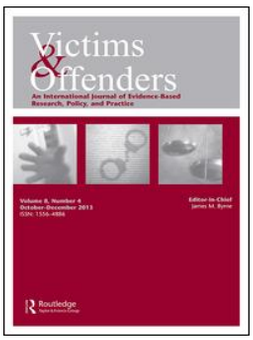

Routledge
Taylor & Francis Group

Victims & Offenders

An International Journal of Evidence-based Research, Policy, and Practice

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/uvao20

Adaptations to COVID-19 in Community Corrections Agencies across the United States

Jill Viglione , Lucas M. Alward , Ashley Lockwood & Sara Bryson

To cite this article: Jill Viglione , Lucas M. Alward , Ashley Lockwood & Sara Bryson (2020): Adaptations to COVID-19 in Community Corrections Agencies across the United States, Victims & Offenders, DOI: 10.1080/15564886.2020.1818153

To link to this article: https://doi.org/10.1080/15564886.2020.1818153

VICTIMS & OFFENDERS
https://doi.org/10.1080/15564886.2020.1818153

Routledge
Taylor & Francis Group

Adaptations to COVID-19 in Community Corrections Agencies across the United States

Jill Viglione[a], Lucas M. Alward[a], Ashley Lockwood[a], and Sara Bryson[b]

[a]Department of Criminal Justice, University of Central Florida, Orlando, Florida, USA; [b]Department of Criminal Justice, East Carolina University, Greenville, North Carolina, USA

ABSTRACT

Currently, there are more than 4.3 million Americans are under some form of community supervision. Much of the experience of traditional community supervision relies on face-to-face interactions. Individuals on supervision often require treatment or services typically delivered in face-to-face settings. However, the COVID-19 pandemic has forced community corrections' agencies to quickly rethink how they do business, with limited existing research on how to adapt supervision protocols in the midst of a global pandemic. Using surveys of directors of community corrections' agencies across the United States, the goal of the current study was to examine how community corrections' agencies have adapted traditional supervision processes to address disease prevention and containment in addition to supporting client needs and community safety as a result of COVID-19. Changes implemented during the pandemic may have implications for the future landscape of community supervision. Understanding how and what agencies prioritize in a time of global crisis can provide a foundation for identifying sustainable changes as well as understanding future impacts on system and client-level outcomes.

KEYWORDS

community corrections; COVID-19; parole; probation; pandemic; alternatives to incarceration; early release mechanisms; prison reform

Introduction

Currently, there are more than 4.3 million Americans under some form of community supervision (e.g., probation and parole), which represents the largest arm of the United States correctional system (Kaeble & Alpher, 2020). Individuals on community supervision typically have a host of requirements they must comply with, such as in-person office visits with their assigned supervision officer, occasional home visits by their officer, finding and maintaining employment, payment of fines, restitution, and fees, drug tests, and participation in treatment programs as appropriate (Petersilia, 1997). Much of the "experience" of traditional community supervision relies on face-to-face interactions between the supervision officer and individual on supervision (Andrews & Bonta, 2010). However, the global COVID-19 pandemic introduced significant challenges to these processes for the field of community supervision. With many states instituting "stay at home" orders in the first several months of the pandemic, community corrections' agencies were forced to rethink how they do business quickly, with limited existing research on how to change supervision protocols in the midst of a global pandemic.

CONTACT Jill Viglione jill.viglione@ucf.edu Department of Criminal Justice, University of Central Florida, Orlando, FL 32816-1600, USA.

This article has been republished with minor changes. These changes do not impact the academic content of the article.

There are little data currently synthesized on the prevalence of COVID-19 outbreaks amongst clients and community supervision staff. Reports have focused primarily on incarceration, with estimates indicating that roughly 95,000 individuals in U.S. prisons have tested positive for COVID-19 to date (The Marshall Project, 2020). In attempts to reduce transmission within correctional facilities, more than 100,000 individuals were released from state and federal prison between March and June 2020 (Sharma et al., 2020) with similar reductions occurring in local jails across the country (Prison Policy Initiative, 2020). While specific rates amongst community supervision agencies are not known at this time, many of these released individuals were placed on parole or probation, suggesting possible routes of community transmission (Prison Policy Initiative, 2020). Individuals of lower socioeconomic status and without access to health care are most vulnerable during the current pandemic (Ahmed et al., 2020), suggesting additional risk factors for community supervision populations. These populations are already medically vulnerable with increased risks of contracting infectious diseases due to the prevalence of preexisting medical risk factors (e.g., asthma, hepatitis, and sexually transmitted diseases) (Clark et al., 2013; Vaughn et al., 2012) as well as disproportionate levels of social and economic disadvantage (Vaughn et al., 2012), and behavioral risk factors (e.g., substance use) (Fearn et al., 2016). In addition, individuals on community supervision often require treatment or services typically delivered in face-to-face settings (e.g., mental health services, drug testing). The complex needs and increased risk factors for infectious disease present in community supervision populations, coupled with increased hardships as a result of the pandemic (e.g., increased unemployment, housing and food instability, lack of access to treatment and health care), have created significant challenges for correctional agencies and the populations they supervise.

Now, community supervision agencies must work to balance public safety, budgetary concerns, and public health and officers are now in charge of supporting at-risk populations while also considering their own job stability and health. As community corrections' agencies and officers are already asked to "do more with less" (Ginsburg-Kempany & Kaiser, 2017, p. 279), it is critical to understand how supervision agencies have adapted in response to COVID-19. Agencies have had to make quick, wide-scale policy decisions, which might have implications for the future landscape of community supervision. Understanding how and what agencies prioritize in a time of global crisis can provide a foundation for identifying sustainable changes as well as understanding future impacts on system and client-level outcomes.

Literature review

On March 11, 2020, the World Health Organization (WHO) declared a global pandemic following the rapid spread of COVID-19 (Campedelli et al., 2020). In an attempt to spearhead agency response to COVID-19, Exit: Executives Transforming Probation & Parole, a coalition consisting of current and former community supervision executives, and the Vera Institute of Justice (2020b) released statements with recommendations for community supervision agencies across the United States. To prevent the spread of COVID-19, these guidelines included immediate limitation of office visits for those on parole and probation, suspension, or limitation of technical violations throughout the pandemic, reduced intake to only those with an absolute need to be on probation and parole, reduced probation and

parole terms, training for staff, and guidance for probationers and parolees. To contain the spread of COVID-19, Vera (2020b) recommended the use of Center for Disease Control (CDC) screening tools for all those on community supervision and sharing of educational information on COVID-19 with individuals on community supervision. Lastly, the Vera (2020b) guidelines provided guidance on responding to COVID-19, including creating medical care plans, training staff, and implementing policies to protect staff who become ill.

Taken together, these guidelines present huge transformations for the field of community supervision, including changes to methods of responding to noncompliance and integration of public health strategies completely new to the field. There is little in these guidelines that provide guidance for the many challenges that agencies may face in supervising their clients during the pandemic, such as the provision of mental health and substance use treatment and drug testing. Preliminary evidence suggests several challenges community corrections' agencies may have to grapple with for the foreseeable future. For example, since the start of the COVID-19 pandemic, poverty rates have increased (Sumner et al., 2020) and approximately three out of every 10 American's experienced a pay cut or were laid off as a direct result of COVID-19 (Igielnik, 2020), which will inevitably impact those on community supervision. Several correctional interventions and treatment services have been cancelled or temporarily replaced with telehealth initiatives (Schwartzapfel, 2020). However, little is known about how community corrections' agencies integrate telehealth services into treatment and whether individuals on supervision have reliable access to the technology (Schwartzapfel, 2020). Adapting to COVID-19 presents significant shifts in the daily operation and functioning of community supervision agencies. Community corrections' agencies will likely need to continue with altered supervision practices for the foreseeable future given there have been nearly 5.5 million confirmed cases and over 170,000 deaths in the United States as of August 2020 (Dong et al., 2020).

