

October 2017

John R. Kasich, Governor
Tracy J. Plouck, Director

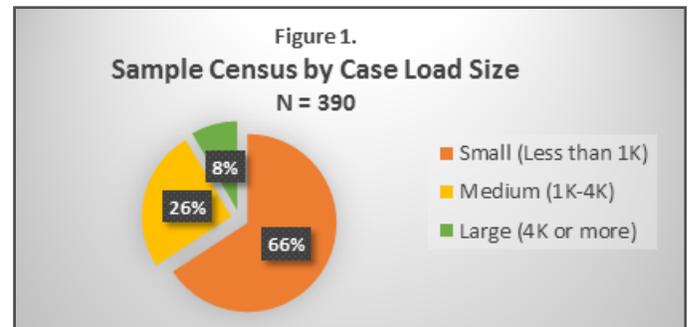
Report prepared by:
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Introduction

To better understand the nature of quality-directed activities in Ohio’s publicly-funded system of behavioral health care, an online survey was developed that asked providers about characteristics of staff and activities associated with compliance, quality assurance/improvement (QA/I), and performance evaluation/management (PE/M). The survey was administered between July 12 and August 10, 2017.

Sampling

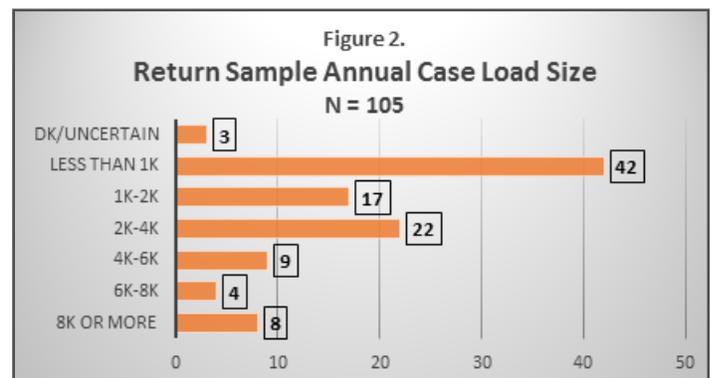
Three-hundred ninety (n = 390) organizations were identified from the Ohio Department of Mental Health and Addiction Services’ (OhioMHAS) list of certified and/or licensed providers who billed in SFY 2017 and were emailed an invitation to participate in the online survey about the organization’s quality-directed activities and staff associated with those activities. Approximately 8 percent (n = 33) of the 390 providers in the census were categorized as large, serving 4,000 or more clients annually. Another 26 percent (n = 100) were categorized as medium, serving between 1,000 and 4,000 clients annually. The largest group served less than 1,000 annually, which comprised 66 percent (n = 256) of the census.



Results

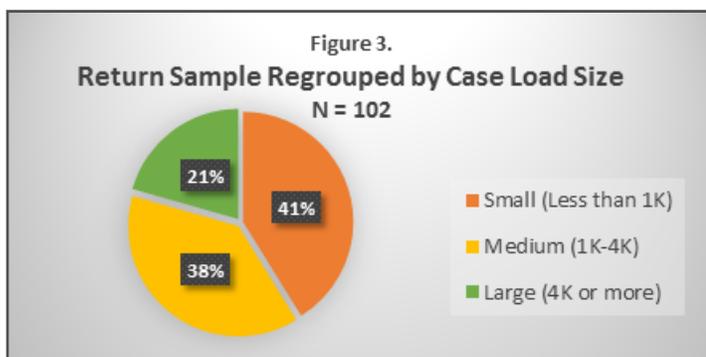
About how many mental and/or behavioral health clients are treated annually by your organizations at all sites in Ohio?

Respondents were asked to indicate their organizations’ annual case load sizes in one of eight categories, including: *Don’t Know/ Uncertain; Less than 1,000; 1,000 to 2,000; 2,000 to 4,000; 6,000 to 8,000; and 8,000 or more.* The raw distribution of the answers from 105 respondents is shown in the bar chart below. (There were 105 responses to the survey, and 100 completed questionnaires.)



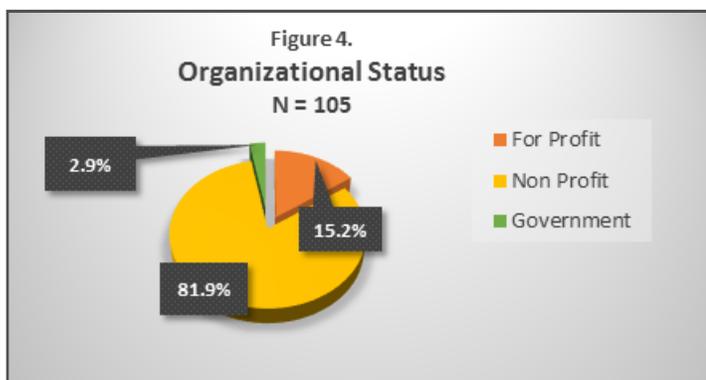
As Figure 2 shows, 42 respondents said the organization served less than 1,000 clients yearly; 17 reported 1,000-2,000; 22 reported 2,000-4,000; nine reported 4,000-6,000, four 6,000-8,000, and eight 8,000 or more. Three respondents replied "Don't Know/Uncertain."

