# Correlates of Patient-Centered Care Practices at U.S. Substance Use Disorder Clinics

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**Objective:** Substance use disorder treatment professionals are paying increased attention to implementing patient-centered care. Understanding environmental and organizational factors associated with clinicians' efforts to engage patients in clinical decision-making processes is essential for bringing patient-centered care to the addictions field. This study examined factors associated with patient-centered care practices in substance use disorder treatment.

Methods: Data were from the 2017 National Drug Abuse Treatment System Survey, a nationally representative survey of U.S substance use disorder treatment clinics (outpatient nonopioid treatment programs, outpatient opioid treatment programs, inpatient clinics, and residential clinics). Multivariate regression analyses examined whether clinics invited patients into clinical decision-making processes and whether clinical supervisors supported and believed in patientcentered care practices.

Results: Of the 657 substance use disorder clinics included in the analysis, about 23% invited patients to participate in clinical decision-making processes. Clinicians were more likely to engage patients in decision-making processes when working in residential clinics (compared with outpatient nonopioid treatment programs) or in clinics serving a smaller proportion of patients with alcohol or opioid use disorder. Clinical supervisors were more likely to value patient-centered care practices if the organization's administrative director perceived less regional competition or relied on professional information sources to understand developments in the substance use disorder treatment field. Clinicians' tendency to engage patients in decision-making processes was positively associated with clinical supervisors' emphasis on patient-centered care.

Conclusions: A minority of U.S. substance use disorder clinics invited patients into clinical decision-making processes. Therefore, patient-centered care may be unavailable to certain vulnerable patient groups.

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Patient-centered care has become normative in many medical fields (1), replacing a care model emphasizing clinicians' technical authority in the care decision-making process (2). Patient-centered care is a collaboration in which clinicians are expected to share with patients (and primary caregivers) not only the information necessary for making informed decisions but also authority and control over clinical decisions (3). In exchange, patients are encouraged to engage in clinical decision-making processes and share with clinicians their nonclinical history (e.g., behavioral and environmental concerns), individual preferences, and subjective and contextual information (4, 5).

Leaders in substance use disorder treatment are pushing for the field to follow the rest of medicine in embracing patient-centered care (6). Patients may have strong preferences for care options (e.g., mutual help group, one-on-one behavioral treatment, and pharmacotherapy) as well as the format and goals of treatment. In this situation, patientcentered shared decision making can close the information

and preference gaps between patients and providers (7). Patient involvement in decision making is associated with greater satisfaction with the care experience, increased

#### **HIGHLIGHTS**

- Substance use disorder treatment providers are encouraged to practice patient-centered care.
- In 2017, about 23% of clinics invited patients to participate in decision-making meetings about their care.
- Two factors associated with a clinic's lower likelihood of practicing patient-centered care were greater regional competition for patients and serving a larger proportion of patients with alcohol or opioid use disorder.
- Patient-centered care may be unavailable to vulnerable patient groups.

compliance with the agreed-upon care plan, and less severe substance use (8–10).

Despite the promise of patient-centered care practices in substance use disorder treatment, few studies have examined with an organizational lens the prevalence and predictors of clinician-patient collaboration in decision-making processes (11). Environmental and organizational contexts influence clinician-patient interactions in various treatment settings (12). The Patient Protection and Affordable Care Act (ACA) introduced financial and policy incentives for clinics to implement patient-centered care (13). Given the institutional shift in medical services toward patient-centered care, staff members with medical training and credentials may want the legitimacy provided by patient-entered care practices (14). Administrative directors who perceive greater regional competition may wish to promote patientcentered care not just to provide more responsive services for individual patients but also in response to market demands (15). Given the potential importance of such organizational forces in implementing patient-centered care, this study examined factors associated with patient-centered care practices in the substance use disorder treatment field with a field-representative survey data set.

#### **METHODS**

This study used data from the 2017 National Drug Abuse Treatment System Survey (NDATSS), a nationally representative survey of substance use disorder treatment clinics in the United States. Since 1988, the NDATSS has been one of the most comprehensive, validated, and representative data sources for examining how treatment services are delivered and financed (16, 17). The sampling frame is drawn from the national census of substance use treatment clinics conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA). The sampling is stratified by clinic modality. For the 2017 survey, of 730 eligible clinics, 657 finished some or all portions of the survey (a 90% response rate) (18). The NDATSS team collects information from administrative directors and clinical supervisors on operational, managerial, and clinical aspects of the facility. The 2017 survey is the most recent wave and includes questions measuring clinics' patient centeredness, such as patient engagement in care decision-making processes and clinical supervisors' perspectives on patient-centered practices.