The current study

There is little existing research that examines how community supervision agencies adapt and respond to a global pandemic. The aim of the current study was to examine how community corrections' agencies have implemented changes to prevent, contain, and respond to COVID-19 while also serving the needs of the population they serve and maintaining public safety. This study examined the efforts community supervision agencies have taken to implement new policies and procedures designed to prevent, contain, and respond to the COVID-19 pandemic. Data from this study are designed to supply agencies with information regarding key barriers and strategies associated with the provision of community supervision services during a public health crisis.

Methods

Data collection

Data for this study are part of an ongoing, longitudinal, mixed-method study to examine how community supervision agencies are adapting to the COVID-19 pandemic. The current examination relied on self-reported survey data of community supervision agency administrators across the United States collected during June 2020. Data collection occurred in a series of stages.

First, a database was created that contained all existing counties and states in the United States. After every county in each state was identified, a list of county-level community supervision agencies was assembled along with a primary representative (e.g., director, chief probation officer, manager) for each corresponding organization. For every identified director, we collected all available contact information through publicly available directories and websites. For agencies with only phone numbers listed, the research team made phone calls to attain an e-mail address for an agency representative. The make-up of each state contact list varied depending on the structure of community corrections' system. For example, eight states were organized by regions and opted to have a regional director completes the survey for multiple counties while two states operated at the state-level and opted to have one representative from the state respond to the survey. In addition, the research team supplemented their community supervision contact database with access to an e-mail list-serve belonging to the Center for Advancing Correctional Excellence! (ACE!), which contains active subscribers of community supervision agency representatives from across the United States. This provided an avenue for the inclusion of additional supervision entities including juvenile and state agencies. Twelve states required approval from a centralized review board. At the time of data extraction, two states declined to participate in the research study and 10 had not yet approved participation.

Using a non-probability convenience sampling strategy, electronic surveys were distributed to all identified community supervision administrators using Qualtrics, a reliable and secure online survey service (Snow & Mann, 2013). Respondents were first sent an e-mail inviting them to participate in the study. The initial e-mail contained information detailing the purpose of the study, instructions to select only one representative within each supervision agency to complete the survey, guarantees about the voluntary nature of participation, and confirmed that all study methods were approved by the university's institutional review board. This e-mail also contained a link to the survey with an option for respondents to opt out of the study. To increase response rates, the administration of surveys followed an adapted Dillman (2000) method. After the initial e-mail invitation, respondents were sent reminder e-mails weekly for 3 weeks. The data examined in the current study represent completed surveys by the end of week four of data collection.

Sample

At the time of data extraction for the current study, a total of 1,295 community supervision administrators (chiefs, supervisors, directors) were invited to participate in the study. Of these individuals invited to complete the survey, 213 responded (16.4%). The response rates varied across states, ranging from 0% (n = 6) to 100% (n = 1). On average, the survey took approximately 35 minutes to complete. Agencies were represented from 37 states across the country.[1] Of the responding agencies, the majority reported they served rural areas (56.4%) and adults (90.6%). The majority of agencies were county probation agencies (60.1%) and supervised individuals on felony (83.6%) and misdemeanor (77.5%) supervision. Participating agencies employed on average 62 supervision officers supervising an average caseload of nearly 90 cases. Small agencies supervising between 20 and 499 individuals were the most prevalent in the sample (34.9%). At the time of data collection, all but two participating agencies were open and actively supervising individuals on community supervision (see Table 1).

Table 1. Sample characteristics (N = 213).

Variable	% (*n*)	*M* (*SD*)	Minimum	Maximum
Regions Served				
Rural	56.4% (119)			
Suburban	8.5% (18)			
Urban	9.5% (20)			
Rural/Suburban	6.2% (13)			
Rural/Urban	4.7% (10)			
Suburban/Urban	3.3% (7)			
Rural/Suburban/Urban	11.4% (24)			
Region of U.S.				
Northeast	13.1% (28)			
Midwest	32.9% (70)			
West	20.7% (45)			
South	33.3% (71)			
Populations Served				
Adults	90.6% (193)			
Youth	40.8% (87)			
Felony	83.6% (178)			
Misdemeanor	77.5% (165)			
Type of Supervision				
County Probation	60.1% (128)			
State Probation	39.9% (85)			
Federal Probation	1.4% (3)			
State Parole	26.8% (57)			
County Parole	10.3% (22)			
Caseload		89.8 (46.5)	10	300
Total Supervision Population		5169 (24,528)	20	250,000
20–499	34.5% (69)			
500–999	20.5% (41)			
1000–4999	33% (66)			
5000+	11% (22)			
Officers with Caseloads		62 (290)	1	3500
Office Status				
Open	99.1% (210)			
Closed	0.9% (2)			

Measures

The measures included in this study assessed whether and which type of prevention, containment, and response strategies were implemented in community supervision agencies across the United States.

Prevention strategies

Directors were asked to report whether officers were "meeting face-to-face with individuals on their caseload in the office," "in the field," "in another location," or if "no face-to-face meetings were occurring at that time" (1 = yes, 0 = no). If a respondent selected "another location," they were asked to specify which location(s) contact was occurring. We asked respondents to identify changes made to how face-to-face meetings are conducted compared to before COVID-19 (1 = yes, 0 = no), including whether officers "met in office, but somewhere other than their office," "outside an individual's home," and an open-ended space to provide other alternatives. We asked respondents to report who officers were meeting with face-to-face. Response options included "all who we normally would meet with," "high risk," "moderate risk," "low risk," and "individuals who needed a drug test," were "new to the agency," or other (1 = yes, 0 = no). Lastly, respondents were asked to

report how frequently face-to-face meetings for specific types of caseloads (e.g., by risk level and special population status) were occurring compared to before COVID-19. This variable was measured on a 3-point Likert scale with response items including occurring less frequently, same frequency, and more frequently than before COVID-19.

Use of technology. The survey contained a dichotomous measure (1 = yes, 0 = no) asking directors to report which technologies officers were currently using to supervise individuals on their caseload. Items included "telephone calls," "texting," "e-mail," "postcards," "video conferencing," and "telehealth." Next, we asked directors to report whether the use of these technologies was occurring more or less frequently than before COVID-19. This scale was measured on a 4-point Likert scale, with response options ranging from not currently using, but we plan to use through using more frequently than before COVID-19.

Responses to behavior. The survey included two questions designed to measure the type of practices officers were currently implementing with their caseloads as well as violation practices. Both scales were measured on a 3-point Likert scale ranging from less frequently to more frequently than before COVID-19. First, we asked directors to report the frequency officers were implementing a variety of responses to individual behavior, such as "technical violations," "revocations," "drug testing," and "making referrals to mental health or substance use treatment." Next, we asked directors to report the frequency at which violations were issued for noncompliance behaviors, such as "failing a drug/alcohol test," "failure to attend a treatment program," "pay fines/fees," "find employment," and "committing a new crime."

