A Successful Proactive Medication Variance Reporting Program

by Bayview Center for Mental Health, Inc.

Winner: Board of Directors' Award, 2007 Negley Awards for Excellence in Risk Management

As with most behavioral health programs, the majority of our treatment revolves around medication management. Long before the Institute of Medicine came out with its original report presenting the number of medical errors throughout the country and the concomitant morbidity and mortality associated with these errors, most, if not all, healthcare facilities tracked and trended this type of data.

The most common of such medical errors are medication errors — even in behavioral health. Due to the variety of clients and programs at Bayview, medication errors can occur because of any one of a number of reasons and involve medical, nursing, as well as other direct care staff who have no specific clinical background but are responsible for observing clients taking their medications on a daily basis.

At Bayview, each dose of a particular medication involved in an incident counts as one medication variance. For example, if a client was prescribed three different medications to be taken once daily and the medications were not given for two days, we would count this as six medication variances. The significance of this definition will become more apparent when data is presented.

This essay focuses primarily on medication variances involving clients in supervised housing programs, but the data includes all our programs combined. We began tracking our medication variance data in 1994. Although we had fewer programs then than we do today, the number of incidents that were reported (20) was far below what we knew to be occurring and certainly well below the national norm. We averaged between 15 and 27 medication variances annually between 1994 and 2000.

There has always been a stigma associated with reporting incidents and medication errors and we initially embarked on a rather uncoordinated effort to get staff to report medication incidents. Medication variances, then referred to as medication errors, were documented on the same form used to report other client incidents and were trended in six different sub-categories including wrong time/dosage/route, wrong medication, inventory discrepancies related to narcotics, adverse drug reactions, pharmacy errors, and omissions. We also looked at who was responsible for the error and in which program they were working; corrective actions generally involved admonishment. Our attempts to convince staff to report these incidents simply on the basis that they would improve the quality of care we provided were for naught.

Then unexpectedly in FY2000-01, the number of reported incidents jumped to 138. The majority of these incidents involved omissions reported by our supervised housing program where clients, who live in apartments, present themselves daily to the lay (non-nursing) Housing Advisors who observe them taking their medications. Although we were excited that we were finally getting reports, the sudden increase, particularly from a program where there was no actual medication administration, prompted us to form an IOP (Improving Organizational Performance) team. This team uncovered a number of process issues related to medication monitoring, reordering of medications, improper documentation, untrained staff, and poor communication. Our preliminary process improvements in the Housing program included:

- Purchasing pill counters so that medications could be counted weekly;

- Using only two outside pharmacies for medication deliveries;

- Eliminating the back-up medication drawer;

- Assigning Housing Advisors to regularly monitor the medications of the residents for whom they were responsible; and

- Developing a medication review form that the psychiatrist would complete following the medication management appointment and which informed the Housing Advisors anytime a client's medication was changed or discontinued (Attachment 1). The client brought this form to the appointment and handed it to the psychiatrist.

During the following year (2001-02), we developed and administered a survey instrument to assess the staff's willingness to report medication incidents (Attachment 2), and the number of reports increased to 437. Although more programs were reporting incidents, the bulk of the incidents were still occurring in the Housing programs. The intensive training (Attachment 3) of the Housing Advisors provided by the Supported Housing Director and Division Director for Community Housing & Rehabilitation was paying off. It was not that more incidents were occurring, but rather that staff now recognized how to identify errors and how to report them.

The lOP team continued to meet and address the types of errors that were being reported. Some of the new issues we identified as contributing to medication incidents included that clients were not keeping their scheduled appointments and running out of medications; clients were not getting their

refills for a variety of reasons; and the Housing Advisors were not being informed in a timely manner of changes in the clients' medications after their medication management appointments. A second set of improvements was implemented including:

1) Having the Housing Advisors fax each client's medication review form directly to our Health Information Management (HIM) department who placed it in the clinical record prior to the medication management appointment. Following the client's appointment, the medication review form was faxed back to the Housing Advisors;

2) Having the Housing Advisors complete weekly medications inventories and faxing them to the Case Management Coordinator for follow-up;

3) Specifically assigning each Housing Advisor two apartments (with 3-4 clients in each one) for which (s)he was responsible;

4) Having medications picked up by either the Case Manager or the client because of the problems we were having with the outside pharmacies;

5) Placing old medications in a box designated for disposal;

6) Discouraging the use of PRN prescriptions;

7) Having Case Managers follow-up with non-Bayview primary care physicians regarding refills for non-psychiatric medications;

8) Counting medications before the client went out on pass and after (s)he returned;

9) Counting new medications before they were stored; and

10) Having the Case Management Coordinator be responsible for assuring that consultation forms were faxed daily from the clients' medical clinic.

