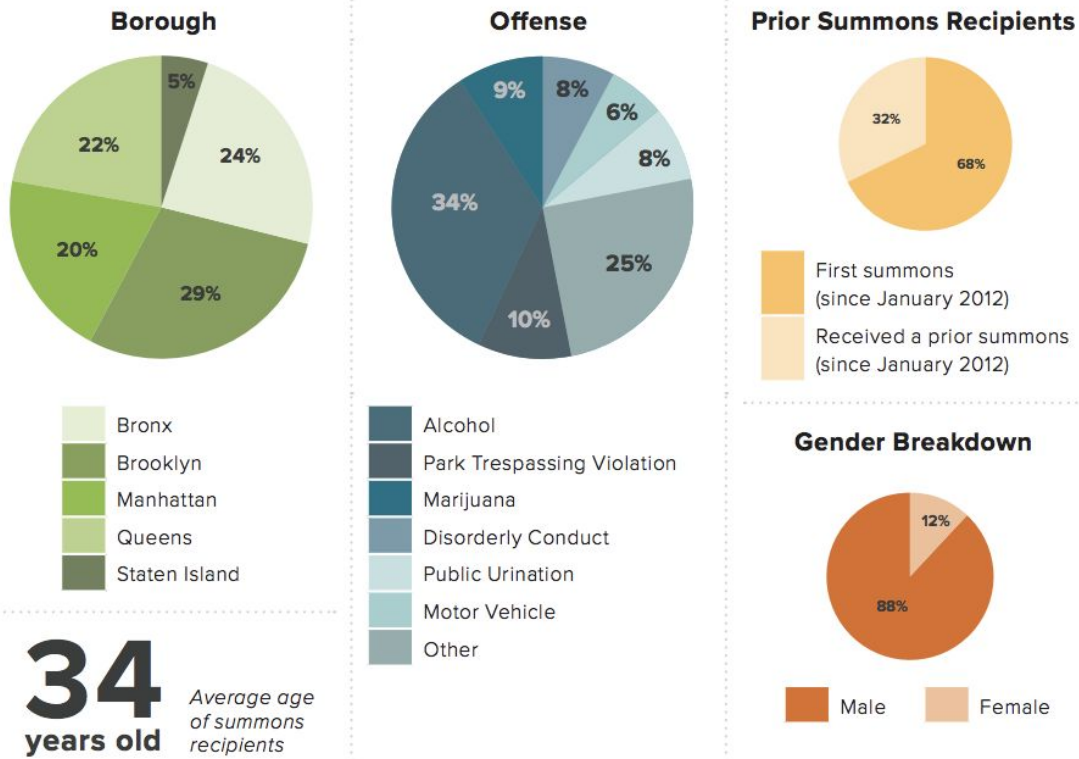
The authors note that each text message costs less than one cent (\$0.0075). Sending all 2014 summons recipients three messages would have cost less than \$7,500. Email sent to study authors to learn more about text-messaging system used.

Usage Demographics

They collected data on who generally received summonses between January 2016 and June 2017, but did not attempt to note any specific demographic details about which individuals were more likely to respond to treatment. The graph that the team published of the summons recipients follows:

Who Receives Summonses? Descriptive Statistics of Summons Recipients⁵

Summons recipients between January 2016 and June 2017



Other Insights: Did they have any other insights about best content to include, timing to send them, how to phrase or converse, etc.?

The team wanted to explore “personalized reminders.” Rather than identify the intervention with the largest average effect and administer the same “nudge” to everyone, the team hypothesized that they might receive larger gains by tailoring reminders to individuals so that a given individual receives messages specific to the barriers that they are experiencing--e.g., first-time summons recipients may be more responsive to consequences messages.

Bay Area Legal Aid group, reminders and surveys

<http://simlab.org/blog/2017/05/23/texting-for-legal-aid/>

Their Protocol: (Taken directly from the report above)

To trigger an appointment reminder, staff visit a special screen in their case management system, pre-filled with some information about the client. Staff fill in an

appointment time and date, select an office from the dropdown menu, add an extra note if needed, and send the information on.