Agency policies. Directors were asked to report whether collection of supervision fees was suspended, or if they were collecting fees and issuing violations for unpaid balances (1 = yes, 0 = no). Next, we asked directors to report whether any supervision terms were ended early (1 = yes, 0 = no). For those who responded yes, they were asked to provide information on the characteristics of individuals whose supervision terms were ended early ("low risk," "served a minimum amount of time," "in compliance with all of their supervision conditions," and "other"; 1 = yes, 0 = no) and the percentage of cases terminated. Lastly, we asked directors to report whether they planned to release individuals from supervision early in the future (1 = yes, 0 = no).

Directors were asked to report whether COVID-19 specific prevention policies had been implemented (1 = yes, 0 = no). Example items included whether masks were provided for staff and/or individuals on supervision and whether mask use was required. An open-ended response item was included to allow directors to write in other prevention strategies implemented.

Containment strategies

Directors were asked to report whether they had implemented a number of containment strategies, including use of a screening tool to identify people with possible exposure to COVID-19 or at a higher risk of COVID-19 infection, and sharing information and guidance about COVID-19 prevention (1 = yes, 0 = no). An open-ended response item allowed respondents to provide any other containment strategies implemented.

Response strategies

Directors were asked to report whether they engaged in response strategies such as whether they "created medical care plans for individuals on supervision," "provided training for staff on how to respond to possible COVID-19 infections," and whether policies were implemented to support staff who tested positive (e.g., paid sick leave) (1 = yes, 0 = no). Directors were given the opportunity to write in additional response strategies.

Impact of COVID-19

To understand the impact of COVID-19 on staffing, we asked whether and what percent of officers were furloughed or laid off, and whether these reductions in workforce were expected in the future. We asked directors whether there were any positive COVID-19 cases identified among clients or staff in their office. Those who reported positive cases were asked to estimate the number of positives detected and to describe the agency response to the detection of positive tests.

Director perceptions

Lastly, directors were asked two open-ended questions regarding their perceptions of the impact of COVID-19 on their agency. First, we asked directors to report the most beneficial strategy their agency has implemented to support effective operations during the COVID-19 pandemic. Second, we asked directors the most pressing issue facing community corrections' agencies in the current climate.

Analytic plan

All survey data were exported to Qualtrics and uploaded to SPSS version 26 for analysis. Because the focus of this study is to examine the landscape of community corrections during the COVID-19 pandemic, a series of descriptive analyses were conducted. Given the focus of this study is exploratory in nature, inferential analyses were not conducted.

Results

Prevention strategies

Of the 213 agencies participating in the survey to-date, 59.1% reported they were supervising individuals face-to-face in the office, while 46% reported supervising individuals face-to-face in the field, representing 179 unique agencies. Only 15.9% of agencies reported they were not seeing any individuals, in any capacity, face-to-face (see Table 2). Of those meetings in the office, 42.9% reported they met somewhere other than usual office space such as the lobby or a classroom where there was more space to social distance. Of those meetings in the field, 72.4% reported officers met with individuals outside of their homes, 26.5% reported they met somewhere else, such as a community park or place of employment, while 8.2% reported no change in how they conducted field visits.

Of the 179 agencies who reported some face-to-face contact (office or field), 25.7% reported they met with all individuals on their caseload as they normally would. However, 51.9% reported they met with high-risk individuals, 26.9% moderate risk, and

Table 2. Face-to-face contact strategies (N = 213).

	% (*n*)
In office	59.1% (126)
In office, somewhere other than usual office space	42.9% (54)
In office, no change	39.7% (50)
In office, designated place (e.g., lobby, classroom)	32.5% (41)
Outside office, parking lot, curbside	19.8% (25)
In office, behind barrier/plexiglass	11.9% (15)
In field	46.0% (98)
In field, outside home	72.4% (71)
In field, park, place of employment	11.1% (14)
In field, no change	8.2% (8)
No face-to-face meetings occurring	15.9% (34)

8.6% with low-risk individuals. Additionally, 37.9% of directors reported they saw individuals who needed to be drug tested while 45.2% of agencies saw new clients (see Figure 1). In agencies where officers saw all individuals face-to-face as they would have prior to COVID-19 (n = 46), about 48% reported these meetings occurred at the same frequency while 46% reported they occurred less frequently than before COVID-19. Directors reported seeing individuals with mental health (41.8%) and substance use (61.4%) issues less frequently due to COVID-19. The only group seen at the same frequency was individuals convicted of sex offenses (63.1%) (see Figure 2).

Use of technology

The most commonly used technology to continue active supervision of individuals during the COVID-19 pandemic was telephone calls (95.8%). A large percentage of agencies

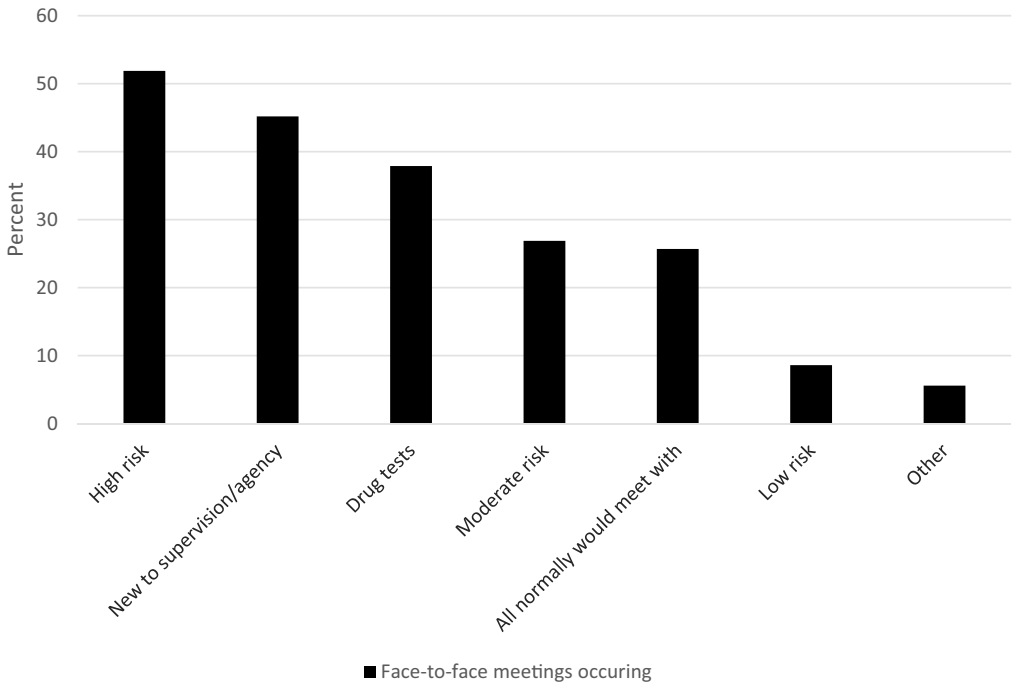

Figure 1. Number of agencies using face-to-face meetings by client type (n = 179).