To better support analysis and reporting, the DK/Uncertain responses were recoded as missing, and the remaining seven categories were collapsed into *Small = Less than 1,000*; *Medium = 1,000 to 4,000*; and *Large = 4,000 or more*. The regrouped distribution of the return sample by annual case load size is shown in Figure 3. Compared to the Sample Census by Case Load Size shown in Figure 1, there is an over-representation of large and medium sized organizations and an under-representation of small organizations in the survey's return sample.



What is your organization's status?

Respondents were asked to indicate whether their organization was For Profit, Non Profit, or Government. The majority—81.9 percent (n = 86)—indicated the organization was Non Profit. Fifteen point two percent (15.2%; n = 16) were For Profit, and 2.9 percent (n = 3) were Government.



What is your job title?

Job titles from 104 open-ended responses were classified into three groups in a categorical variable called JobTitle. The CQP Title group are those titles that referenced only compliance, quality assurance/improvement (QA/I), or performance improvement/evaluation (PI/E). The Other Title group are those titles that did not reference compliance, QA/I, or PI/E, but instead referenced such roles as owner, president, executive, director (operations, fiscal or clinical), program supervisor or manager. The CQP Title Plus group are those titles that referenced compliance, QA/I or PI/E and another role such as clinical services, marketing, care management, grants management, or education.

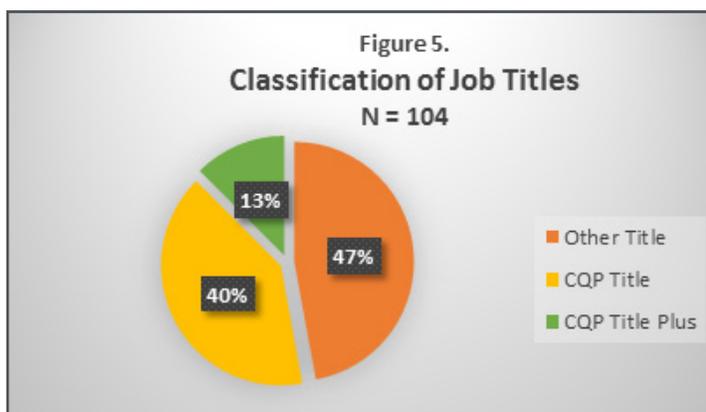


Figure 5 shows the percentage of titles classified into each group, with 40 percent representing only a CQP Title, 47 percent Other Title, and 13 percent CQP Title Plus.

The three job title classifications were analyzed by organizational size, with the Chi-square statistic resulting in a significant association between the distributions. Table 1 shows the Other Title disproportionately associated with the Small and CQP Title disproportionately associated with Large organizations.

Table 1. Distribution of Job Title Classifications by Organization Size

Job Title ^a	Organization Size			Total
	Large	Medium	Small	
CQP Title	15 (71.4%)	14 (36.8%)	9 (21.4%)	38 (37.6%)
CQP Plus Title	1 (4.8%)	11 (28.9%)	1 (2.4%)	13 (12.9%)
Other Title	5 (23.8%)	13 (34.2%)	32 (76.2%)	50 (49.5%)
<i>Total</i>	21 (100%)	38 (100%)	42 (100%)	101 (100%)

^a $\chi^2 = 32.244(4), p < .001$

How many years have you worked...

Table 2. Years of Experience in Different Roles and Settings

Question	N	Mn	Md	Mo	SD	Min	Max
In your current position?	104	5.76	3.25	3.0	6.48	.17	36
With your current organization?	86	11.22	8.0	2.0	9.31	.50	37
In quality improvement or performance management?	102	9.71	9.0	10.0	7.65	.17	36
In mental and/or behavioral health?	98	18.05	18.5	10.0	9.36	1.00	37

Table 2 shows the number of valid responses (N), mean (Mn), median (Md), mode (Mo), standard deviation (SD), minimum (Min) and maximum (Max) values for the questions regarding years of experience in different roles and settings. Survey participants reported an average 18 years working in the field and slightly over 11 years with their current organization. Participants reported a greater average number of years working in quality improvement/performance management (Mn = 9.71 years) than in their current position (Mn = 5.76 years), suggesting that most came into their current positions with some QA/I experience.

Including yourself, how many FTE does your organization resource for QA/I activities?