That information is passed to Frontline, which sends one reminder to the client right away, and a second reminder one business day before the appointment (giving the client time to reschedule if need be). The reminder includes the address and phone number of the office the client is scheduled to visit. Data about office addresses and phone numbers are stored in FrontlineCloud, where they can be easily edited by non-technical staff.

Clients can also trigger a manual reminder at any time by texting in **remind**. In the recipes for download, we've included a feature that can remind clients of what documents they need to bring, tailored to the specific type of case. For this initial period, we haven't used the feature, but instructions to activate it are in the documentation.

Late in the project, we noticed that LAL staff were using the appointment reminders feature to create reminders for outside referrals. We thought this was a great and unexpected use of the system, so we added a twist to help: leaving the office dropdown blank would cause Frontline to automatically recognize the request as a referral rather than an appointment with BayLegal, and send appropriately tailored reminders.

Clients were also sent follow-up surveys, which had a 40% completion rate.

Their Hypotheses:

No general hypothesis other than that "a text-message reminder can help to ensure that clients have all the information that they need for their appointments in a form that can be referenced later."

Outcomes:

"Appointment reminders did not appear to have much of an impact on the no-show rate, which hovered around 10%." They didn't measure any other outcomes.

Court in Hennepin County, Minnesota

<http://napco4courtleaders.org/2018/02/hennepin-county-mn-district-court-reminder-system-cuts-failures-to-appear/> (email sent to Marcy Podkopacz)

Their Protocol:

Most of the judicial divisions using this approach send two reminders per hearing, one three days before and the second a day before the appearance date.

They contracted with an outside vendor, and the court put in a lot of detailed information into the vendor's system. They put together templates of what we wanted our texts to say (160 character limit--in case people get charged). The court wanted to make sure people didn't get charged large amounts for the text.

Example Reminder Content:

Email: "You have a hearing on date at location name at location address. If you have any questions please call...or visit"

Text (Criminal): Hennepin Court Reminder: Hearing date @ hearing time. ? Call XXX:

Text (CHIPS--Dependency): Reminder: You have a child protection hearing scheduled for date @ time. ? Call _____ and .

There is also a text about how to stop reminders, which the court also tracks.

Which Courts are doing what message schedule?

98% of reminders go out in criminal and traffic. 500,000-600,000 cases per year. Most time there is at least one appearance. Sometimes it is 3-5.

Criminal defendants: 3 days out and 1 day out messages

Housing court, they send out one reminder out one day ahead. Sending it to the defendant.

Conciliation they were sending out 7 days and 1 days. Started out sending to plaintiff and the defendant. But they ran into issues for service so stopped sending them on that schedule, now it's 3 and 1 days.

Family cases (except domestic: 7 days and 2). Petitioner and respondent. Not serving to Order for Protection.

Domestic abuse: court doesn't send

Delinquency: 3 and 1 days. They send it to the juvenile, the legal custodian, the foster parent, the father, the mother and any other relative listed in the case.

CHIPS: 3 and 1. They are sending it to the adjudicated father, alleged father, the protected person, the father, the mother, interested observer.

Adoption: Only sending out 1 email, no texts. (3 days out). Sending it to the Guardian ad litem, the petitioners, the social worker.

What is the internal logic behind this timeline? Mainly because family cases are represented -- the court believes it better to send them as close as possible to the event.

They also have an E-alert system in case there was an emergency like floods, Superbowl, traffic, or snowstorm.

Outcomes: We didn't look at demographics, but we did look at cost. We reduced the number of bench warrants in an 18 months period by 24%. Per hearing it was about 10%. The kind of cases that we see the most failure to appear is felony level property (white defendants) and drug cases (minority). The other big area is out-of-custody misdemeanor (trespassing, theft...) When someone gets arrested on a FTA, they spend on average 2 days in jail, costing the court 2 million per year. Calculating the cost of failure to appear. We also looked at defendant's side of it--they are missing work, collateral consequences--could lose job.

Other Insights

One of the things that needs to get worked on is that the federal government has a pass from the FTC, but the state governments do not have that pass. So, if someone decided to sue us they could do it the same way. Collecting the opt-in is really important. It would be really helpful if they had the same cover. At every appearance we are going through contact information, but then we have to keep that sheet that shows that they are opting in. This is a lot of paper for a paperless court.

