IMPROVING ADMINISTRATIVE OPERATIONS FOR BETTER 
CLIENT SERVICE AND APPOINTMENT KEEPING IN A 
MEDICAL/BEHAVIORAL SERVICES CLINIC

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Appointment no-shows are a problem in healthcare organizations. It is important that appointment intake and scheduling processes are effective in both meeting client needs and efficient in meeting organizational business requirements. This study examined baseline levels of appointment keeping in a not-for-profit medical/behavioral pediatric services clinic, analyzed existing administrative processes, introduced additional appointment keeping reminders, and presented systematic, performance management tutorials for clinic employees. Results indicate an increase in percentage of appointments kept and a decrease in appointment lag time.
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INTRODUCTION

In today’s competitive economic market, health care organizations are finding that in order to remain competitive, they must function more like businesses. This means reducing operation costs, increasing profits, and providing high quality services. Ideally this should be done by utilizing and optimizing existing organizational resources and by increasing the number of clients served (Gikalov, Baer, & Bailey, 1997).

In health care settings, increasing the percentage of clients who keep their scheduled appointments has several benefits: efficient use of physician and support staff time; income that matches the cost containment of health care services; the opportunity to provide quality health care; and continued partnership with health care referral services (Bean & Talaga, 1992). Unfortunately, the percentage of health care clients who do not show up for scheduled appointments (without notice of cancellation) has been noted to range from 10-30% (Lowes, 2005); 25-32% (Turner & Vernon, 1976); 19-52% (Benjamin-Bauman, Reiss, & Bailey, 1984); and 47.4% for clients waiting one week or more for their scheduled appointment (Bean & Talaga, 1995). The Medical Group Management Association reports that a broken appointment rate of 4% or less is necessary to avoid a negative impact in health care organizations (Lowes, 2005). Reducing no-show appointments should be a goal for every health care organization. No-show appointment patterns have been analyzed over the years in an effort to identify the causes of these missed appointments. Stone, Palmer, Saxby, & Devaraj (1999) found that
41% of non-attendance was attributable to hospital factors, and 59% was attributable to client factors. Hospital factors included failure to inform clients of their appointments, or cancellation of appointment in advance by either the patient or the hospital. Client factors included forgetting about appointments, work-related reasons, illness, or lack of transportation. Ross, Friman, and Christophersen (1993) found that appointments initiated by someone other than the client (physician, nurse, clerical staff) and follow-up appointments (or recall appointments), are more likely to be missed than client-initiated first-time appointments. Increased client effort, lack of communication, and simply forgetting also contribute to greater risk for missed appointments. Through log linear analysis, Ross et al. (1993) also found that lag time between scheduling and the actual appointment date greatly influenced appointment-keeping outcomes.

Hertz and Stamps (1977) identified that three major factors related to appointment-keeping behavior: physician continuity, communication systems, and type of appointment system. Continuity is seen as important to establish rapport and trust between physician and client. Communication systems, such as appointment reminders are effective in reducing number of no-show clients. Systems that also included the ability to communicate with the non-English speaking clients, such as the Spanish-speaking community, were more successful at reducing no-show appointments. Lastly, when the health care facility differentially reinforced appointment-keeping behavior by scheduling individualized appointment slots vs. permitting walk-in appointment slots, there were fewer no-show clients.

When Bean and Talaga (1992) reviewed appointment-breaking literature, they
found that lower socioeconomic status, education level, and younger age were positively correlated with missed appointments. Clients who had previously missed appointments were also more likely to repeat the behavior. Higher rates of no-show appointments were common with longer lag intervals between scheduling an appointment and the actual appointment date. They also found several health belief measures that were predictors of appointment keeping: concern about the client’s health; perceived susceptibility of client to disease; perceived severity of client’s illness; perceived benefit of treatment; perceived safety of the diet, and no reason to miss the scheduled appointment.

Health care organizations should be aware of the possibility of high percentages of no-show appointments in referral services because referrals occur before any client-clinician relationship is established, clients may be scheduled appointments prematurely (client might agree to the appointment booking before being fully committed to the necessity of the appointment), the client’s condition may improve before the appointment, or the client’s perception of the problem may change (Bean & Talaga, 1995). To keep a competitive advantage, it is suggested that the health care referral services should increase communication with the referred client by using appointment reminders and reassuring the client of the quality of the organization’s clinicians. Reminders should emphasize the importance to both the client and clinician in showing up for the scheduled appointment.

Compliance with referrals is also affected by delay in care, difficulty in obtaining prompt appointments, and concern about financial costs (Manfredi, Lacey, & Warnecke, 1990). Strategies to increase compliance with referrals of patients with cancer in a
neighborhood health clinic included verbal communication between nurse and client at the neighborhood clinic, reminder notes to the client with referral information, telephone reminders about the referral appointment, and a patient information form to be returned after referral appointment compliance. When implementing the above strategies, Manfredi et al. had 89% compliance compared to 68.2% compliance with a control group that did come in contact with the listed strategies. It was noted that, “improved compliance was most evident for conditions associated with non-compliance in the control group. It was least evident for appointments within 15 days, which were associated with high compliance regardless of intervention…The study findings indicate that compliance with referrals can be improved when appointments are within two weeks of referral and when clinic staff give clear instructions and follow-up patients to ensure receipt of prescribed procedures” (p.86).