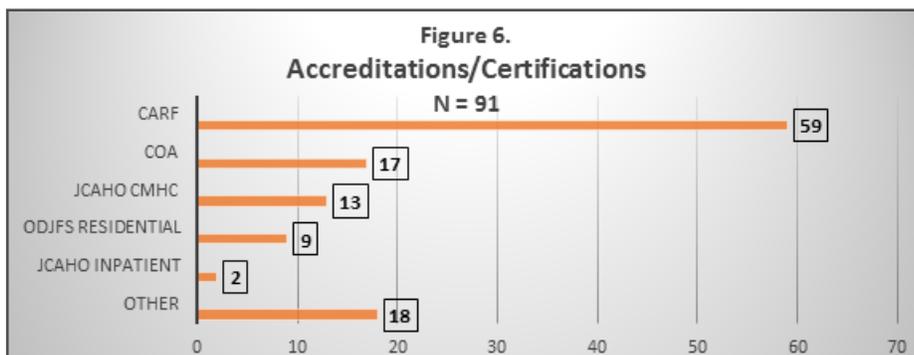
Across 103 responses, the mean number of FTE was 1.76 (SD = 1.58), the median was 1.25 FTE, and the mode 1.0 FTE. When analyzed by organizational size (Large, Medium, Small), the average number of FTE varied among 100 organizations, as shown in Table 3. An analysis of variance of means for the three organizations by size showed no significant difference in the average number of FTE

Table 3. Average Number of FTE Resourced to QA/I Activities

Organization Size	N	Mn	SD	Min	Max
Large	20	2.25	1.23	1.00	6.0
Medium	38	1.62	1.33	.20	6.0
Small	42	1.43	1.50	.05	7.0

What certifications other than OhioMHAS does the organization currently have?

Ninety-one respondents (n = 91; 86.7%) identified one or more certification entities other than OhioMHAS. The 91 respondents cited 118 endorsements of organizations certifications that were categorized as CARF, COA, JCAHO CMHC, JCAHO Inpatients, ODJFS Residential and Other. (See Figure 6.) When OhioMHAS certification of the 91 respondent organizations was added to the 118 cited endorsements, there was an average of 2.3 certifications per organization (n = 209/91). CARF accounted for 59 of the 118 endorsed certifications; COA had 17; JCAHO CMHC had 13; ODJFS Residential had nine; and JCAHO Inpatient had two. The Other category accounted for 18 endorsements. These 18 responses were categorized into two groups: 1) Other State Agencies (n = 5), such as the Ohio Departments of Youth Services, Corrections or Developmental Disabilities, and 2) Other Entities (n = 13), such as ACA, NCQA, PHAB, HRSA, AAS, NCA.



To what extent is quality improvement activity in your organization driven by ...

A) certification requirements, B) payer contract requirements?

Responses to this question were force-ranked so that respondents could not choose the same value for each source of influence on QA/I activity. Valid answers ranged from Not at All (1), Very Little (2), Somewhat (3), A lot (4) to Totally (5). Table 4 shows that the median and mean are 4 – 4.21, which indicates “A lot” of their quality improvement activity is driven by certification requirements; whereas the mean for payer contract requirements is a bit less (3.44), suggesting that activities are only “somewhat” driven by these requirements. However, the median (4) suggests both categories drive QA/I activities equally.

Table 4. Two Drivers of QA/I Activity in the Organization

Driver	N	Mn	Md	Mo	SD	Min	Max
Certification Requirements	80	4.21	4	4	.650	2	5
Payer Contract Requirements	97	3.44	4	4	.826	1	5

Table 5 shows the differences in mean rankings on the two drivers of QA/I activity by organizational size. Analysis of variance tests comparing means for the two drivers by Large, Medium and Small groups showed a significant difference in the rankings on each of the drivers. Interestingly, Medium organizations rated the two drivers lower, while the smaller organizations rated these drivers higher. The differences between the two rankings were significant.

Table 5. Average Ranking of Two QA/I Activity Drivers by Organization Size

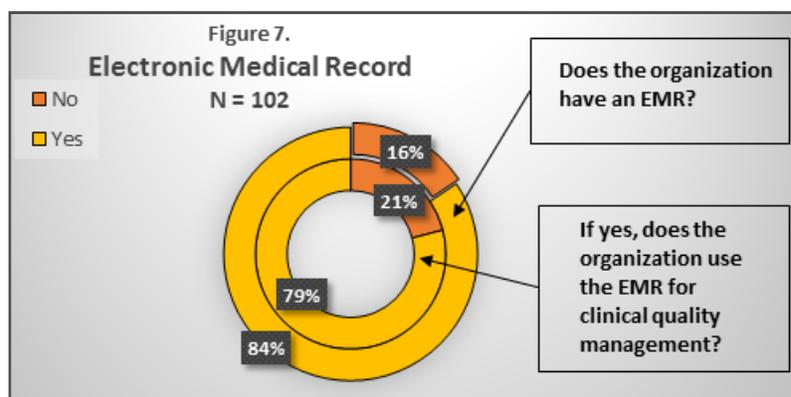
Driver	Organization Size	N	Mn	SD	Min	Max
Certification Requirements ^a	Large	16	4.25	.683	3	5
	Medium	32	4.00	.683	2	5
	Small	30	4.43	.504	4	5
Payer Contract Requirements ^b	Large	21	3.38	.865	1	5
	Medium	37	3.27	.769	3	5
	Small	37	3.66	.579	1	5