## **Dependent Variables**

Because patient-centered care is a dynamic process, no measure perfectly assesses it, particularly at the organizational level (19, 20). We employed two measures of patient centeredness. The first was a binary indicator of whether clinics regularly held treatment planning meetings and invited patients to participate in clinical decision-making processes. In particular, clinical supervisors were asked whether their clinics had a regular meeting of all treatment

providers and whether clients were regularly invited to attend this planning meeting when their case was being discussed. The second was a composite variable that captured clinical supervisors' perceptions of patient-centered care. We developed this measure by using ten original questions assessing the value and emphasis placed by clinical supervisors on patient-centered care practices (Cronbach's  $\alpha$ =0.79) [the ten questions are listed in an online supplement to this article]. Question frames and structures were adopted from two validated measures: the Person-Centered Care Assessment Tool and the Shared Decision Making Questionnaire (21, 22).

The two variables measured different aspects of clinics' patient centeredness. The first measured a particular behavior—namely, patient engagement in the care decisionmaking process-regarding clinicians' collaboration with patients in the formal treatment care process. We note that depending on treatment settings and circumstances, some clinics may use alternative venues and mechanisms to discuss treatment options and may invite regular patient input. The second composite variable was devised to capture clinical supervisors' beliefs about and support for patientcentered care. We note that supervisors' emphasis and promotion of shared decision making may not translate into clinicians' daily practice of patient-centered care. Acknowledging the purpose and limitations of the two variables, we used both measures as dependent variables in this study.

#### **Explanatory Variables**

Health care reform. Under the ACA, many states expanded Medicaid. Substance use disorder treatment clinics experienced increased numbers of previously uninsured patients who were seeking care, potentially influencing how clinicians engaged patients (13). Whether a clinic was located in a Medicaid expansion state at the time of interview was captured with a binary variable (no, 0; yes, 1). Given the expanded market opportunities, clinics that relied more on private insurance income might be more responsive to the voices and concerns of patients (23). The number of substance use disorder clients served in the county in which a clinic was located was a continuous variable, drawn from SAMHSA's 2016 National Survey of Substance Abuse Treatment Services. The percentage of revenue from private and commercial insurance was provided to NDATSS by administrative directors.

Organizational characteristics. Patient-clinician interactions can differ depending on treatment setting (12). Administrative directors provided information on their clinic's primary modality (outpatient program, 1; outpatient nonopioid treatment program, 2; inpatient clinic, 3; and residential clinic, 4). Previous studies have shown that a clinic's ownership, its affiliation with a hospital or mental health facility, whether it has an accountable care organization (ACO) or patient-centered medical home (PCMH) agreement, and its

accreditation status are associated with organizational behavior and clinician practice (24-26). Accordingly, administrative directors provided information on the ownership of their clinic (private for-profit, 1; private nonprofit, 2; and public, 3); whether their clinic was owned by a hospital or mental health facility (no, 0; yes, 1); whether the clinic had an ACO or PCMH agreement (no, 0; yes, 1); and whether the clinic was accredited by either of two major accreditation bodies-the Joint Commission and the Commission on Accreditation of Rehabilitation Facilities (no. 0; ves. 1).

Leadership attributes. Clinical managers' perceptions of regional competition, reliance on professional information sources, and endorsement of the 12-step model have been found to be correlated with clinicians' behavior and types of services available (15, 27). We measured clinic directors' perceived level of regional competition with a binary variable by using NDATSS data (no, a little, or some extent, 0; a great extent or a very great extent, 1). We measured directors' degree of reliance on professional information sources by using average values of the extent to which directors learned of developments in the substance use disorder field by engaging in four activities, which they rated on a scale from 1, no extent, to 5, a very great extent: reading professional publications, attending conferences, participating in seminars or workshops, and maintaining membership in professional associations. Clinical supervisors were also asked whether they believed that the 12-step model was effective (no, 0; yes, 1).