We completed the Medication Safety Self-Assessment, distributed by the Institute for Safe Medication Practices, and began working on additional changes we could make to our systems. We considered the increased reporting of medication incidents as extremely positive, congratulated the staff, and continued to encourage them so that opportunities for improvement could be uncovered and addressed. To emphasize this point, we stopped disciplining staff after reporting incidents

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and started disciplining staff for failing to report incidents.

The number of reported incidents (900) peaked in FY 2002-03. The majority of the incidents (85% or 765 variances) were still being reported by the Housing programs. It was clear that we needed a better way to identify the problem processes causing the variances.

An ad hoc committee was formed consisting of risk management, nursing, and housing staff to develop a separate form and procedure to report medication variances (Attachments 4 and 5). This was the year we stopped using the term "medications errors" and starting using the term "medication variances", another step in reducing the stigma associated with reporting these incidents.

In FY 2003-04, Risk Management placed the reporting form on Microsoft Access so that each specific category could be trended (Attachment 6). The result was very specific data including the types of variances, the medications

involved, where they started, system failures, contributing factors, and the level of harm, if any, caused to the client. By the end of the year, the number of variances started to decrease (401 variances compared to 900 the previous year). This was also the first significant decrease in the number of variances reported by the Housing program (35% versus 85% the prior year). This was also the first time that near misses were being reported.

In FY 2004-05, the number of variances decreased again and we were finally starting to see an increase in the number of variances reported by some of our other programs. We continued to positively reinforce the staff in reporting medication variances and this reinforcement filtered to other types of incident reporting. in FY 2005-06, the last year for which data is currently available, we had a significant increase in medication variances due to two incidents involving over 1500 expired samples. However the Housing programs' variances represented only 8% of the total.

This truly was a significant achievement. In mid-2006, a Medication Variance Training questionnaire was developed and is now used to train all direct care staff Agency-wide (Attachment 7).

Conclusion

A multidisciplinary team effort and ongoing collaboration among all the parties involved are essential to positively reinforcing the benefits of reporting variances and creating a safer environment for the clients.

We believe this program has improved the quality of our services because we have (1) almost completely eliminated the number of medications missed by the Housing program clients, (2) improved the knowledge base of our Housing Advisors as well as

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other staff, (3) taught our clients to be more responsible and self-sufficient as indicated by our client satisfaction survey, (4) increased the number of days our clients spend in the community (reduced the readmission rate due to medication noncompliance), (5) made staff more aware of the potential for serious outcomes if variances are not reported and corrected, and (6) helped staff to understand the importance of reporting near misses. This proactive program has reduced our liability exposure by assuring that our clients get the right medications at the right time and perhaps, most importantly, it was implemented before a sentinel event occurred.

If we can prevent even one client from decompensating and/or potentially injuring him/herself or others, then we have reduced our risk exposure. Our staff satisfaction survey results indicate that over 85% feel comfortable reporting medication variances and adverse events today, compared to 35% when this process started. This prevention and training program can be undertaken by any behavioral health facility and additional resources (other than time) were/are not required to implement it.

We have been very fortunate that we have never had a truly serious outcome resulting from a medication variance. However, since we treat our clients therapeutically with a variety of medications, the potential for error and serious injury will always exist, and we will continue to look for ways to improve our processes as we face new challenges. ❖

ABOUT BAYVIEW:

Opened in 1981, Bayview Center became accredited in 1995. It offers a continuum of therapeutic and support services to clients in Miami-Dade and Boward Counties in SE Florida. The Center operates with a $19.7 million budget and 300 FTEs. Long time and current CEO Robert S. Ward has recntly announced his impending retirement. At presstime, no appointment has been made. Attachments mentioned in this article are available from Bayview Center's Office of Corporate Compliance (305-892-4646).