^aF=3.757(2), $p < .05$ ^bF=3.024(2), $p < .05$

Does your organization currently have an electronic medical record (EMR) system?

If yes: Do you use your EMR system for clinical quality management?

Eighty-four percent (84%; $n = 83$) of 102 respondents indicated their organization had an electronic medical record (EMR) system, while 16 percent ($n = 22$) said the organization did not (Figure 7 – outer ring). Of the 83 affirmative responses to the question, 79 percent ($n = 70$) said the EMR was used for clinical quality management, while 21 percent ($n = 13$) said the it was not (Figure 7 – inner ring).



When the presence or absence of EMR systems was analyzed by organization size, there were significant differences between organizations on the proportions with and without EMR. Table 6 shows that Small organizations reported the absence of EMR systems in greater a proportion than might be expected by random chance. A little over 70 percent of Small organizations did not currently have an EMR, compared to 14.3 percent each of the Medium and Large organizations.

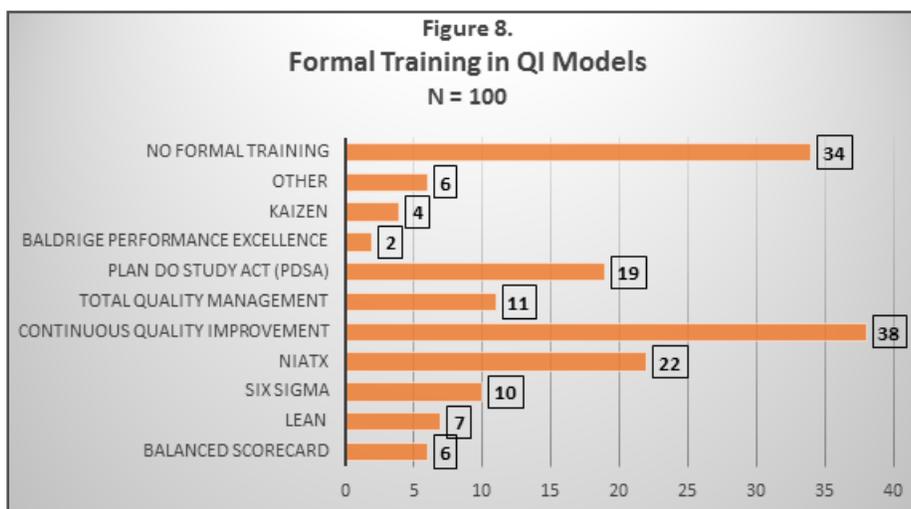
Table 6. EMR Systems by Organization Size

Organization Size ^a	Does your organization currently have an electronic medical record (EMR) system?		Total
	Yes	No	
Large	18 (22.2%)	3 (14.3%)	21 (20.6%)
Medium	36 (44.4%)	3 (14.3%)	39 (38.2%)
Small	27 (33.3%)	15 (71.4%)	42 (41.2%)
Total	81 (100%)	21 (100%)	102(100%)

^a $\chi^2 = 10.355(2), p < .01$

Have you participated in formal training in any of the following quality improvement models or frameworks? (Check all that apply.)

About one-third (n = 34) of the 100 individuals who responded to this question reported they had not participated in formal training in a quality improvement model or framework. The remaining two-thirds (n = 71) reported formal training in a one or more QI models, resulting in 125 endorsements categorized into Balanced Scorecard, Lean, Six Sigma, NIATx, Continuous Quality Improvement, Total Quality Management, Plan Do Study Act, Baldrige Performance Excellence, Kaizen and Other. The largest number of endorsements (n = 38) indicated training in Continuous Quality Improvement. NIATx represented the next highest number of endorsements (n = 22), followed by Plan Do Study Act (n = 19), Total Quality management (n = 11), Six Sigma (n = 10), Lean (n = 7), Balanced Scorecard and Other (n = 6), Kaizen (n = 4), and Baldrige Performance Excellence (n = 2). Formal trainings mentioned under the Other category (n = 6) included CARF's quality management workshop, Health Care Compliance Association basic compliance academy, Institution for Healthcare Improvement, and COA logic model.