Turner and Vernon (1976) studied no-show appointments in mental health settings and found that causes of no-show appointments correlated with the client forgetting the appointment, client’s economic status, appointment lag time of 15 days or more, ethnic background, diagnosis, severity of diagnosis, and clarity of appointment intake and procedures. Turner and Vernon added telephone prompts that reminded clients of their appointment date and time at a mental-health care clinic. An administrative staff member made all telephone prompt calls one to three days prior to the appointment date. During baseline, no-show rates ranged between 22-44% and fell to 7-19% when the phone prompts were introduced. The telephone prompt calls cost only $162.00 (labor cost) during the seven-month intervention, which was recovered after filling only six missed
appointment slots. The authors advocate phone reminders because they are easy, successful, and cost-effective.

Pediatric clinics often experience high percentages of missed appointments. Friman, Finney, Rapoff, and Christophersen (1985) explained that keeping an appointment involves a complex response chain that begins with remembering the scheduled appointment date and time, followed by many other responses. Some of these responses may be followed by punishing consequences, such as traveling during high-traffic times of day, difficulty finding parking, leaving work early, and so on. Increasing the reinforcing value of the scheduled appointment and decreasing the response requirement for clients, are two approaches to decrease a no-show appointments. Friman et al. used mailed appointment reminders, telephone reminders, and free parking passes for clients in an effort to ease the client’s response requirement and improve appointment keeping. Results showed an overall increase in kept (show) appointments from 56% during baseline to 75.3% during intervention.

It is interesting to note that Friman and Poling (1995) observed that basic research outcomes have shown that, “response rates decrease as force requirements increase, increasing the force requirement in the second component of a two-component chain schedule decreases response rates in the first component, extinction is more rapid as force requirements increase, subjects will escape from situations that require particularly effortful responding, and subjects prefer lower effort responding to higher effort responding” (pp. 583-584). These findings have been supported by the health care appointment keeping research. Friman and Poling acknowledge that appointment
keeping involves a chain of responses that requires effort. Opportunities to reduce the effort should be identified and tested, and the added benefits justifying the effort should be readily apparent to the client.

Benjamin-Bauman et al. (1984) found that one of the least expensive and easiest scheduling interventions for appointment keeping is to reduce the lag time between scheduling the appointment and actual appointment date. At a health department family planning clinic, clients were assigned to either a 1-week lag time, or 3-week lag time conditions. Results showed that the 1-week lag group averaged a 75% show rate compared to a 57% show rate for the 3-week lag group. A second experiment showed that clients assigned to a next-day appointment (actual appointment one day after scheduled) had a mean show rate of 72%. Clients assigned to a 2-week lag time had a mean show rate of 52%. Client satisfaction surveys indicated a preference for shorter appointment lag scheduling system. Furthermore, clinic productivity increased from serving 21.2 clients per week (1 year prior to the intervention) to 30.1 clients per week during the study.

Mailed appointment reminders, telephone reminders, and mailed parking passes all had minimal effects on appointment keeping in a study by Ross et al. (1993) at a child health care clinic. Therefore, researchers chose to analyze the appointment lag time and found that when lag time was more than 4 weeks, show rates fell from 63% to 47%. The interventions did not significantly affect the outcomes when lag time was long (more than 4 weeks). When lag time was more than 4 weeks, there was also an increase in canceled appointments from 18% to 34%. Cancellations were important for three reasons. First,
when a client contacts the health care clinic to cancel, he/she has an opportunity to reschedule. Second, the contact creates an opportunity for the client to communicate their concerns and ask questions. And third, the cancellation allows the clinic to schedule another client during this time. When scheduling another patient is not possible, the clinician may alternatively use this time for other tasks such as paperwork and reports.

In addition to testing appointment-keeping interventions, it is important to obtain and analyze cost-effectiveness for each intervention. Reiss & Bailey (1982) randomly assigned 125 Medicaid participants in a dental clinic to either a multiple contact group (mailed postcards and telephone calls), a problem-solving group (client and social worker discussed problem-solving techniques relevant to appointment keeping), an incentive group (coupon worth cash or gift item redeemable during the visit), an incentive + problem-solving group, or a control group. Results showed that initial (first-time) appointment-keeping percentages were 69.6% for the multiple-contact group, 64% for the problem-solving group, 84% for the incentive group, 76% for the incentive + problem-solving group, and 37% for the control group. Results for completion of care (attending all necessary follow-up appointments) were 56.5% for the multiple-contact group, 52% for the problem-solving group, 52% for the incentive group, 56% for the incentive + problem-solving group, and only 16.7% for the control group. Although the costs of interventions ranged from $.19-$5.20 per family/visit, the net effects of the intervention strategy, or percent change over baseline, was roughly 40% in improved attendance. This analysis showed that the intervention strategies were cost-effective.