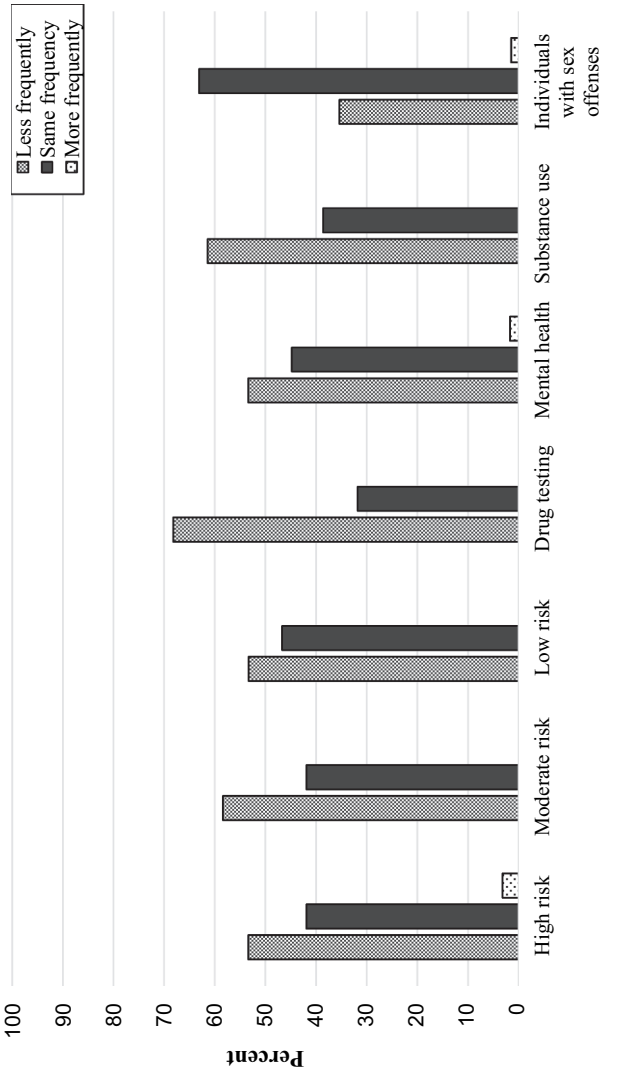

Figure 2. Frequency of face-to-face meetings (n = 179).

reported their officers were also using texting (92%), e-mail (91.1%), and video conferencing (90.6%) to supervise their caseloads (see Figure 3). Approximately 12% of directors reported the use of other technology, including smartphone applications, website reporting, kiosks, electronic monitoring, and social media. Of all strategies, 81% reported that video conferencing was a new technology implemented in response to COVID-19

The majority of directors reported individuals were using telehealth services for mental health (82.6%) and substance use (83.6%). Approximately 35% of agencies reported telehealth for mental health services was a new option, while 41% of agencies reported telehealth for substance use services was newly implemented. Of those implementing telehealth, approximately 48% of directors reported increased use for mental health and 53% increased use for substance use during the COVID-19 pandemic (see Figure 3).

Responses to behavior

For all supervision and case management supervision strategies inquired about, the largest increase in use was reported for electronic monitoring/GPS (25%) (see Table 3). Directors reported decreased use of drug testing (88.7%), community service requirements (77.2%), revocations (76%), and technical violations (75%). Directors reported their office processed fewer violations for all noncompliance, except for commission of a new crime (52%) and possession of a firearm (41%), which agencies were more likely to use violations at the same frequency as prior to COVID-19.

Agency policies

At the time of data collection, approximately 62% of agencies reported they were collecting supervision fees but were not issuing violations for late fees while 14% reported issuing violations for late fees. Only 2.5% of agencies suspended the collection of supervision fees during the pandemic. Roughly 22% of agencies reported they made alterations in their collection process, such as permitting online, mail-in, or phone payments.

Approximately 24% of agencies reported they had terminated supervision terms early because of COVID-19 (see Table 4). The majority reported these individuals were those in full compliance with all conditions of probation (91.7%), while other characteristics used to guide termination decisions included whether they were low risk (68.8%) or served between 50% and 75% of their time (41.7%). Approximately 66% of all agencies reported they were not planning to terminate supervision terms in the future, while 30% reported this was a possibility.

Most agencies reported they received fewer new clients referred for supervision (71.6%), while 31% of agencies reported receiving increased referrals since the start of the COVID-19 pandemic. Of those who experienced a decline, directors reported anywhere from a 1% reduction in caseload to a 100% reduction, representing no new cases referred. In agencies that experienced an increase, the reported range was from 1% to 40% increase (see Table 4).

Provision of PPE

Approximately 83% of agencies provided face masks for staff, while 56% provided masks for individuals on supervision. Approximately 72% required staff to wear a face mask while working, while 65% required individuals on supervision to wear a face mask. When asked to report additional policies implemented, 10% reported conducting temperature screening of all individuals prior to entering the building, 10% reported additional

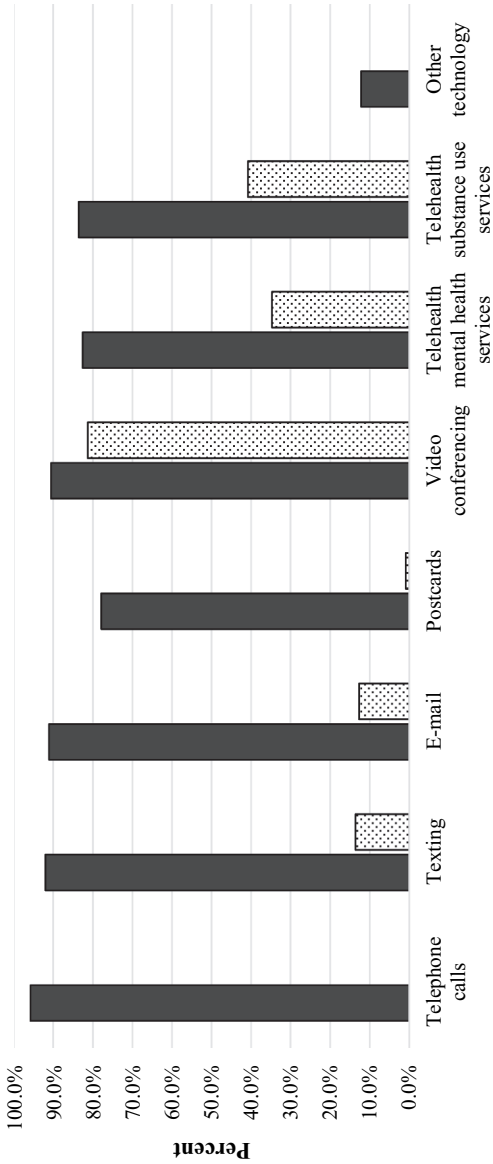

Figure 3. Use of technology to supervise clients (N = 213).

Table 3. Use of supervision strategies and violations compared to pre-COVID-19 (N = 213).

	Less frequently	Same frequency	More frequently
Supervision Strategy Use			
Drug testing	88.7%	10.3%	0.5%
Community service	77.2%	12.9%	3.0%
Revocations	76.1%	16.4%	2.5%
Technical violations	75.1%	18.4%	3.0%
Employment assistance	36.3%	45.3%	10.4%
Substance use treatment	28.1%	62.1%	5.9%
Housing assistance	26.4%	48.3%	7.5%
Risk assessments	23.2%	68.5%	4.4%
Curfews	22.3%	44.6%	11.9%
Mental health treatment	22.2%	64.5%	8.9%
EM/GPS	20.8%	38.6%	24.9%
Help accessing medical care	20.0%	49.3%	5.0%
Use of Violations			
Failed drug/alcohol test	69.4%	14.5%	9.7%
Failed community service	61.9%	12.5%	12.5%
Failed to appear to meeting with office	59.5%	22.1%	11.1%
Failed to maintain employment	53.9%	17.9%	22.9%
Failure to appear for court	53.0%	25.9%	8.6%
Pay supervision fees	51.9%	18.9%	21.6%
Attend treatment program	50.5%	22.2%	15.5%
Associate with prohibited individuals/places	50.5%	29.8%	11.0%
Pay fines/restitution	49.2%	21.7%	20.6%
New crime	25.5%	52.0%	4.4%
Possession of firearm	25.0%	41.7%	4.4%

Table 4. Supervision terminations and change of client referrals.

