



An Evaluation of the Vistelar Training Initiative at Milwaukee County Behavioral Health Division: Final Agency Records Report

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Executive Summary

In May of 2017, the Milwaukee County Behavioral Health Division (BHD) implemented a new training program for all staff to address conflict in the workplace. The training was conducted by Vistelar, a global consulting firm that specializes in trainings to address conflict in a variety of areas. Researchers from the University of Wisconsin-Milwaukee were contracted to complete an outcome evaluation of the program. This evaluation involved the collection of baseline data prior to the training, follow-up data one month after the training, and follow-up data one year after the training. Additionally, monthly data on seclusion hours and restraint rates for consumers in four direct care units (e.g. Observation, PCS, CAIS, Acute Adult Inpatient) were examined from January 2016 through September 2019. This report details the findings examining whether the training had an impact on the overall trends of restraint and seclusion rates.

The outcomes examined in this report were:

- 1) the restraint rate for each direct care unit
- 2) the seclusion rate for CAIS and Acute Adult Inpatient units

The results indicated that the training was successful in:

➤ reducing the restraint rate in the CAIS and Acute Adult units beyond the overall trend

The results indicated that the training had a counterintuitive impact in:

➤ increasing the seclusion hour rate in the CAIS and Acute Adult units beyond the overall trend

Based on these findings, the evaluators recommend:

- BHD continue training their employees in conflict management.
- BHD examine whether any policy changes on seclusion could have led to an increase in the use of this practice.

Introduction

In May of 2017, the Milwaukee County Behavioral Health Division (BHD) implemented a new training program for all staff to address conflict in the workplace. The training was

conducted by Vistelar, a global consulting firm that specializes in trainings to address conflict in a variety of areas. Vistelar developed the Gatekeeper Training Program to specifically address conflict in behavioral health centers, whether between co-workers or between staff and consumers. The initial goal was to have all existing employees trained by September 2017, with continued sessions held for any new hires. Healthcare workers who worked directly with patients on units (e.g., RNs, CNAs) also were required to attend a 2-day workshop for additional training on proper procedures for client stabilization.

The evaluators (Drs. Freiburger and Romain Dagenhardt) were asked to determine whether the program met its intended goals – namely if conflict within the workplace was reduced, role clarification improved, and a cultural change toward non-escalation was achieved. This report presents the results comparing trends in the restraint rate and seclusion hours rate for four direct care units: Observation, PCS, CAIS, and Acute Adult Inpatient. It presents the results of a time series ARIMA analysis, which takes into account the overall trend and random variance, on whether the implementation of the training had any impact beyond the existing trend. Lastly, recommendations for the Milwaukee County BHD based on these results are discussed.

Methods

Sample and Data

Agency records on restraints and seclusion hours were collected for four units at MCBHD, which provide direct care to consumers: two short-term care units (e.g., Observation & PCS) and two longer-term inpatient units (e.g., CAIS & Acute Adult Inpatient). These records were obtained as monthly rates for each unit from January 2016 through September 2019. Data for approximately 1.5 years prior to the training implementation were obtained to determine the

overall trend in these two outcome measures to compare to monthly trends throughout the duration of the evaluation. Because the data were skewed for each outcome measure, the data were transformed into the natural log for each outcome.

Design and Analysis

To account for the overall trend in the use of restraints and seclusion, an interrupted time series analysis was performed for each unit on the two outcome measures using an Auto-Regressive Integrated Moving Average (ARIMA) model. These models assess the influence of previous months on current months (autocorrelation), seasonality, and random noise in the overall trend to isolate and assess the impacts of a treatment or intervention. The results presented below include the ARIMA temporal component of the overall trend as well as the influence of the training introduced in July 2019 on the overall trend.

Results of Outcome Measures

Table 1 presents the results of four separate ARIMA models on the log restraint rates for each direct care unit. As can be seen, the training had no impact on the overall trend of restraints in the observation unit. The results for the PCS unit were marginally significant ($p=.061$), with the analysis indicating a trend toward decreasing the use of restraints after the training was implemented. The two long-term inpatient units, however, did see a significant change in the use of restraints. Both CAIS and Acute Adult units experienced a decrease in the rate of restraints as the result of the training net of the general trend over 45 months ($p<.05$).

Table 1: Results from the Interrupted Time Series Analysis of Log Restraint Rates 2016-2019.

Unit	Coefficient for Training Impact	ARIMA Time Components
Observation	-1.562	Autocorrelation Lag 1: .330* Sigma: 2.064***
PCS	-.467^	Autocorrelation Lag 1: .322*

		Sigma: .428***
CAIS	-1.381*	Autocorrelation Lag 1: .292* Sigma: 1.146***
Acute Adult	-1.093*	Autocorrelation Lag 1: .530*** Sigma: .758***

Note: ^p=.061, *p<.05, **p<.01, ***p<.001

The second outcome measure examined the use of seclusion hours, which were only present on the two long-term inpatient units. Therefore, the analyses only included these two units. As can be seen in Table 2, the training was associated with an increase in log seclusion hours in the CAIS unit (p<.05). In addition, the Acute Adult unit experienced an increase in seclusion hours after the training was introduced (p<.05).

Table 2: Results from the Interrupted Time Series Analysis of Log Seclusion Hour Rates 2016- 2019.

Unit	Coefficient for Training Impact	ARIMA Time Components
CAIS	2.163*	Autocorrelation Lag 1: 1.414*** Autocorrelation Lag 2: -.917*** Moving Average Lag 1: -1.354*** Moving Average Lag 2: .622*** Sigma: 1.430***
Acute Adult	2.024***	Autocorrelation Lag 1: .402* Sigma: .766***

Note: *p<.05, **p<.01, ***p<.001

Conclusion

The results from the ARIMA models indicate that the impact of the training on the use of restraints and seclusion hours was mixed. It appears that the training was most impactful on reducing the use of restraints in long-term inpatient units with minimal to no impact on

short-term inpatient units. This was true regardless of whether the consumer population was youth or adults. Unanticipated findings emerged with respect to seclusion hours. In both long-term units, seclusion hours increased after the training was introduced. One possible explanation for this finding is that policies and procedures for restraints and other related procedures were rewritten during the training period for consistency between these policies and the training provided to staff. The evaluators are unaware of the content of these changes – it is possible that the increase in seclusion hours is related to policy changes. A second limitation to the data also exists. The training of existing employees was to be completed within a 3-month period yet was ongoing through the duration of the evaluation. Determining the impact of training that was slowly implemented to existing staff is somewhat difficult, compared to a single-point intervention. It is possible that the impact of the training is underestimated given the approach of an interrupted time series model, which assumes a single time point for intervention.

Recommendations

Based upon the results from the focus groups and the process evaluation, we make the following recommendations:

- BHD continue training their employees in conflict management.
- BHD examine whether any policy changes on seclusion could have led to an increase in the use of this practice.