Staff and client characteristics. The composition of staff and client populations can shape clinician-patient engagement (14, 28-30). The proportion of staff members with specific characteristics (e.g., medical training or in recovery from substance use disorder) was captured in the administrative director survey as a continuous variable. Data about the composition of patient groups (i.e., the proportion of patients with alcohol use disorder, opioid use disorder, and prescription opioid use disorder; the proportion of involuntary patients; and the proportion of patients from racial-ethnic minority groups) were gathered from the clinical supervisor survey in a continuous-variable format.

Control variables. We ascertained each clinics' regional location (Northeast, 1; Midwest, 2; South, 3; and West, 4) and staff size (the total number of full- and part-time staff).

## **Analytic Approach**

NDATSS survey weights adjusted descriptive statistics to be nationally representative (18). Logistic regression analysis was used to analyze the association between explanatory variables and whether clinics invited patients into clinical decision-making processes, given the binary nature of the dependent variable. Linear regression was used for the second analysis of whether attributes correlated with the composite patient-centered care variable. To investigate

field-level differences, we controlled for modality (using outpatient nonopioid treatment program clinics as a reference category) in both regression analyses. We also used one dependent variable to predict the other variable in regression analyses and vice versa, because organizational leaders' support for patient-centered care could influence clinicians' adoption of inclusive decision-making processes, and repeated exposure to and success with patient-centered procedures could drive senior managers' stronger support (31, 32). Models with and without patient-centered care explanatory variables resulted in almost identical relationships between other explanatory variables and dependent variables. To preserve sample size and minimize estimation bias, missing values for the explanatory and control variables were imputed by using a stepwise regression multiple imputation method with IVEware (33). For ease of interpretation, several continuous variables (e.g., staff and patient compositions) were standardized for regression analyses.

#### **RESULTS**

#### **Descriptive Statistics**

Weighted descriptive characteristics of the overall sample of substance use disorder clinics in the United States (N=657) are presented in Table 1. About 23% of the clinics invited patients to participate in clinical decision-making discussions. Separate descriptive analyses showed that 23% of the outpatient opioid treatment programs, 18% of the outpatient nonopioid treatment programs, 26% of the inpatient clinics, and 39% of the residential clinics invited patients to participate in the clinical decision-making process. The patientcentered care composite variable had a mean±SD score of -0.08 ± 0.91, which is close to its desired distribution characteristics (i.e., mean=0, SD=1) [see online supplement for mean scores and SDs for the 10 questions].

Roughly 66% of the clinics were outpatient nonopioid treatment programs, 21% were residential clinics, 8% were outpatient opioid treatment programs, and 4% were inpatient clinics. A majority (57%) were private nonprofit clinics and accredited by the Joint Commission or the Commission on Accreditation of Rehabilitation Facilities (53%). About 60% of the directors reported a high degree of regional competition. Roughly 7% of staff had medical training and 33% were in recovery from substance use disorder. About 50% of the patients had alcohol use disorder, 33% had opioid use disorder, and 28% had prescription opioid use disorder. More than 46% of patients were involuntary, receiving treatment services following a court order; and 40% were from racial-ethnic minority groups.

#### **Regression Analysis**

We found several significant associations between environmental and organizational factors and the two dependent variables (Table 2). Residential clinics were significantly more likely than were outpatient nonopioid treatment

TABLE 1. Weighted descriptive characteristics of the overall sample of U.S substance use disorder treatment clinics (N=657), by whether patients were invited to participate in clinical decision-making processes