Listed below are broad areas of QA/I activity. In each area, enter the percentage of your time that you spend working on related activities. (The sum of all answers must equal 100.)

Ninety-nine (n = 99) respondents rated eight areas of QA/I activity with an estimated percentage of time spent working on related activities. Areas were defined with examples of related activities and included Service Provision, Safety/Risk Management, Client Perspectives, Staff Perspectives and Issues, Access, Productivity/Financing, Treatment Outcomes and Disparities.

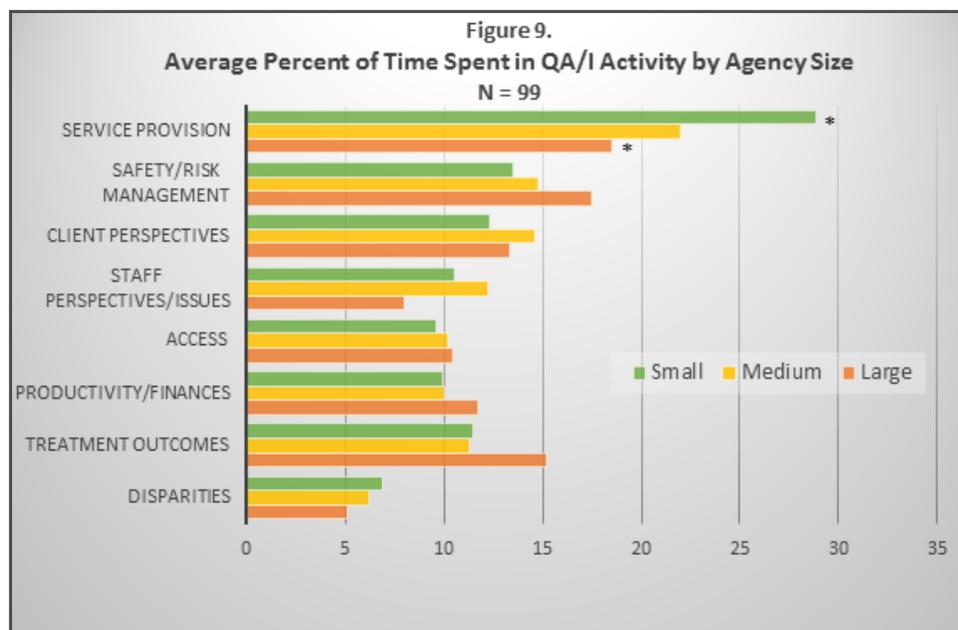
Table 7 shows the sample's average, median and modal percent of time spent in each of the eight areas of QA/I activity, along with standard deviations and minimum/maximum values. Activities associated with Service Provision were the highest percentage reported (24.45%) and those associated with Disparities were the lowest (6.21%). Safety/Risk Management (14.54%), Client Perspectives (13.35%) and Treatment Outcomes (12.25%) were the next three highest areas with percentages of time spent. Staff Perspectives/Issues (10.54%), Productivity/Finances (10.34%) and Access (10.07%) made up the third and lowest tier of time spent.

Table 7. Average Percent of Time Spent in Eight Domains of QA/I Activity

#	Item	N	Mn	Md	Mo	SD	Min	Max
1.	Service Provision: e.g., treatment plan standards met, progress notes, screenings, referrals, Rx documentation, case reviews, level of family involvement, etc.	99	24.45%	20%	20%	15.73	0%	80%
2.	Safety/Risk Management: e.g., critical incidents, physical injuries, medication errors, suicidal behavior, HIPAA compliance, CPR certification TB testing, fire drills, etc.	97	14.54%	10%	10%	10.32	0%	50%
3.	Client Perspectives: e.g., satisfaction, complaints, preferences, suggestions, perception of safety, experience of care, etc.	99	13.35%	10%	10%	6.48	2%	30%
4.	Staff Perspectives and Issues: e.g., staff satisfaction, retention/turnover, credentialing, exit interviews, team relations, attitudes toward supervisors/administrators, etc.	99	10.54%	10%	10%	6.66	0%	40%
5.	Access: e.g., appointment scheduling, wait times, outreach activity, unmet community needs, follow-up appointments, etc.	99	10.07%	10%	5%	7.29	0%	50%
6.	Productivity/Finances: e.g., mileage, number of clients served, billing units per worker, billing report submission, fundraising, etc.	99	10.34%	10%	5%	8.62	0%	40%
7.	Treatment Outcomes: e.g., recidivism, sober time, school suspensions/expulsion, EBP fidelity, hospitalizations, clinical measures, etc.	99	12.25%	10%	10%	9.83	0%	70%
8.	Disparities: e.g., racial/gender/age differences in outcomes, access, satisfaction, staffing, safety or service provision, etc.	95	6.21%	10%	5%	4.15	0%	20%

Figure 9 shows the average percent of time spent on domain activities by organization size. Small organizations are indicated by the green bars, Medium by the golden, and Large by the orange. An analysis of variance test on each of the eight domains of QA/I activity by organization size showed that Large and Small organizations differed significantly in the percent of activity spent on Service Provision. (Indicated by asterisks.) Small organizations' mean of 28.9% was significantly higher than that of Large organizations' mean of 18.55.