Similarly, Rice and Lutzker (1984) analyzed costs and benefits of four
appointment keeping interventions at a family practice clinic: no-treatment, modified appointment reminder cards (more salient discriminative stimulus), free (no cost) follow-up appointments, and reduced fee follow-up appointments. Results showed that non-compliance (no-show) rates were 30% in the no-treatment control group, 33% in the modified appointment reminder card group, 3% in the free follow-up group, and 13% in the reduced fee group. It was determined that the reduced fees represented the most cost-effective intervention for the clinic.

As mentioned above, health care organizations are finding that they must function more like businesses (Gikalov et al., 1997). According to an organizational systems view, this would mean improving processes to match the organization’s goals. Rummler and Brache (1995) put forth models of organizational functioning that emphasized systems perspectives, highlighting workflow processes across the organization. They explained, “An organization is only as good as its processes. To manage the Performance Variables at the Process Level, one must ensure that processes are installed to meet customer needs, that those processes work effectively and efficiently, and that the process goals and measures are driven by the customer’s needs and the organization’s requirements” (p. 17). There are essential relationships between the work environment, inputs/processes/outputs, feedback mechanisms, customers, and shareholders. In order to achieve organizational goals, process goals, design, and management must be addressed. Process mapping (detailed descriptions of workflow in the manner of flowcharts) is one way to analyze each step in a process and identify whether changes could be made that would improve timeliness, quality, cost, and/or outcomes of the process. Processes
should be examined to determine where flaws (such as error-prone steps) occur, and how these flaws (often called “disconnects”) can be remedied.

Hodge (2001) carried out a process-oriented performance improvement project to increase the number of show appointments and to remove clients who did not intend to keep appointments from the schedule at an eye clinic. An important feature of the revised process was that the clinic staff could carry out the changes on a regular basis, so as to improve the sustainability of the intervention. This is an important feature of her study since longevity of improvements is essential for organizations wishing to stay competitive in the economic market.

Hodge (2001) analyzed baseline appointment-keeping in an eye clinic where patients were pre-appointed one-year in advance. The percentage of clients who kept their appointments during baseline was 20%. After interviewing staff and creating workflows of the clinic’s current processes, it was determined that high turnover and lack of systematic administrative processes were contributing to the low appointment show rates. A revised process package was introduced and included: entering scheduled appointments into a computer system rather than using a paper calendar (as during baseline), mailing a postcard reminder 1 month prior to scheduled appointments, calling 2 weeks prior to appointments for confirmation, and calling all unconfirmed clients 1 week prior to appointments for confirmation. Five administrative business unit employees were trained on the new process package. The appointments kept during the revised process package (intervention) improved to between 60%-90%.

The current study attempted to assist a not-for-profit medical/behavioral services
pediatric clinic in improving appointment intake and appointment-keeping processes. In addition, basic performance management tools and techniques were provided to aid the clinic in carrying out improved administrative operations on a regular basis.

Throughout the study, several appointment classifications will appear in reference to appointment keeping: A cancelled appointment is any appointment that is verbally communicated by the client to the clinic, any time prior to the scheduled appointment, to be cancelled (an understanding by both the client and the clinic that the client will not be attending the scheduled appointment). A no-show appointment is any appointment that a client did not attend, without prior notification to the clinic. A rescheduled appointment is any appointment whereby the client communicates to the clinic that he/she will not be able to attend the scheduled appointment, and at the same point of contact, sets up another future appointment date. A recall appointment is a secondary, or follow-up appointment that is scheduled as a medical best practice to assure the client is appropriately responding to the clinician’s instruction/prescription.
METHOD

Personnel and Setting

This project was conducted in a not-for-profit organization that provides diagnosis and treatment services to children, ages birth-21 years, diagnosed with developmental disabilities, behavioral problems, or emotional problems. As of February 15, 2007, the organization employed three psychologists, five pediatric clinicians, six client service representatives and was governed by a Chief Executive Officer (who was also a staff physician) and volunteer board of directors.

The staff members who participated in the study included the client service representatives (including an interim Client Services Manager), the CEO, and the Chief Financial Officer. Client service representatives were members of the administrative business unit, responsible for appointment intake, appointment keeping, triage processes, account management, processing insurance, claims and collections. Other tasks and responsibilities of the client service representatives included greeting patients, updating insurance information, Spanish translation during appointments, and client waiting room upkeep.