| Variable  |           | %  | Patients invited to participate |    |                 |    |                |       |
|---|-----------|----|---------------------------------|----|-----------------|----|----------------|-------|
|   | N         |    | Yes<br>(N=139)                  |    | No<br>(N=454)   |    |                |       |
|   |           |    | N                               | %  | N               | %  | F <sup>a</sup> | р     |
| Dependent   |           |    |                                 |    |                 |    |                |       |
| Invite patients to participate in clinical decision-making processes        | 139       | 23 |                                 |    |                 |    |                |       |
| Patient-centered care factor score (M±SD) <sup>b</sup>                      | $1\pm.9$  |    | .1±.9                           |    | $1\pm.9$        |    | 6.5            | .011  |
| Explanatory and control   |           |    |                                 |    |                 |    |                |       |
| Located in Medicaid expansion state   | 472       | 70 | 102                             | 70 | 325             | 69 | .1             | .783  |
| Total N of substance abuse admissions in county (thousands) $(M\pm SD)^c$   | 14.0±22.6 |    | 15.5±24.0                       |    | 13.1±21.9       |    | 1.2            | .282  |
| Percentage of revenue from private and commercial insurance (M±SD)          | 15.5±23.6 |    | 15.0±24.1                       |    | 16.6±24.2       |    | .4             | .547  |
| Service modality  |           | _  |                                 | _  |                 | _  | _              |       |
| Outpatient opioid treatment program   | 213       | 8  | 45                              | 9  | 155             | 9  | .0             | .946  |
| Outpatient nonopioid treatment program                                      | 290       | 66 | 48                              | 52 | 209             | 71 | 17.6           | <.001 |
| Inpatient clinic  | 46        | 4  | 11                              | 4  | 27              | 4  | .2             | .690  |
| Residential clinic  | 108       | 21 | 35                              | 35 | 63              | 17 | 22.4           | <.001 |
| Ownership   |           |    |                                 |    |                 |    |                |       |
| Private for profit  | 162       | 30 | 39                              | 28 | 115             | 32 | .5             | .462  |
| Private nonprofit   | 358       | 57 | 71                              | 57 | 262             | 55 | 2.3            | .132  |
| Public  | 90        | 13 | 21                              | 15 | 66              | 13 | .3             | .619  |
| Owned by hospital or mental health facility                                 | 152       | 25 | 31                              | 24 | 109             | 23 | .0             | .834  |
| Accountable care organization or patient-<br>centered medical home in place | 150       | 22 | 34                              | 31 | 106             | 21 | 5.1            | .025  |
| Accredited (JC or CARF) <sup>d</sup>  | 377       | 53 | 88                              | 59 | 269             | 52 | 1.8            | .183  |
| Director perceived high competition   | 372       | 60 | 78                              | 61 | 260             | 57 | .6             | .448  |
| Directors' reliance on professional information sources (M±SD) <sup>e</sup> | 3.4±.7    |    | 3.4±.7                          |    | 3.4±.7          |    | .0             | .915  |
| Clinical supervisor endorsed 12-step treatment model                        | 328       | 56 | 76                              | 60 | 246             | 53 | 1.9            | .172  |
| Percentage of staff with medical training (M.D. or R.N.) (M±SD)             | 7.3±12.6  |    | 7.8±13.0                        |    | 6.6±12.2        |    | .9             | .354  |
| Percentage of staff in recovery from substance use disorder (M±SD)          | 33.3±29.5 |    | 34.5±27.1                       |    | 33.7±29.8       |    | .1             | .810  |
| Percentage of patients with alcohol use disorder (M±SD)                     | 49.7±26.8 |    | 44.6±29.3                       |    | 51.4±26.1       |    | 6.0            | .014  |
| Percentage of patients with opioid use disorder (M±SD)                      | 32.7±32.4 |    | 31.7±28.5                       |    | 33.0±33.1       |    | .2             | .679  |
| Percentage of patients with prescription opioid use disorder (M±SD)         | 27.6±25.4 |    | 28.5±26.6                       |    | 27.6±25.2       |    | .1             | .738  |
| Percentage of involuntary patients (M±SD)                                   | 46.1±34.8 |    | 50.4±34.0                       |    | 44.4±34.8       |    | 3.0            | .083  |
| Percentage of patients from racial-ethnic minority groups (M±SD)            | 39.5±31.1 |    | 50.0±35.0                       |    | 35.8±29.0       |    | 21.4           | <.001 |
| Region  |           |    |                                 |    |                 |    |                |       |
| Northeast   | 182       | 21 | 33                              | 18 | 131             | 22 | .2             | .649  |
| Midwest   | 159       | 23 | 36                              | 26 | 106             | 23 | .6             | .422  |
| South   | 176       | 29 | 37                              | 26 | 120             | 30 | .1             | .814  |
| West  | 140       | 27 | 33                              | 30 | 97              | 25 | 1.2            | .271  |
| N of staff (full- and part-time) (M±SD)                                     | 21.7±36.9 |    | 22.7±53.4                       |    | $32.6 \pm 32.6$ |    | .1             | .783  |

<sup>&</sup>lt;sup>a</sup> df=1

clinics to invite patients into care decision-making meetings (adjusted odds ratio [AOR]=3.42). Two variables related to the composition of patient populations were negatively

associated with the odds of inviting patients to care decision meetings: the percentage of clients with alcohol use disorder (AOR=0.77) and the percentage of clients with opioid use

<sup>&</sup>lt;sup>b</sup> Possible scores range from -4.9 to 1.4, with higher scores indicating clinical supervisors' greater emphasis and support for patient-centered care.