Inventory of Text Message systems in US

New York Criminal Justice Agency, Inc., (Interesting because they did "same day" calls and texts)--since these were denoted as "wake-up" calls, it seems that the hypothesis is that these calls are primarily to remind people who have already committed to coming to court rather than to change the minds of people who have not yet decided if they would attend.

Sent out reminder calls and texts (reminder call three days before and a wake up call made between 6am and 10am on the morning of the scheduled appearance. These were supplemented by text-messages sent out two days prior to a court appearance and again on the day of the appearance.

New York City Criminal Justice Agency (2013). Annual report 2013. New York: Authors.
Available at
http://www.nycja.org/lwdcms/docview.php?module=reports&module_id=1410&doc_name=doc .

Court systems and legal aid actors who have texting reminder

- Court systems who are texting as of Feb. 2018,
<http://www.bostonglobe.com/metro/2018/02/18/some-court-systems-are-texting-people-get-them-show-could-work-here/qVjl7179AXZ9aoplUr5iWI/story.html>
 - Oregon:
<http://www.betagov.org/completed-trials/Clackamas-County-Text-Message-Trial-Snapshot.pdf>
 - California:
<http://www.betagov.org/completed-trials/Monterey-Superior-Court-Trial-Snapshot-7.pdf> (Spanish speakers may benefit more?)
 - Minnesota
<http://napco4courtleaders.org/2018/02/hennepin-county-mn-district-court-ereminder-system-cuts-failures-to-appear/> (email sent to Marcy Podkopacz)
- IT builds off of automated letters and robo-calls,
<http://www.ncsc.org/~media/Microsites/Files/PJCC/PJCC%20Brief%2010%20Sept%202017%20Court%20Date%20Notification%20Systems.ashx>
- New York city Criminal Court and Supreme Court report that they have begun this work,
<http://www1.nyc.gov/office-of-the-mayor/news/058-18/new-text-message-reminders-summons-recipients-improves-attendance-court-dramatically> -- Report here,
https://urbanlabs.uchicago.edu/attachments/store/f0f9210ecb1a295be0af54cee2c7364564c570a857a33d758a162d6faafd/142-954_NYCSummonsPaper_final.pdf
- Ozaukee Wisconsin -- District Court Hearings
<https://www.co.ozaukee.wi.us/2351/Text-Message-Hearing-Reminders>
- Spokane County, Washington - Criminal Court Hearings
<https://www.spokanecounty.org/FormCenter/District-Court-10/Court-Date-Text-Reminder-Optin-225>
- Madison, Wisconsin for FTA:
http://host.madison.com/ct/news/local/govt-and-politics/court-date-reminder-text-messages-may-be-reducing-failure-to/article_af2e9a9f-d77f-57c6-a793-9aa37cb2c9a6.html
- Cook County:
<https://www.dnainfo.com/chicago/20171004/downtown/cook-county-court-system-timothy-evans-chief-judge-text-message-automated-phone-call-reminders>
- Monterey County superior court,
<http://www.betagov.org/completed-trials/Monterey-Superior-Court-Trial-Snapshot-7.pdf>
- In Legal Aid Groups, with support from LSC,
http://www.slate.com/articles/technology/future_tense/2012/12/legal_aid_text_messaging_automated_call_backs_and_other_tech_enhanced_support.html
- CourtBot for Traffic court, <https://www.codeforamerica.org/products/court-bot> , in Tulsa,
<http://www.news9.com/story/35046174/courtbot-app-launches-to-help-tulsans-avoid-failure-to-appear-fines>

Text Messages in Medical Reminders and Hospital-Patient Care

Kimberly R. Joo, Joo, K. R. (2017). *Text Message Follow-Up Reminders in the Pediatric Urgent Care*. . Wright State University, Dayton, OH,
https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1019&context=nursing_dnp

Their Protocol:

SMS sent to patients in the pediatric urgent care with discharge diagnoses of wheezing, bronchospasm, and/or asthma exacerbation

Outcomes:

Baseline data showed a four-week follow-up rate of 53%; post-intervention rate was 57.8%. 4.8% increase not statistically significant.