Early termination of supervision (*n* = 203)	% (*n*)
Yes	23.5% (48)
No	64.7% (132)
Not sure	11.8% (24)
Terminations by client status (*n* = 48)	% (*n*)
In compliance with all conditions	91.7% (44)
Low risk	68.8% (33)
Served minimum time (range from 50%-75%)	41.7% (20)
Other characteristics (e.g., payment of fees, significant progress in treatment)	16.7% (8)
Agency plans to terminate supervision terms in the future (N = 213)	% (*n*)
Yes	4.2% (9)
Maybe	29.7 (60)
No	65.8% (133)
New Client Referrals (*n* =204)	% (*n*)
Decrease in new clients	71.6% (146)
Increase in new clients	8.8% (18)
Estimated percent decline in number of clients (*n* = 146)	% (*n*)
1–20% decline	19.2% (28)
21–40% decline	23.4% (34)
41–60% decline	17.1% (25)
61–80% decline	17.1% (25)
81–100% decline	11.0% (16)
Estimated percent increase in number of clients (*n* = 18)	% (*n*)
1–10% increase	38.9% (7)
11–20% increase	33.3% (6)
21–30% increase	11.1% (2)
31–40% increase	5.6% (1)
Don't know	5.6% (1)

sanitization of office space, 9% enforced social distancing, and 7% installed plexiglass barriers (see Table 5).

Table 5. Reported prevention, containment, and response strategies implemented (N = 213).

Prevention	% (*n*)
Provide face masks to officers	83.1% (177)
Require officers wear a face mask	71.8% (153)
Require individuals on supervise wear a face mask	64.8% (138)
Provide face masks to individuals on supervision	55.9% (119)
Other strategies:	53.1% (113)
Temperature checks before entering building	10.3% (22)
Additional sanitization of building/agency cars	9.8% (21)
All contact 6 ft or greater, including enforcement in lobby/waiting room	9.3% (20)
Plexiglass barriers, sneeze guards, glass barriers, desk guards	6.6% (14)
In planning phase, nothing implemented yet	0.01% (3)
Containment	% (*n*)
Sharing of information and guidance with staff	73.7% (157)
Sharing of information and guidance with individuals on supervision	58.2% (124)
Use of screening tool to identify possible exposure	52.1% (111)
Use of screening tool to identify people at a higher risk of infection	26.8% (57)
Response	% (*n*)
Paid sick leave	62.0% (132)
Provide training for staff for responding to COVID-19	34.7% (74)
Plan for staffing/agency operations if significant portion unable to work	33.8% (72)
Create medical care plans for individuals on supervision	10.3% (22)
Have not implemented anything yet	26.8% (57)

Containment strategies

Approximately 52% of agencies reported implementing a screening tool to identify individuals who may have been exposed to COVID-19. Another 27% reported implementing a screening tool to identify individuals who are at a higher risk of COVID-19 infection. Roughly 74% of directors shared guidance about prevention with their staff, while 58% shared guidance with individuals on supervision. Other less common strategies reported included requiring clients to sign a form stating they do not have COVID-19 and/or do not currently have symptoms, requiring staff to report symptoms each day before coming to work, posting a sign with common symptoms on the front door, and requiring staff to log all contacts (see Table 5).

Response strategies

Ten percent of directors reported creating medical care plans with guidance on accessing emergency care, a transportation plan, and medical insurance. Less than half of participating agencies reported providing training to their staff on procedures to respond to COVID-19 (34.7%). However, 62% of directors implemented a paid sick leave policy while 33.8% reported having a plan for staffing substitutions and/or agency operations if staff were to fall ill. Approximately 27% of agencies had not yet implemented any policies to support staff who became ill with COVID-19 (see Table 5).

Impact of COVID-19

Approximately 38% of offices reported at least one confirmed case of COVID-19 among individuals on supervision, while 15% reported at least one confirmed case among officers. In these offices, the majority reported fewer than 10 positive cases (60% among clients and 88% among staff). In offices where a client tested positive, 32% placed the individual on

Table 6. Policies implemented in response to identification of positive COVID-19 cases in office.

Response	Clients (n = 64)	Staff (n = 24)
Remote supervision for individual until cleared	31.7% (20)	– -
Cleaning service/increased cleaning	20.6% (13)	70.8% (17)
Remote work for staff/skeleton crew in office	19.0% (12)	– -
Contact tracing	6.3% (4)	45.8% (11)
Closed office temporarily	6.3% (4)	20.8% (5)
Encouraged medical attention	6.3% (4)	– -
Test PO, quarantine until negative	6.3% (4)	58.3% (14)

remote supervision until either they tested negative or 14 days had passed (see Table 6). In those offices where a staff member tested positive, 71% increased cleaning protocols and/or hired a cleaning service, 46% conducted contact tracing, 38% required the officer to quarantine until they tested negative, 21% required any other staff who came into contact with the individual to quarantine until they tested negative, and 21% closed the office temporarily.

Director perceptions

Directors were asked to report the single most beneficial policy implemented in their agency in response to COVID-19 to-date. Of the 171 directors who responded, the most reported beneficial policy was the use of remote supervision and technology to continue supervising individuals (46.8%). The next most frequent responses were mask requirements/use of PPE (10.5%), rotating schedules/skeleton crews (7.6%), and requiring an appointment (5.8%).

Directors were also asked to report the most pressing issue for community corrections' agencies currently. The most common issue reported was the inability to hold individuals on supervision accountable (29%). This challenge stemmed from several issues. First, directors noted they had a limited ability to use incarceration as a sanction. Either the jail would not take individuals for probation violations or judges would not sentence individuals to be incarcerated. Second, directors noted there was a backlog of cases in the court system, which equated to a delay in responding to probation violations filed with the court. Third, directors reported courts were not issuing warrants for arrest for probation violations. As a result, directors noted they were struggling to determine both which violations were worth their time to file, and how to respond to noncompliance when issuing a violation was not possible. The second most common issue directors reported was the limited ability to conduct drug tests (14.6%). In these cases, directors noted they suspected increased levels of drug use but could not conduct drug tests as frequently as usual due to remote work, safety concerns, limited resources/staffing to process tests, or closure of labs. Approximately 13% of directors reported that the inability to meet face-to-face was a challenge, often due to the perceived inability to stay current with the individual and provide an adequate level of supervision. And, close to 10% noted budget strains were the most pressing issue. Some agency budgets largely depend on supervision fees, which clients were struggling to pay, and/or decreased referrals to probation equated to decreased collection of fees and not enough demand for officers.

Discussion

The goal of this study was to examine the policies and procedures community corrections' agencies have put into place in response to COVID-19. The current pandemic challenges correctional decision-makers on how to manage large correctional populations, enforce compliance, and provide and/or link to appropriate treatments while supporting public health measures to prevent virus transmission among staff, clients, and the community. Although this effort is descriptive, it provides a preliminary exploration of the primary changes to traditional supervision as well as ongoing challenges. This information is meant to serve as a starting point for developing guidelines for community corrections' agencies both as the pandemic progresses and for future public health emergencies.