<sup>&</sup>lt;sup>c</sup> Including patients admitted to outpatient nonopioid treatment programs, outpatient opioid treatment programs, inpatient clinics, and residential clinics.

<sup>&</sup>lt;sup>d</sup> JC, Joint Commission; CARF, Commission on Accreditation of Rehabilitation Facilities.

e Possible scores range from 1 to 5, with higher scores indicating directors' greater degree of reliance on professional information.

TABLE 2. Predictors of patient-centered care practices in substance use disorder treatment clinics in the United States

|  |      | Patients invited t<br>participate in clini<br>ision-making prod | cal   | Patient-centered care factor score |            |       |  |
|--|------|---|-------|------------------------------------|------------|-------|--|
| Variable   | OR   | 95% CI  | р     | Coef                               | 95% CI     | р     |  |
| Located in Medicaid expansion state (reference: not)   | 1.43 | .78 to 2.62   | .245  | 13                                 | 34 to .08  | .230  |  |
| Total N of substance abuse admissions in county <sup>a</sup>   | .93  | .79 to 1.08   | .333  | .01                                | 04 to .07  | .598  |  |
| Percentage of revenue from private and commercial insurance <sup>b</sup>                             | .91  | .70 to 1.17   | .445  | .07                                | 01 to .16  | .082  |  |
| Service modality (reference: outpatient nonopioid treatment program)                                 |      |   |       |                                    |            |       |  |
| Outpatient opioid treatment program  | 1.32 | .69 to 2.52   | .405  | .20                                | 02 to .43  | .080  |  |
| Inpatient clinic   | 2.54 | .94 to 6.89   | .067  | .04                                | 33 to .42  | .818  |  |
| Residential clinic   | 3.42 | 1.80 to 6.51  | <.001 | .14                                | 10 to .39  | .249  |  |
| Ownership (reference: private for-profit)  |      | 75 : 400  |       |                                    | 07         |       |  |
| Private nonprofit  | .60  | .35 to 1.02   | .061  | 08                                 | 27 to .12  | .434  |  |
| Public   | .77  | .38 to 1.56   | .476  | 18                                 | 44 to .08  | .174  |  |
| Owned by hospital or mental health facility  | 1.03 | .59 to 1.80   | .913  | 05                                 | 25 to .14  | .590  |  |
| Accountable care organization or patient-centered medical home in place (reference: no)              | 1.25 | .76 to 2.05   | .388  | 02                                 | 21 to .16  | .794  |  |
| Accredited (JC or CARF) (reference: not accredited) <sup>c</sup>                                     | 1.42 | .86 to 2.34   | .167  | 07                                 | 25 to .12  | .477  |  |
| Director perceived high competition (reference: not perceived)                                       | 1.06 | .68 to 1.64   | .797  | 18                                 | 34 to02    | .025  |  |
| Director's reliance on professional information sources  | .85  | .62 to 1.15   | .288  | .19                                | .08 to .31 | ≤.001 |  |
| Clinical supervisor endorsed 12-step treatment model (reference: did not endorse)                    | .99  | .63 to 1.56   | .972  | .03                                | 13 to .20  | .684  |  |
| Percentage of staff with medical training (M.D. or R.N.) <sup>b</sup>                                | .99  | .77 to 1.28   | .941  | 02                                 | 11 to .07  | .687  |  |
| Percentage of staff in recovery from substance use disorder <sup>b</sup>                             | .91  | .71 to 1.17   | .476  | 09                                 | 19 to .01  | .070  |  |
| Percentage of patients with alcohol use disorder b   | .77  | .60.99  | .040  | .04                                | .05 to .12 | .433  |  |
| Percentage of patients with opioid use disorder <sup>b</sup>   | .74  | .57 to .96  | .025  | 02                                 | 11 to .08  | .733  |  |
| Percentage of patients with prescription opioid use disorder b                                       | 1.19 | .90 to 1.56   | .218  | .05                                | 05 to .15  | .334  |  |
| Percentage of involuntary patients <sup>b</sup>  | 1.14 | .87 to 1.48   | .343  | .02                                | 07 to .12  | .611  |  |
| Percentage of patients from racial-ethnic minority groups <sup>b</sup> Region (reference: Northeast) | 1.48 | 1.18 to 1.86  | <.001 | 03                                 | 11 to .05  | .480  |  |
| Midwest  | 1.46 | .79 to 2.69   | .230  | 20                                 | 42 to .02  | .080  |  |
| South  | 1.02 | .48 to 2.15   | .964  | 18                                 | 44 to .08  | .177  |  |
| West   | 1.14 | .61 to 2.15   | .673  | 18                                 | 41 to .04  | .115  |  |
| N of staff (full- or part-time) <sup>a</sup>   | .95  | .75 to 1.22   | .706  | .04                                | 05 to .12  | .424  |  |
| Patient-centered care factor score   | 1.27 | 1.00 to 1.62  | .048  |                                    |            |       |  |
| Invite patients to participate in clinical decision-making processes                                 |      |   |       | .19                                | .01 to .36 | .042  |  |