Procedure

In a January 2007 initial meeting between Eagle Performance Improvement Consultants (EPIC, of which I was a member) and the organization’s CEO, several
organizational concerns were identified as problem areas. The CEO was concerned about the high number of client complaints regarding the lag time between submitted application and actual appointment date. Clients also complained about lack of communication from the organization regarding important appointment information during the admissions process. The CEO was also concerned about high turnover of the client services manager position in the administrative business unit in the last few years. The organization had already established an Infrastructure Committee to address some of these concerns, and they had previously met on several occasions before consulting with EPIC, to explore possible solutions. The Infrastructure Committee was comprised of executives, clinicians, and human resource representatives, with 5-8 members attending each meeting.

Analysis of the Problem

In an effort to utilize the Infrastructure Committee’s knowledge of the organization’s processes and business goals, members were asked to pinpoint some of the organization’s difficulties in the admission process during EPIC consultation meetings. No clear pinpoints were identified from these meetings with the Infrastructure Committee, so an analysis of the admissions process was undertaken by EPIC personnel. The steps involved in this analysis are described below (see Appendix A for a detailed timeline of the steps described).

Step 1: Application Process. During the Infrastructure Committee meetings, clinicians indicated client service representatives were not adequately screening incoming
applications and that Medicaid clients contributed to the high number of no-show appointments. Clinicians believed that many of these clients were inappropriately filtered into the organization during the application intake process, as might happen if someone actually needed psychiatric services that the clinic does not provide. The clinicians decided to analyze the organization’s current application to determine if questions could be re-written to gather more enhanced detailed information about client concerns and symptoms, so the potential clients could be better assigned to either pediatric services, psychology services, or referred to a more appropriate clinician in the community. Ideas were generated to increase the length of the application in an effort to gather more client facts. This raised concerns that a lengthier application would be more difficult for parents to fill out and cause them more aggravation. Several items were re-worded in an attempt to make the form easier to fill out. Ideas for shortening the form were also discussed in meetings. However, after examining the current application and benchmarking with other organizations of similar size and services, the Infrastructure Committee determined that the current application was comparable to applications used in the benchmarked organizations, and plans for revision were shelved. The benchmark investigation also showed that the appointment lag times, while long, were not unusual for the type of organization.

Step 2: Client Services. Next, an eight hour shadow day was arranged in the administrative business unit. The purpose of the shadow day was to gather information about the triage process, daily administrative responsibilities, and insurance procedures from client services representatives and the interim client services supervisor. This
information was used to make a process map of the triage process (see F.1). Information was also provided about MISYS TIGER™, a software application and service provider for small to medium-sized clinical practices that allows the administrative business unit to access client information, scheduling, and accounting. In addition, this system links to the clinician’s electronic medical records (EMR). The clinic also utilized an automated appointment reminder system that called clients during evening hours to remind them of the date and time of their appointment and prompted them to either confirm or cancel their appointment via touchtone instructions (MISYS FastCall™).

Information from the shadow day and process map showed that triage functions were running smoothly and in a time-efficient manner. There were no unusual delays: typically applications were processed and appointment made within 7-10 business days (pending no unusual insurance delays) of receipt of the application. The most time-consuming steps in the process involved processing insurance approvals for clients. In early 2007 this was being done by phone and email. That would change as a new software tool became available later in the year. The main conclusion from the triage process analysis was that the triage process was not contributing to the performance problems of concern to the CEO. That is, client screening assignment to Clinicians was not responsible for long wait times to see a clinician or other complaints voiced by clients about their communications with the clinic.

**Step 3: Clinician Input Forms.** Evaluation of the application process (Step 1) led many Infrastructure Committee members to suggest that inefficiencies in the business administrative unit were the cause of long application intake and poor appointment
keeping. However, observation of Client Services (Step 2) triage process showed effective functions in place. The next step was to analyze why these assumptions were prevalent within the Infrastructure Committee. To accomplish this, an anonymous clinician input form was designed to encourage a “safe” way for clinicians to communicate their concerns to the consultants without creating animosity between the clinicians and the client service representatives (see Appendix B). Results showed that clinicians were not familiar with the roles and responsibilities of client service representatives other than appointment intake and appointment keeping. There was also lack of consistency among the clinicians in carrying out administrative functions. For example, some clinicians were familiar with and proficient at using the MISYS TIGER™ scheduling tools, while other clinicians delegated these tasks to their nurse or to the client service representatives. This lack of consistency led to increased opportunity for client scheduling errors. A potential solution was to train clinicians to use the software; however, this step was not taken because the clinic planned to upgrade to a newer version of MISYS TIGER™ in January 2008.