The largest, and perhaps most obvious, change reported across community corrections' agencies was the decrease in face-to-face supervision practices. Less than three-quarters of agencies surveyed reported they were still meeting with individuals in the office, and of those who were, agencies largely prioritized individuals assessed as higher risk followed by those who were new clients. And, agencies instructed officers who conducted field visits to do so either outside the individual's home or in another outdoor location (e.g., community park, place of employment) rather than enter the home as they normally would. In place of this face-to-face contact, agencies reported a large increase in the use of technology (e.g., telephone calls, video conferencing, e-mail, and texting) to supervise caseloads. For the majority of agencies, the use of video conferencing was an entirely new technology. While not surprising, given much of the country has shifted to remote work, this is a significant shift for community corrections' agencies.

There is little previous research on the use of technology as a replacement for face-to-face supervision meetings, but when it has been implemented, these technologies have focused on the use of kiosks (Barnes et al., 2010, 2012; Belshaw, 2011; Ogden & Horrocks, 2000; Wilson et al., 2007) and telephone supervision systems (Viglione & Taxman, 2018). Randomized controlled trials found no significant differences in reoffending, arrest, and incarceration rates between individuals supervised by kiosks and those on traditional supervision (Barnes et al., 2010, 2012). However, the use of these technologies was reserved for only individuals assessed as low risk. And even then, officers were hesitant to rely on the technology as the main supervision modality. An evaluation of telephone supervision found officers either refused placement of low-risk individuals on telephone supervision altogether or avoided designating an individual as low risk to prevent them from being placed on the telephone supervision caseload (Viglione & Taxman, 2018). The COVID-19 pandemic has forced agencies to not only implement technology but to implement technology for most of their caseloads, regardless of the risk level. Directors reported this adaptation was the single most beneficial change made in response to COVID-19. The use of technology allowed agencies to prioritize the health and safety of their staff and clients and has removed some traditional barriers for individuals on supervision, including transportation and flexibility to meet with their officers around their work schedules. Despite these reported benefits, there is scant empirical evidence regarding the implementation and effectiveness of tele-conferencing for community supervision. However, meta-analytic evidence examining the use of telehealth with criminal justice populations for substance use services finds virtual services were as effective as in-person services (Batastini et al., 2016). While this evidence points to the utility of technology, a critical path forward for future research is to examine

the implementation of technologies to supervise individuals and provide support and a range of services.

Despite the reported benefit of technology to continue supervision efforts, directors reported the biggest challenge currently facing the field of community supervision was the inability to hold individuals accountable. This was due to court systems being entirely shut down or were operating with a backlog, inability to obtain arrest warrants, limited processing of violations, and reduced use of jails for probation violations. This left many directors feeling as though they must prioritize only the most serious violations (e.g., new offense or firearm possession) and that they have limited alternatives to keep individuals in compliance. Given the nature of the pandemic and the attention on reducing crowding within jails and prisons, this challenge is one community corrections' agencies may face for the foreseeable future.

A growing body of evidence suggests the use of jail and incarceration as a sanction may not be the strongest strategy to respond to noncompliance (Boman et al., 2019; De Wree et al., 2009; Gil, 2010; Morash et al., 2019; Wodahl et al., 2015). For example, Boman et al. (2019) found no difference between the use of jail-based and community-based sanctions in response to drug use violations, while enhanced treatment sanctions improved the likelihood that an individual would successfully complete intensive supervision probation. Morash et al. (2019) found punitive responses (e.g., jail time, extension of supervision term, increased drug testing) to non-drug-related violations were related to increased violations, while treatment responses (e.g., encouragement, required, or increased drug treatment) were related to decreased recidivism. Additional research found no difference in effectiveness between jail-based sanctions and alternatives (e.g., written assignments, treatment requirements, community service) in promoting compliance and decreased recidivism (De Wree et al., 2009; Gil, 2010; Wodahl et al., 2015). This research supports the use of alternative, community-based responses to noncompliance and suggests support for strengthening systems of graduated sanctions, which aim to provide incremental responses to noncompliance while reserving formal violations for the most serious behaviors (Burke, 1997; Taxman et al., 1999). Examples of incremental responses include those aligned with a rehabilitation goal (e.g., drug court, treatment) or punitive goals (e.g., increased reporting requirements, electronic monitoring, increased drug testing) (Burke, 1997). However, the pandemic presents challenges to many of these options due to limited resources (e.g., limited availability of treatment, inability to drug test). This suggests the need for individual agencies to create a schedule of responses feasible in their jurisdiction as well as creativity in developing alternatives to violations.

The inability to drug test individuals on supervision was also reported as a major challenge during the pandemic. Directors reported significant concern that individuals were likely relapsing and/or using substances at an increased rate during the pandemic and that they were unable to detect this increase in use. Changes in drug testing resulted from either the complete shut down of community supervision offices where drug tests were conducted, the use of skeleton crews which resulted in not enough staff in office at one time to drug test the population at the normal rate, and the shutdown and/or backlog in labs who conduct and/or process drug testing. Additionally, directors reported concerns over the safety of conducting drug tests during the pandemic. Several directors reported they had switched to the use of mouth swabs for drug testing, the use of patch testing for alcohol use, or had actually added a window to their bathrooms so officers could supervise drug tests

from a different room. This challenge presents a direct need for community supervision agencies to partner with public health experts, as drug testing does involve risks that are directly relevant in the COVID-19 pandemic. For example, research on COVID-19 finds that viral RNA may be present in urine, but little evidence that this viral RNA is infectious (Nomoto et al., 2020). However, infectious viral RNA is known to be found in saliva (To et al., 2020), which suggests the use of mouth swabs may be riskier than traditional urine screens. However, officer supervision of a urine screen in an enclosed space without proper ventilation (e.g., a bathroom) is also risky for COVID-19 transmission (Morawska et al., 2020). And, with either strategy, appropriate PPE would be required to reduce risks of transmission, which requires the acquisition of resources that have been difficult across the country. Safer alternatives may include bathroom window observation of drug screens or perhaps when proper PPE is available, the use of curbside mouth swab testing. However, creating alternatives to procedures such as drug testing requires careful consideration of the medical and infectious disease research on COVID-19 and should be done in consultation with experts to best protect the safety of staff and clients. Continued shut-downs, lack of resources/staff, and backlogs in labs are likely to persist, which will require the development of protocols that are safe and feasible for community supervision agencies to implement.

Lastly, financial and budget concerns are likely to challenge community supervision agencies for the foreseeable future. While many directors reported current budget crises already, others reported the expectation of financial crises to come. With the inability to collect supervision fees and reduction in the numbers of individuals on supervision, directors have been (anticipate) forced to lay off staff. This is particularly troubling as directors report expectations that their budgets will be drastically reduced for years to come, yet the reduction in caseloads is not expected to last indefinitely. Thus, it is likely that community corrections' agencies may see a surge in cases (e.g., once court backlogs have resolved), yet they will have drastically reduced budgets and workload. This anticipated challenge may be partially addressed through the continued use of technology to supervise clients; however, researchers and practitioners should prioritize developing protocols and guidelines for community supervision agencies to navigate the consequences of the pandemic.

Limitations

The goal of the current study was to provide a descriptive and preliminary analysis of the ways in which community supervision agencies have adapted and responded to the COVID-19 pandemic. Given the nonrandom sample, it is possible that the findings presented here do not generalize to community supervision agencies across the country. However, we were able to report on data from a significant portion of the country and across a number of different settings (e.g., region, populations served). And, this study serves to build knowledge around the contextual factors that may be currently impacting community supervision agencies in the United States as a means to build the foundation for further examining the impact of COVID-19 on practice and outcomes. The data presented in this manuscript represent data from the first month of data collection only. The next steps of this study include an additional month of data collection in wave 1 followed by two additional waves of data collection to examine how responses to COVID-19 and the

challenges presented to community supervision agencies change over the course of the pandemic.