<sup>&</sup>lt;sup>a</sup> Log transformed.

disorder (AOR=0.74). When a clinic's proportion of patients from racial-ethnic minority groups was increased by 1 SD (35%), the odds of inviting patients into meetings significantly increased (AOR=1.48), compared with clinics in which the proportion of patients from minority groups was average. The patient-centered care composite variable was positively associated with a clinic's increased odds of inviting patients into formal care decision processes (AOR=1.27).

Several variables were significantly associated with the composite patient-centered care variable (Table 2). Directors' reliance on professional information sources was positively correlated with the composite score (coefficient=0.19). High regional competition perceived by directors was negatively correlated with the composite score (coefficient=-0.18). Clinics that invited patients into formal clinical decision-making processes tended to score higher on the composite variable (coefficient=0.19).

<sup>&</sup>lt;sup>b</sup> Standardized.

<sup>&</sup>lt;sup>c</sup> JC, Joint Commission; CARF, Commission on Accreditation of Rehabilitation Facilities.

### **DISCUSSION**

Despite an institutional environment that now emphasizes patient autonomy and agency, many substance use disorder treatment service providers do not appear to provide patient-centered care. This study used field-representative survey data to offer early evidence of these patterns in the field of substance use disorder treatment.

#### **Findings**

In 2017, only 23% of the substance use disorder clinics invited patients into formal clinical decision-making processes. Regularly inviting patients into the decision-making process was significantly correlated with a clinic's service modality, its patient composition, and clinical supervisors' emphasis on patient-centered care. Clinics serving a larger proportion of patients with alcohol use disorder or opioid use disorder were less likely to invite patients to participate in the clinical decision-making process. Clinics may be more willing to close information and preference gaps between clinicians and patients with certain groups of patients, or the gaps may be smaller with some groups than others (e.g., there is no medication to treat stimulant use disorder and hence nothing for clinician and patient to potentially disagree about). Prescribing a standard treatment program may be the norm for the patient groups with alcohol or opioid use disorders (i.e., total abstinence or a support group for those with alcohol use disorder and medication-assisted treatment for those with opioid use disorder).

Direct engagement efforts may also be influenced by the demographic characteristics of various patient groups. For a long time, opioid use disorder has been highly stigmatized, associated with low-income individuals, persons from racial-ethnic minority groups, and young urban residents, all of whom have been historically framed as economically dependent and undeserving of treatment (34, 35). However, middle-class, white, and middle- and retirement-aged suburbanites constitute a significant proportion of the recent surge of patients with prescription opioid use disorder, and they are often characterized as more deserving or more worthy of treatment (36). We were thus surprised to find a positive association between the proportion of patients from racial-ethnic minority groups and clinics' tendency to directly engage with patients. These patterns suggest a more complex dynamic. Further qualitative investigation is needed to capture patients' and clinicians' perspectives and behaviors.