Large organizations reported greater mean percentages of time spent on Safety/Risk Management (17.5%), Access (10.5%), Productivity/Finances (11.8%), and Treatment Outcomes (15.3%), but the difference was not significant compared the time spent in these four respective areas by Small (13.5%; 9.6%; 9.9%; 11.5%) and Medium (14.8%; 10.2%; 10%; 11.3%) organizations. Respondents with Medium organization reported a greater percent of time spent on Client Perspectives (14.6%) than Large (13.4%) and Small (12.35%). Similarly, Medium organization respondents reported a greater percent of time spent on Staff Perspectives (12.2%) than Large (8%) and Small (10.6%). Interestingly, respondents with Small organizations reported the greatest percent of time spent on Disparities (6.9%), compared to time spent in this area by Large (5.2%) and Medium (6.2%) organizations.



*F=3.469(2), $p < .05$

Is there anything else you do in quality assurance/improvement at your organization that was not covered by areas listed in the previous question?

Twenty-four (n = 24) respondents elaborated in the open-ended question about QA/I activities. Compliance activity -- making sure licensure, accreditation, certification, and HIPAA requirements were being met -- was the most frequently cited area of QA/I responsibility missing from the eight-domain matrix shown in Table 7. Four mentioned training activity in the "hope to continuously improve client care." Another four respondents said they were involved in planning, policy, procedure review, and program development. One such respondent remarked that s/he had "total responsibility for agency's manual of operations." Four more were engaged in client rights, customer service, direct service, intake and referral.

The final four respondents mentioned marketing, communications, grant writing, and regular data reporting. One respondent of a small organization remarked that “significant time is spent determining the best way to utilize technology to gather relevant and accurate data.”

To facilitate further analysis, the 24 cases with elaboration on the other QA/I activities question were coded as “1,” and the non-respondent cases were coded as “0.” This dichotomous variable, which was called More, was tested as a proxy for the propensity to provide greater detail on QA/I activity. A Chi-square test was run to see if there was a relationship between More and Job Title, the categorical variable created as a proxy for the degree to which the respondent’s job title reflected a compliance, QA/I, or management performance role. (See Figure 5, *Classification of Job Titles*.) A greater than expected number of positive More cases associated significantly with the CQP Title category in Job Title. In other words, respondents with job titles that referenced only the functions of compliance, quality assurance/improvement or performance improvement/evaluation (CQP Title) were more likely to elaborate on QA/I activity (See Table 8.)

Table 8. Propensity to Elaborate on QA/I Activity (More) and Job Title

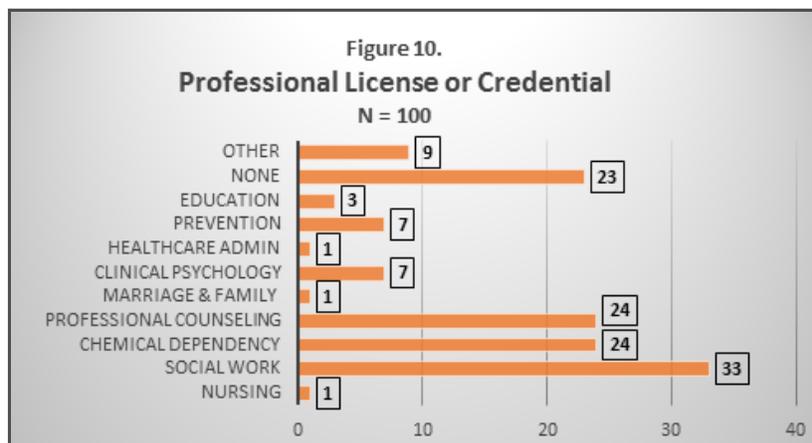
Job Title ^a	More		Total
	0	1	
CQP Title	23 (57.5%)	17 (70.8%)	40 (38.5%)
CQP Plus Title	11 (13.8%)	2 (8.3%)	13 (12.5%)
Other Title	46 (57.5%)	5 (20.85)	51 (49%)
<i>Total</i>	80 (100%)	24 (100%)	104 (100%)

^a $\chi^2 = 13.996(2), p < .01$

Are you or have you ever been certified licensed or credentialed in any of the following professions? Check all that apply.