Conclusions

The pandemic has drastically altered the nature of community supervision across the United States. Approximately 4 months into the pandemic, community supervision agencies have had to shift to a technological approach to supervising caseloads and grapple with initial challenges of accountability, drug testing, and budget strains. This analysis aimed to shed light on these issues to spark conversation and action to develop strategies that will assist community supervision agencies during these challenging times. Immediate work is needed to support directors and probation staff in addressing noncompliance using alternatives to violations and jail-based sanctions and the monitoring and detection of substance use as well as develop and advance technologies to support supervision efforts during the ongoing pandemic and beyond. This ongoing project sets a foundation for additional inquiry in understanding how agencies response to COVID-19 will shape the future of community corrections.

At a broader level, we are at a critical juncture to consider how the landscape of community corrections might be permanently altered to better define key goals and priorities, and cost-effective methods for achieving these goals. Previous research suggests probation, although designed as an alternative to incarceration, serves as a "net widener" (Phelps, 2013). The imposition of many conditions and punishment for noncompliance with those conditions can result in revocation and incarceration (Doherty, 2016; Klingele, 2013), a system that can feed both mass imprisonment and mass probation (Phelps, 2020). Correctional agency resources were often limited prior to the COVID-19 pandemic, with evidence from the current study suggesting these budgets may become even further strained. Coupled with the current health risks associated with many traditional supervision processes, steps toward reform seems necessary now more than ever. Research on effective correctional practices has emphasized the need to intervene with higher-risk individuals, citing the negative consequences that result from over-supervising those who are a low risk to reoffend (Hanley, 2006; Lowenkamp & Latessa, 2002). And, Phelps (2020) discusses a number of key reforms to move away from a system of mass probation to a system that can provide meaningful supports to individuals on supervision, including a reduction in the use of community supervision, a reduction in the number of probation conditions, especially blanket conditions applied to entire populations, and more liberal use of early terminations. Findings from the current study suggest agencies have been forced to implement some of these measures, suggesting a need for ongoing research to examine the long-term impacts of these changes. Additionally, Phelps (2020) calls for improved guidelines and tools for responding to probation violations, a need that is supported by the findings of the current study. Given the hardships and complexities posed by COVID-19, implementation and evaluation of these reforms could move the field away from the wide use of community supervision to a more targeted approach designed to provide quality, individualized services and support for those with the greatest needs. And, in the context of COVID-19, these steps could assist agencies by reducing the number of individuals they must manage and adapt services for during times of crises, reducing risks for staff, individuals on supervision, and their families and communities.

Note

1. The states represented in the sample are as follows: Northeast: Connecticut, Massachusetts, New Jersey, New York, Pennsylvania, Vermont; Midwest: Illinois, Indiana, Iowa, Missouri, Kansas, Michigan, Nebraska, Ohio; West: Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington; South: Alabama, Arkansas, Florida, Georgia, Louisiana, Maryland, South Carolina, Texas, Virginia.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This study was funded by a grant from the National Science Foundation [grant number 2030344]. The authors gratefully acknowledge the contributions of community corrections agency staff to share their experiences during an extraordinarily difficult time.

References

Ahlin, E. M., Antunes, M. J. L., & Tubman-Carbone, H. (2013). A review of probation home visits: What do we know? *Federal Probation*, *77*(3), 32–37. https://heinonline.org/HOL/Page?handle=hein.journals/fedpro77&div=34&g_sent=1&casa_token=0ouk_J4c23AAAAAA:3eELir3C02gF1P_CzG9f7RrQgh1B24dHqQfCwHEOciH3H0uFfuddXKvuF2v8JUh5j4H1SgzBeg&collection=journals

Ahmed, F., Ahmed, N., Pissarides, C., & Stiglitz, J. (2020). Why inequality could spread COVID-19. *The Lancet*, *5*(12), E240. https://doi.org/10.1016/S2468-2667(20)30085-2

Andrews, D. A., & Bonta, J. (2010). Rehabilitating criminal justice policy and practice. *Psychology, Public Policy and Law*, *16*(1), 39–55. https://doi.org/10.1037/a0018362

Barnes, G. C., Ahlman, L., Gill, C., Sherman, L. W., Kurtz, E., & Malvestuto, R. (2010). Low-intensity community supervision for low-risk offenders: A randomized, controlled trial. *Journal of Experimental Criminology*, *6*(2), 159–189. https://doi.org/10.1007/s11292-010-9094-4

Barnes, G. C., Hyatt, J. M., Ahlman, L. C., & Kent, D. T. (2012). The effects of low-intensity supervision for lower-risk probationers: Updated results from a randomized controlled trial. *Journal of Crime & Justice*, *35*(2), 200–220. https://doi.org/10.1080/0735648X.2012.679874

Batastini, A. B., King, C. M., Morgan, R. D., & McDaniel, B. (2016). Telepsychological services with criminal justice and substance abuse clients: A systematic review and meta-analysis. *Psychological Services*, *13*(1), 20–30. https://doi.org/10.1037/ser0000042

Belshaw, S. H. (2011). Supervising probationers on the information superhighway: Towards an understanding of minimum supervision level probationers in a large Texas county. *International Journal of Punishment and Sentencing*, *7*(3), 98–106. https://heinonline.org/HOL/Page?handle=hein.journals/punisen7&div=15&g_sent=1&casa_token=z5GwGP33VuMAAAAA:-k1PaCVucAfV-OcKH16S2fX8OvI9FGRCw4t-WBojMK7Q49Z1YvgRb4aWr67s6-1zffYpIgjudQ&collection=journals

Boman, J. H., IV, Mowen, T. J., Wodahl, E. J., Lee Miller, B., & Miller, J. M. (2019). Responding to substance-use-related probation and parole violations: Are enhanced treatment sanctions preferable to jail sanctions? *Criminal Justice Studies*, *32*(4), 356–370. https://doi.org/10.1080/1478601X.2019.1664506

Burke, P. (1997). *Policy-driven responses to probation and parole violations*. National Institute of Corrections.

Campedelli, G. M., Aziani, A., & Favarin, S. (2020). Exploring the effect of 2019-nCoV containment policies on crime: The case of Los Angeles. *arXiv Preprint arXiv*, *2003*, 11021. https://doi.org/10.31219/osf.io/gcpq8

Clark, C. B., McCullumsmith, C. B., Waesche, M. C., Islam, M. A., Francis, R., & Cropsey, K. L. (2013). HIV-risk characteristics in community corrections. *Journal of Addiction Medicine*, *7*(1), 45–51. https://doi.org/10.1097/ADM.0b013e3182781806

De Wree, E., Ruyver, B. D., & Pauwels, L. (2009). Criminal justice responses to drug offences: Recidivism following the application of alternative sanctions in Belgium. *Drugs: Education, Prevention and Policy*, *16*(6), 550–560. https://doi.org/10.3109/09687630802133632

Dillman, D. A. (2000). *Mail and web-based survey: The tailored design method*. Wiley.

Doherty, F. (2016). Obey all laws and be good: Probation and the meaning of recidivism. *Georgetown Law Journal*, *104*(2), 291–354. https://heinonline.org/HOL/Page?handle=hein.journals/glj104&div=13&g_sent=1&casa_token=&collection=journals

Dong, E., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *Lancet Infectious Diseases*, *20*(5), 533–534. https://doi.org/10.1016/S1473-3099(20)30120-1

Executives Transforming Probation and Parole [EXiT]. (2020, March 12). *Statement from community supervision executives on the importance of using best practices during the COVID-19 crisis*. https://www.exitprobationparole.org/Covid19statement.