The second regression analysis, using the patient-centered care composite variable, revealed a positive relationship between patient-focused care and managers' reliance on professional information sources. As the senior staff member of a clinic, an administrative director's engagement with and exposure to professional association members, conferences, journals, and seminars might lead to the clinic's adoption of a normative practice mode (37). However, directors' reliance on these professional

information sources was not significantly associated with patients being regularly invited to participate in the clinical decision-making process. Thus, normative pressure may yield some symbolic results (e.g., emphasizing patient-clinician collaboration during staff training sessions) without producing substantive organizational change (e.g., reducing average caseloads for clinicians so that they can spend more time with patients or changing clinic hours to improve patients' access to care decision-making processes).

We found that when administrative directors perceived high regional competition, clinics tended to have lower scores on the patient-centered care composite variable. Managers who sense greater competition may tend to deemphasize noneconomic activities (i.e., patient-centered shared decision-making processes) to lower operational costs and maintain a competitive edge. Although clinics serving less price-elastic and perhaps more quality-elastic patient subgroups may strive to accommodate patients' concerns and preferences, when faced with stark competition—given that a majority of patients are either uninsured or Medicaid insured—clinics may prioritize survival over patient-centered care (23, 38).

Finally, the two dependent variables (i.e., whether clinics regularly invited patients to participate in clinical decision-making processes and the patient-centered care composite variable) were positively associated with each other after the analysis controlled for various observed environmental and organizational factors. The causality and direction of relationships could not be tested with cross-sectional data. These correlations may reflect the influence of common unobserved preferences and unit characteristics that influence both variables. Our results confirm that the variables were correlated with each other and captured different aspects of patient-centered care practice, given the variables' relationships with different explanatory variable sets.

#### Limitations

Our study had several limitations. First, the two dependent variables did not fully measure a treatment clinic's patient centeredness. Second, although the validity and reliability of the nationally representative data have been demonstrated, the survey did not capture important patient-level information and variances (e.g., how often and how long individual patients engaged with clinicians) that could show how patient-centered efforts shaped individual patients' experiences. Third, the possibility of response bias looms large with the questions related to clinics' emphasis on and practice of patient-centered care. Despite the survey's efforts to minimize social desirability bias, supervisors may have provided normative answers to these questions. Fourth, our study was based on organizational leaders' reports on patient-centered care practices, not on the direct responses of front-line clinicians or patients. Understanding the perspectives and experiences of the main participants in patient-centered care is an important topic for future study. Fifth, with cross-sectional data, this study could reveal only associations, not longitudinal or causal relationships. Finally, our findings are not necessarily generalizable to clinics outside the United States, where a different set of environmental and organizational factors may influence organizational practices.

#### **CONCLUSIONS**

Although delivery of care across the addiction treatment system is highly variable and some clinics may adopt alternative patient engagement mechanisms, only about onequarter of the substance use disorder clinics in the United States invited patients to participate in formal clinical decision-making processes. Our study also indicated that clinics facing greater competition or serving a greater proportion of patients with alcohol use disorder or opioid use disorder were less likely to engage patients or to value patient-centered care—a sign that patient-centered care may be unavailable to certain patient groups. Future studies need to show how patient-centered care practice affects the nature and outcomes of the services that clinics offer. Given the addiction field's history of nominal patient engagement, qualitative studies on how clinicians and patients experience patient-centered care would seem to be the next step. Searching for alternative ways of engaging patients could also be a useful endeavor, particularly in the substance use disorder treatment field, where staff members in recovery have traditionally served as proxies representing patients' best interests (39).

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## **Short Descriptions of Novel Programs Invited**

Psychiatric Services invites contributions for Frontline Reports, a column featuring short descriptions of novel approaches to mental health problems or creative applications of established concepts in different settings.

Text should be 350 to 750 words. A maximum of three authors, including the contact person, can be listed; one author is preferred. References, tables, and figures are not used. Any statements about program effectiveness must be accompanied by supporting data within text.

Material to be considered for Frontline Reports should be sent to one of the column editors: Francine Cournos, M.D., New York State Psychiatric Institute (e-mail: fc15@cumc.columbia. edu), or Stephen M. Goldfinger, M.D., Department of Psychiatry, SUNY Downstate Medical Center (e-mail: smgoldfingermd@aol.com).