One hundred (n = 100) respondents answered the question about professional credentials, resulting in 133 endorsements in 11 categories. No professional certification, licensure or credential (None) was reported by 23 respondents, reducing the number of credentialed

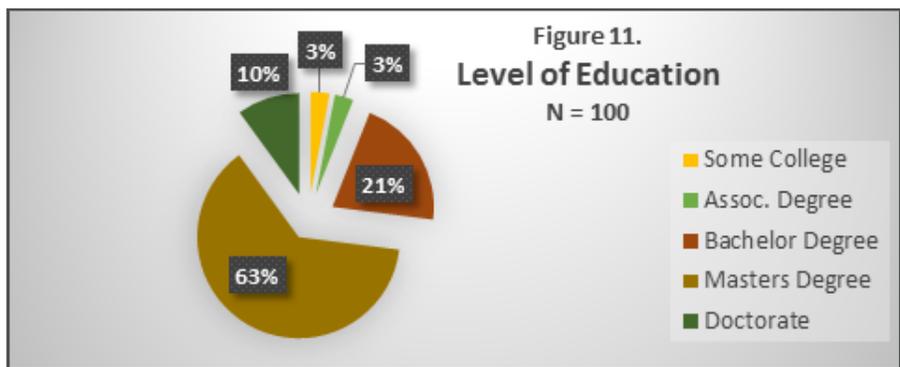
respondents to 77. (See Figure 10.) This resulted in an average of 1.73 credentials per respondent (n = 133/77). Social Work was the most frequently cited professional category (n = 33), followed by Chemical Dependency Counseling and Professional Counseling (n = 24 each). Prevention and Clinical Psychology credentials each were endorsed by seven (7) respondents. Education (n = 3), Nursing (n = 1), Healthcare Administration (n = 1), and Marriage and Family



Therapist (n = 1) were the least cited professional areas. The Other category was endorsed by nine respondents, who listed credentials in Art Therapy, Vocational Rehabilitation, Policing, Healthcare Compliance, Health Information Administration, Financial and Housing Counseling, and professional degrees in business and economics.

What is the highest level of education you have completed?

Sixty-three percent (n = 63) of respondents reported having completed a Master’s degree. Twenty-one percent (n = 21) had completed a Bachelor’s degree, 10 percent (n = 10) a Doctorate, and three percent each (n = 3) had completed some college or had an Associate degree.



Gender, Age and Racial Group Representation

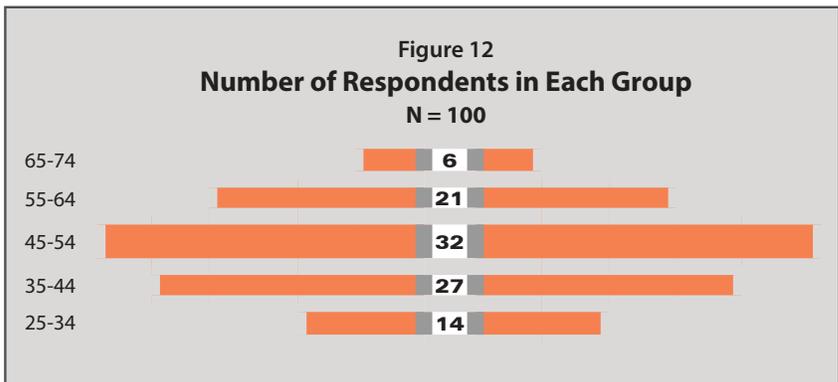
What is your gender?

Of 100 respondents, 19 were male and 81 were female. This is represented as one male to every 4.26 females.



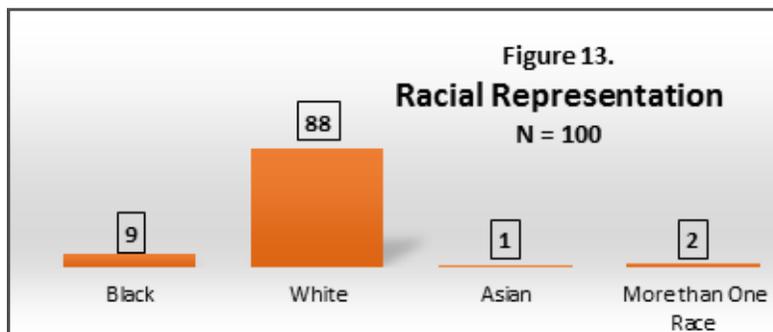
What is your age?

Fourteen percent (n = 14) were between 25 and 34 years old; 27 percent (n = 27) were between 34 and 44; 32 percent (n = 32) between 45 and 54; 21 percent (n = 21) between 55-64; and six percent (n = 6) were between 65 and 74.



What racial group do you identify with most?

The majority of the sample (n = 88) identified as White/Caucasian; nine indicated Black/African American; one indicated Asian and two were More than One Race.