**Step 4: Client Satisfaction.** The organization had not formally tracked Client Satisfaction prior to the current evaluation. EPIC advised the organization to create and use a client survey or interview to help pinpoint where improvements in appointment intake and appointment keeping process could be made. Step 1 and Step 2 of analysis indicated that the organization was functioning within the range of competitor’s application intake and appointment lag times, and it was believed that client satisfaction information might help the organization become an exemplar in both areas. Unsatisfied
clients traditionally direct complaints to the client services department, but due to high manager turnover in the clinic, there were no steps put in place to reverse complaints. Fourteen random phone interviews were conducted in spring/summer 2007 and included several clients (parents of children patients) early in the application intake process, several who had already had their first appointment, and several who had been return clients of the organization for years. Clinicians volunteered to interview clients and it was arranged to ensure that they did not interview their own patrons in an effort to keep client responses confidential. Results confirmed that client frustrations included lack of communication from the organization, and long appointment lag times, matching the CEO’s original reports of client complaints. It was suggested that this client satisfaction information serve as a form of baseline data for the organization, and that they return to a client satisfaction survey or interview again after new organizational changes were agreed to and implemented (See Appendix C).

Step 5: Requested Data. As the clinicians were conducting the client satisfaction interviews, appointment data were gathered from the CFO (April 2007-January 2008). Data were collected about appointments from both 2006 and 2007 and analyzed in an effort to identify trends in no-show appointments. Analysis was performed according to appointment type, insurance provider, and clinician. Financial averages were also provided for data purposes. No-shows were of interest because an increase in no-show appointments translated into an increase in clients that the organization rescheduled. When these clients rescheduled, they increased the appointment lag time for other clients going through the appointment intake process. Results showed that Medicaid clients
were the least likely group to no-show, contrasting with the beliefs of many members in the Infrastructure Committee (see Step 1). This information was useful because it eliminated the need for the Committee to brainstorm fixes for Medicaid no-shows (see Step 6 for more information). Data analysis did show that Recall clients were the greatest no-show appointment group. Recall clients are clients scheduled for a follow-up visit or consultation after diagnosis was made and medications prescribed by the pediatric clinicians. These appointments are deemed necessary by the organization, in accordance with lawful medical practices, and are required if prescription refills are involved in treatment. In 2006, 86% of fail-to-show appointments were recalls, and from January-June 2007, 90% of fail-to-show appointments were recalls. The clinic’s personnel suggested that many clients do not find the recall appointments to be necessary unless prescription renewal is involved.

*Step 6: Intervention Brainstorming.* Analyzing contingencies associated with appointment keeping can reveal potential causes for no-show appointments. Often the potentially reinforcing consequences associated with showing up at an appointment are weaker than the consequences of missing an appointment. Specifically, using a PIC/NIC analysis (Daniels & Daniels, 2004) approach suggests that other life activities (e.g., going to or staying at work) can compete with the importance of attending an appointment, especially when that appointment is a less than necessary follow-up appointment. PIC/NIC analysis is a tool that helps examine the strength of consequences. Consequences are either Positive or Negative, Immediately occur or occur in the Future, and are either Certain to occur or Uncertain to occur. Consequences that are either
Positive, Immediate, Certain or Negative, Immediate, Certain are the most powerful and likely to influence decisions and behavior. For example, if showing up to an appointment results in a prescription refill, the client may find the consequence to be Positive, Immediate, and Certain (PIC). However, if the showing up to an appointment means sitting in traffic for an hour and missing a half day of work, the consequence may be Negative, Immediate, Certain (NIC). Furthermore, if appointments can be rescheduled at a later date without penalty, the “cost” associated with missing an appointment is lower.

The FastCall™ system provided opportunities for clients who received the phone call reminders to confirm or cancel an appointment; however, FastCall™ contained no interactive functions for messages left on answering machines or voicemail and contained no provision for rescheduling an appointment. Thus, rescheduling prior to scheduled appointment dates required the initiation of contact by clients, increasing response effort and likely increasing no-shows. These factors suggested that changes to consequences for clients might improve appointment keeping. Several ideas were developed, including the use of small rewards for those who show up for appointments, billing for missed appointments, a deposit that would be refunded at the time of the appointment, or assistance with transportation to and from appointments.

Certain organizational constraints precluded the use of some strategies. For example, the organization is a not-for-profit entity that serves both Medicaid and Commercial insurance clients, and donations and grant money are large sources of funding for the organization. Medicaid clients have insurance provided to them according to their financial need; thus requiring deposits prior to appointment dates or
charging clients for a missed appointment could differentially impact Medicaid clients relative to clients with Commercial insurance and could, therefore, constitute a discriminatory practice. Furthermore, it was felt that processes associated with collection of these charges would add to the daily responsibilities of the administrative business unit.

A limitation in the use of incentives to improve appointment keeping was the lack of resources to purchase rewards for clients that show for their appointments. The possibility of providing transportation for those who need it was also discussed. However, free municipal transportation was available only for Medicaid clients, and could only be arranged through insurance companies, not the organization.

Because of the difficulties associated with arranging consequences, most of the consequence-based intervention proposals were not used (the organization ultimately implemented a revised No-show policy, which will be addressed in the Discussion section). Instead, intervention focused on the antecedent manipulations such as the use of prompts to improve attendance. In Step 2 of the analysis, client services explained information about MISYS FastCall™. The former client services manager had programmed the system to call all scheduled clients two nights prior to their appointment. The system provided information about the clinician, appointment date, appointment time, and the client was prompted to either confirm or cancel the appointment via touchtone instructions.