Fearn, N. E., Vaughn, M. G., Nelson, E. J., Salas-Wright, C. P., DeLisi, M., & Qian, Z. (2016). Trends and correlates of substance use disorders among probationers and parolees in the United States 2002–2014. *Drug and Alcohol Dependence*, *167*, 128–139. https://doi.org/10.1016/j.drugalcdep.2016.08.003

Gil, C. (2010). *The effect of sanction severity on criminal conduct: A randomized low intensity probation experiment* [Doctoral dissertation]. University of Pennsylvania.

Ginsburg-Kempany, K., & Kaiser, K. A. (2017). Incorporating procedural justice and legitimacy into the RNR model to improve risk-need assessment. In F. S. Taxman (Ed.), *Handbook on risk and need assessment: Theory and practice* (pp. 269–291). Routledge.

Hanley, D. (2006). Appropriate services: Examining the case classification principle. *Journal of Offender Rehabilitation*, *42*(4), 1–22. https://doi.org/10.1300/J076v42n04_01

Igielnik, R. (2020, May 15). *Majority of Americans who lost a job or wages due to COVID-19 concerned states will reopen too quickly*. Pew Research Center. https://www.pewresearch.org/fact-tank/2020/05/15/majority-of-americans-who-lost-a-job-or-wages-due-to-covid-19-concerned-states-will-reopen-too-quickly/

Kaeble, D., & Cowhig, M. (2018). *Correctional populations in the United States, 2016*. Bureau of Justice Statistics (BJS), US Department of Justice, and Office of Justice Programs.

Kaeble, D., & Alpher, M. (2020). *Probation and Parole in the United States, 2017–2018*. Bureau of Justice Statistics (BJS), US Department of Justice, and Office of Justice Programs. https://www.bjs.gov/content/pub/pdf/ppus1718.pdf

Klingele, C. (2013). Rethinking the use of community supervision. *Journal of Criminal Law and Criminology*, *103*(4), 1015–1070. https://doi.org/10.2139/ssrn.2232078

Lowenkamp, C. T., & Latessa, E. J. (2002). *Evaluation of Ohio's community based correctional facilities and halfway house programs* (Technical report). University of Cincinnati.

Morash, M., Kashy, D. A., Smith, S. W., & Cobbina, J. E. (2019). Technical violations, treatment and punishment responses, and recidivism of women on probation and parole. *Criminal Justice Policy Review*, *30*(5), 788–810. https://doi.org/10.1177/0887403417723425

Morawska, L., Tang, J. W., Bahnfleth, W., Bluyssen, P. M., Boerstra, A., Buonanno, G., … Wierzbicka, A. (2020). How can airborne transmission of COVID-19 indoors be minimised? *Environment International*, *142*, 105832. https://doi.org/10.1016/j.envint.2020.105832.

Nomoto, H., Ishikane, M., Katagiri, D., Kinoshita, N., Nagashima, M., Sadamasu, K., … Ohmagari, N. (2020). Cautious handling of urine from moderate to severe COVID-19 patients. *American Journal of Infection Control*, *48*(8). https://doi.org/http://doi.10.1016/j.ajic.2020.05.034.

Ogden, T. G., & Horrocks, C. (2000). Pagers, digital audio, and kiosk: Officer assistants. *Federal Probation*, *65*(2), 35–44.

Petersilia, J. (1997). Probation in the United States. *Crime and Justice*, *22*, 149–200. https://doi.org/10.1086/449262

Phelps, M. (2013). The paradox of probation: Community supervision in the age of mass incarceration. *Law & Policy*, *35*(1–2), 51–80. https://doi.org/10.1111/lapo.12002

Phelps, M. (2020). Mass probation from micro to macro: Tracing the expansion and consequences of community supervision. *Annual Review of Criminology*, *3*(1), 261–279. https://doi.org/10.1146/annurev-criminol-011419-041352

Prison Policy Initiative. (2020, August 18). *Responses to the COVID-19 Pandemic*. https://www.prisonpolicy.org/virus/virusresponse.html

Schwartzapfel, B. (2020, April 3). *Probation and parole officers are rethinking their rules as coronavirus spreads*. The Marshall Project. https://www.themarshallproject.org/2020/04/03/probation-and-parole-officers-are-rethinking-their-rules-as-coronavirus-spreads

Sharma, D., Li, W., Lavoie, D., & Lauer, C. (2020, June 16). *Prison populations drop by 100,000 during the pandemic*. The Marshall Project. https://www.themarshallproject.org/2020/07/16/prison-populations-drop-by-100-000-during-pandemic

Snow, J., & Mann, M. (2013). *Qualtrics survey software: Handbook for research professionals*. Qualtrics Labs, Inc.

Sumner, A., Hoy, C., & Ortiz-Juarez, E. (2020). *Estimates of the impact of COVID-19 on global poverty*. *UNU-WIDER, April*, 800-9. United Nations University World Institute for Development Economics Research.

Taxman, F. S., Soule, D., & Gelb, A. (1999). Graduated sanctions: Stepping into accountable systems and offenders. *The Prison Journal*, *79*(2), 182–204. https://doi.org/10.1177/0032885599079002004

The Marshall Project. (2020, August 14). *A state-by-state look at coronavirus in prisons*. https://www.themarshallproject.org/2020/05/01/a-state-by-state-look-at-coronavirus-in-prisons

To, K. K. W., Tsang, O. T. Y., Leung, W. S., Tam, A. R., Wu, T. C., Lung, D. C., . . . Lau, D. P. L. (2020). Temporal profiles of viral load in posterior oropharyngeal saliva samples and serum antibody responses during infection by SARS-CoV-2: An observational cohort study. *The Lancet Infectious Diseases*, *20*(5), 565–574. https://doi.org/10.1016/S1473-3099(20)30196-1

Vaughn, M. G., DeLisi, M., Beaver, K. M., Perron, B. E., & Abdon, A. (2012). Toward a criminal justice epidemiology: Behavioral and physical health of probationers and parolees in the United States. *Journal of Criminal Justice*, *40*(3), 165–173. https://doi.org/10.1016/j.jcrimjus.2012.03.001

Vera Institute of Justice. (2020a, May 14). *New research shows nationwide failure to release people from prison to prevent spread of COVID-19*. Vera Institute of Justice. https://www.vera.org/newsroom/new-research-shows-nationwide-failure-to-release-people-from-prison-to-prevent-spread-of-covid–19

Vera Institute of Justice. (2020b, March 18). *Guidance for preventative and responsive measures to coronavirus for parole, probation, and clemency*. Vera Institute of Justice. https://www.vera.org/downloads/publications/coronavirus-guidance-parole-probation-clemency.pdf

Viglione, J., & Taxman, F. S. (2018). Low risk offenders under probation supervision: Risk management and the risk-needs-responsivity framework. *Criminal Justice and Behavior*, *45*(12), 1809–1831. https://doi.org/10.1177/0093854818790299

Wilson, J. A., Naro, W., & Austin, J. F. (2007). *Innovations in probation: Assessing New York City's automated reporting system*. JFA Associates.

Wodahl, E. J., Boman, J. H., IV, & Garland, B. E. (2015). Responding to probation and parole violations: Are jail sanctions more effective than community-based graduated sanctions? *Journal of Criminal Justice*, *43*(3), 242–250. https://doi.org/10.1016/j.jcrimjus.2015.04.010