Limitations

The return sample represents about 25 percent of the OhioMHAS provider universe, and it is heavily skewed toward the Large and Medium-sized organizations. Therefore, the generalizability of results should be interpreted with caution. The discussion of findings is limited to the sample.

Discussion

Given the premise that more resources are available to Large organizations that can be dedicated to QA/I staff and activity, the sample's skew toward the Medium to Large-sized organizations in the OhioMHAS provider universe is not surprising. Despite the finding that organization size showed no significant difference in mean number of QA/I full-time employees (FTE), the Large and Medium-sized organizations were more responsive to the survey. Slightly more than 40 percent of the sample respondents were with small organizations and this permitted analysis of variation between organizations by size. OhioMHAS researchers felt it important to obtain as large a sample from as many small organizations as possible, given the fact that such agencies represent two-thirds of the providers in the system of care.

Analyses by organization size showed that a significant proportion of Small providers reported QA/I duties were performed by administrative leadership (Job Title = Other) and less likely than Large providers to report such staff with a title specific to compliance, quality assurance/improvement, or performance management/evaluation (CQP Title). At the same time, no relationship was found between Job Title and whether the respondent reported formal training in a QI model or approach. Additionally, no relationship was found between organization size and whether the respondent reported having formal training. While nearly a third of the sample reported no formal training, it appears that QA/I staff with formal training are proportionately distributed across organizations regardless of size or job title.

Electronic Medical Record (EMR) systems – a major source of efficiency for QA/I activity – were not proportionately distributed across sampled organizations by size, as a significant proportion of respondents with small providers reported they did not have EMR. Compared to Medium to Large-sized organizations, a greater proportion of Small organizations with EMR reported they did not use their systems for clinical quality management. If the premise is true that Small organizations have fewer resources to dedicate to QA/I activity, it should not be surprising that the study found significantly fewer

EMR systems among small providers and less clinical QA/I use of EMR by the Small providers with systems. As a Small organization respondent commented, “significant time is spent determining the best way to utilize technology to gather relevant and accurate data.”

Lower resource efficiency of Small organizations’ EMR use also can explain why respondents with small organizations ranked both drivers of QA/I activity—certification and funding requirements—significantly higher than Large organizations. In addition, the relationship for size to resource efficiency can explain why respondents with small organizations reported significantly more time spent on QA/I activities associated with service provision. While not statistically significant, some of the data point to the strength in the QA/I activities of Small organizations. When it comes to time spent in QA/I activities associated with disparities and staff perspectives, respondents with small organizations spend a greater proportion of time than Large organizations focusing in these areas.

To cast the widest possible net over prospective survey participants, the questionnaire’s use of the term “compliance” was not differentiated from “quality assurance/improvement” or “performance management/evaluation”. That said, the domains used in the QA/I Activities matrix had an implicit bias against measuring the percent of time spent meeting regulatory requirements. This was pointed out by 25 percent of the respondents to the follow up question asking for further elaboration on job duties, and observation of this bias was made by respondents of all size organizations. This anecdotal evidence lends support to the finding that, when forced to rank drivers of QA/I activities, all respondents felt more influenced to meet regulatory than funding requirements. This is not surprising for a sample that reported 2.3 certifications per organization and 1.3 professional credentials per respondent.

While the effects of regulation on QA/I activity are evident, it remains to be seen how managed care reimbursements tied to performance measures will influence the focus of future QA/I activity. What seems evident from the analysis of variables concerned with scope of QA/I job duties (More) and job titles, is that individuals with CQP Titles have integrated quality-directed activities with a host of other functions, most notably training, planning and program development, policy review, client care, and marketing/communications. Indeed, the 13 percent of job titles that were originally classified as CQP Title Plus solely on functional terms is deceptively small. This area of analysis and study—what staff responsible for QA/I activity do in their whole scope duties—is important to understand if we are to appreciate ways in which staff make their work relevant to the organization.

Recommendations

It needs to be stressed that one-third of respondents reported having had no formal training in QA/I frameworks. In addition, many respondents in QA/I positions are likely to need continuing education units (CEUs) to maintain professional credentials as social workers, professional counselors, and chemical dependency counselors. QA/I training typically does not offer CEUs. However, The Ohio Department of Health, HIV Care Service Section provides some Social Work CEUs through their online training modules in quality improvement project management, process, tools, and analysis. The NIATx Resource Center offers free, online learning modules, toolkits and workbooks designed specifically for behavioral health. This resource can readily be adapted to QA/I activity in mental health services. Staff with OhioMHAS’ Office of Quality, Planning and Research plan to explore the feasibility of developing similar online trainings with CEUs for QA/I staff in mental health and behavioral services, recognizing that such efforts will take ongoing feedback from the field.