The system was programmed to print a report the following morning (day prior to scheduled appointments) with the number of clients that confirmed their appointment,
canceled their appointment, had a message left on an answering machine, that answered
the phone but did not respond to the instructions, had a busy phone line, did not answer
(nobody picked up the phone), had a service error (phone service disconnected), or
enrollment error (the clinician was not programmed into the FastCall™ reminder
system). The purpose of the report was to allow client services personnel the opportunity
to fill any canceled appointment slots with other clients already on the schedule for an
upcoming appointment. There were many mysteries that surrounded MISYS FastCall™
since a previous client services manager set up the system, and the customer service
representative for MISYS FastCall™ who helped set up the system had also left her
position and could not be contacted. No current employees of the organization were able
to modify the settings of the system and the new manager (formerly the interim manager)
had difficulties obtaining information from the new MISYS™ customer service
representative. The administrative business unit discussed the need to know how to
operate and modify features of the program; for example, the MISYS Tiger™ system
included a written reminder function that had never been utilized in the past. During the
Intervention Brainstorming months, the new client services manager and CFO learned
how to program the written reminder system after attending a MISYS™ workshop early
fall 2007.

Intervention brainstorming produced the suggestion that Client Services staff
make live phone call appointment reminders to clients from the day prior to scheduled
appointment. This live call could result in contact with guardian/parent, a message left
with another adult (such as babysitter or grandparent), message left on answering
machine, no contact made, or information gathered regarding an incorrect phone number. One of the benefits to making the live calls was that the client service representatives were able to access multiple contact phone numbers via patient information on MISYS Tiger™. MISYS FastCall™ only has the capacity to store one programmed phone number per client—if the client did not answer when the system made the automated call or if the system reached a disconnected number, it did not call again. If a client does not answer via live reminders, the client service representative can use secondary phone numbers in the client’s information file, or can record information regarding disconnected numbers (can enter any forwarding information in the client’s information file, or can flag the file and make a note for future reference). During live calls, client service representatives can also address client questions and concerns. This could increase communication between the organization and the client, which was one of the original problems addressed by the CEO and later confirmed through the client satisfaction information.

Step 7: Changes to Appointment Reminders. Before July, 2007 only automated phone calls were made to clients via the FastCall™ system. In the next five months, several changes were made in an effort to improve appointment keeping. It was not possible to isolate the effects of each appointment reminder type. Instead, changes were made through adding components or changing other elements of the various reminders. The following schedule describes the course of changes across the second half of 2007:
7/2/07-7/31/07 - Live calls were made to all clients one day prior to scheduled appointment, FastCall™ made to all clients two days prior to scheduled appointment

8/1/07-9/11/07 – Live calls were made to new clients only one day prior to scheduled appointment, FastCall™ made to all clients two days prior to scheduled appointment

9/12/07-10/9/07 – Live calls were made to all clients one day prior to scheduled appointment, FastCall™ made to all clients two days prior to scheduled appointment, written reminders were mailed to all clients two weeks prior to scheduled appointment (see Appendix D)

10/17/07-12/31/07 – Phone calls were pushed back a day. Live calls were made to all clients two days prior to scheduled appointment, FastCall™ made to all clients three days prior to scheduled appointment, and written reminders were mailed to all clients two weeks prior to scheduled appointment.

Live appointment reminders were made during the 8am-5pm business day, and FastCall™ reminders were made after business hours from 5-8pm. Written reminders were sent to all pediatric and psychology clients with the exception of therapy appointments. This was a decision made by the clinicians and the client services supervisor because therapy appointments were scheduled at once and in block sessions, according to insurance allowances.

The show and no-show rates were tracked during all intervention phases and data were analyzed using graphic displays, and included 2006 appointment show and no-show
information as baseline measures. Findings will be discussed in the Results section.

**Step 8: Performance Management Tutorials.** The goals of this consulting project were to address the long lag time between client appointment intake process and actual appointment date, to increase communication between the organization and clients, and to examine high turnover of administrative business unit supervisor position. Probes into the latter concern suggested that former managers did not set performance-based expectations, provide performance feedback, measure business results, base decisions on data, or work to accomplish a problem solving culture. In an effort to help the new manager be successful in her position, and create a positively charged work environment, a series of Performance Management tutorials was provided. The CFO and one of the client service representatives also attended the tutorials. Tutorials introduced the following information:

- **Tutorial 1-Performance Analysis Model.** Introduced four areas to analyze why an employee is underperforming, and how to improve performance. Included training, direction/feedback, equipment/resources, incentives/disincentives

- **Tutorial 2 –Performance Tools.** Included information about antecedent-behavior-consequence (ABC) analysis, positive reinforcement, feedback, pinpointing, goals setting/deadlines. Purpose of this these tools was to help clinic leaders focus on individual, departmental, and organizational results, and the behaviors that lead to these results. Also included a process analysis quick reference tool so clinic leaders could perform gap analysis independently.
• Tutorial 3 – Data & Measurement. Addressed why measuring is important, different measurement categories, how to develop/evaluate measures, how to construct graphs and appropriate data collection sources

• Tutorial 4 – Problem Solving. Emphasized the importance of teams, characteristics of teams, and a problem-solving model for teams to follow to achieve improved performance. Emphasis was placed on reinforcing the results, behaviors, and cooperative interactions of team members.

Although no data were taken regarding the impact of these tutorials, comments about them will be included in the Discussion section.

Simultaneous Changes in the Organization

In addition to the analysis and intervention described in Steps 1-8, simultaneous changes were made in the organization as part of their normal operations that may have interacted with the consultation-based interventions. Changes included promotion of the interim manager into the manager position; an update of the organization’s phone system from a long and confusing touchtone menu to a briefer and clearer touchtone menu; clinician turnover occurred in both pediatrics and psychology departments; switchboard routing changed from one person to all of client services; CFO and Client Services manager attended local MISYS™ workshop and seminars; the administrative business unit adopted the MISYS Payerpath™ claims software that linked together with MISYS TIGER™ and MISYS EMR™ to expedite client claims and collections; and revision of the organization policy for no-show recall appointments (see Appendix E to compare the
old and new no-show policies with changes highlighted). It is unknown if these changes contributed to changes in no-show appointment outcomes. Employees initiated all simultaneous changes that occurred in the organization during consultation brainstorming sessions. Consultants coached employees during Steps 1-8 and provided feedback and social praise for taking an active part in improving organizational performance tied to business goals.
RESULTS

One of the goals of adding live and written appointment reminders was that communication between client and the clinic would increase, and there would be a higher likelihood that client and clinic would appropriately confirm, cancel, or reschedule the appointments. Canceled and rescheduled time-slots could be used to see a client on the waiting list (or a client scheduled for a later date), reducing the overall lag time for clients would decrease, leading to higher customer satisfaction in regards to appointment wait appointments and leading to higher customer satisfaction with appointment wait time. In addition, by filling no-show slots with clients who were highly motivated to attend the appointment (clients bumped up from the waiting list), the clinic would serve a larger number of clients per day. This results in a larger number of clients served each year, which may impress benefactors who donate to the clinic, and translates to larger annual revenues for the clinic.

F.2 shows the number of cancellations and rescheduled appointments across phases of intervention. The automated FastCall™ service could only accept confirmations or cancellation responses from clients, and F.2 shows the number of cancellations received by FastCall™. Cancellations and reschedules made during live call appointment reminders are also shown. The data show that cancellations and reschedules increased with the addition of live reminder calls. For example, in the first phase, 10 cancellations occurred via FastCall™, but an additional 14 cancellations or
reschedules occurred during live call reminders. Since there were no notable differences in the number of FastCall™ cancels vs. Live call cancels and reschedules across the first three intervention phases, it was decided to continue the Live calls to all clients in an effort to maintain the increased communication opportunities with clients. Across the intervention phases, a total of 51 additional cancellations or reschedules were produced by the live call reminders, or the combination of live and written reminders. These appointment slots might have been no-shows had only the FastCall™ system been in effect.

F.3 depicts the appointment show percentage for all appointments in pediatrics and psychology together month by month across 2006 and 2007. The show percentage is higher during the intervention months (July 2007-December 2007), reaching a peak of 93.3% during September 2007 and remaining above 2006 levels, despite a downward trend toward December 2007. F.4 depicts show percentages for the pediatrics department during baseline and intervention phases. It appears that the reminder systems were effective in increasing the percentage of show appointments across all six months. The declining trend evident in F.3 also appears in these data. F.5 shows the show appointment outcomes for the psychology department. Overall, show percentages were higher in this department than in pediatrics, ranging from 85.5% to 98.3%. No discernable improvement can be seen during the intervention months for the psychology department. Show percentages averaged 90.7% in 2006 and 89.4% in 2007.

When canceled or rescheduled appointment slots are filled with clients from the waiting list, the number of clients served each day increases. F.6 illustrates the raw
number of appointments scheduled during baseline and appointment reminder
intervention months in 2006 and 2007 for pediatrics, along with the number of clinicians
serving clients each month. F.7 shows the same information across the psychology
department. Total appointments increased for the pediatrics department during 2007
compared to 2006. Total number of appointments scheduled during this period for
psychology decreased, but this may have been due to clinician turnover and the changes
associated with this turnover (clinicians must be approved by the State to serve Medicaid
clients and/or commercial insurance clients; different clinicians serve different client
populations). However, psychology was keeping up with the appointment demand
according the CEO, so this decrease was not a concern for the clinic.

F.8 shows the lag time in appointments for pediatrics prior to and during the
appointment reminder intervention phases. Lag time data were not tracked in a systematic
manner by the clinic. Therefore, not all baseline and intervention monthly data are
available for inspection. Data were provided for new client appointments, Medicaid new
client appointments, and recall appointments. F.8 represents an upward trend in lag
times, and appears to be decreasing after appointment reminders were added. It is
possible that appointment reminders led to an increase in reported cancels (vs. no-shows),
allowing the clinic to reschedule clients on the waiting list and in turn decreasing overall
lag time.

F.9 shows the lag time in appointments for psychology prior to and during the
appointment reminder intervention phases. Data was provided according to diagnostic
interview appointments, psychology testing appointments, and (test result) interpretation
appointments. F.9 represents a downward trend for diagnostic interviews and (test result) interpretation appointments, but an upward trend for psychology testing appointments. After appointment reminders were added, testing appointments and diagnostic interviews trend downward while (testing) interpretation appointments show a slight increase (although down to one month or less lag).

In an effort to evaluate pediatric appointment “show” data, January 2006-December 2007 was divided into four six-month periods. The last period (July-December 2007) represents the months that live call and written appointment reminders were added to the FastCall™ reminder system that was already in place. This last period demonstrates the highest appointment “show” rate of all other periods, increasing from 77.6% (January-June 2006) to 86.95% (July-December 2007). In addition, the intervention months have a 6% increase in pediatric “show” appointments from the period before. F.10 shows a table of the data.

Psychology appointment “show” data, January 2006-December 2007 was also divided into four six-month periods. The last period (July-December 2007) represents the months that live call and written appointment reminders were added to the FastCall™ reminder system that was already in place. This last period demonstrates the highest appointment “show” rate of all other periods, increasing from 87.96% (January-June 2007) to 89.34% (July-December 2007). F.11 shows a table of the data. Despite clinician turnover, the last period of July-December 2007 has an increase in “show” appointments from the previous period. In addition, reversed reversal in a downward trend from the three previous periods can be seen.
DISCUSSION

The current project produced multiple successes: an increase in overall client show appointments (as shown in the combined pediatrics and psychology data); decreased appointment lag days; increased communication between the clinic and clients; and an increase in awareness and understanding of appointment intake processes and reminder systems by administrative business unit, CEO, and CFO.

At the final presentation of consultation outcomes with the CEO, CFO, and administrative business unit manager, the CEO stated, “It is not only great to see an increase in show appointments, but now Client Services is aware of the business implications and importance of cancelled appointments” (CEO, personal communication, February 15, 2008). The average revenue per pediatric visit is $220 for pediatrics and $244 for psychology; thus, reducing no-show appointments is a critical business issue for the clinic. Although there has been a positive pattern of change in business results, the changes may not all be attributable to the current interventions. As is typical in organizations, many other variables were changing at the time of the interventions.

The organization’s phone system was updated in July 2007, simultaneous with the implementation of live reminder calls. The new system improved the ease with which client service representatives could be contacted and messages could be left. The system also allowed client service representatives to easily retrieve messages and recontact clients. Because these changes and intervention components were introduced during the
same period, it is unknown if the increased communication between clients and the Clinic resulted from the new appointment reminder systems, the updated phone system, or both.

Clinician turnover also may have been responsible for changes in some measured outcomes. Both pediatrics and psychology experienced turnover. Losing and acquiring clinicians meant a change in total possible appointments per department per day (capacity), thus affecting total monthly appointments scheduled. Fewer scheduled appointments should lead to increased appointment lag times, and more appointments should lead to decreased appointment lag times.

The year-long consultation focusing on appointment-keeping and client management led to ideas beyond the interventions discussed above. During a September 2007 consultation meeting, the CEO suggested making client “sweeps” to identify clients who no longer need the attention of the specialists (clinicians at the clinic), and could be referred to a general practitioner/primary care physician. These “sweeps” would reduce the recall client loads to clients who continued to demonstrate the need for the organization’s specialized services and, thus, permit more efficient handling of new cases. The CEO’s hope was to demonstrate the “sweep” process to the clinicians, so they might do it on their own in the future. In February 2008, the CEO confirmed that she had begun the “sweeps” for a pediatric clinician who was retiring at the end of the month. The CEO was able to refer many clients to community providers, and clients who continued to demonstrate the need for services through the organizations were redistributed to other clinicians. Clients were informed of these changes either by letter sent to their home address (if they had not been to the clinic recently and were not
scheduled during February 2008), or during appointments in the months prior to change. Data on the number of “swept” clients were not available for review as part of this investigation. In addition, new scheduling templates for clinicians’ appointment intake were introduced during February 2008. The new templates added 2-3 additional new patient appointment slots per clinician per week. As of February 15, templates had been developed for April 2008 for two clinicians, and additional templates were going to be started for two more clinicians that day (so that 4 of 5 clinicians had the new template in place by February 16). By scheduling more new client appointments per week, the new client appointment lag time could be further decreased.

Several limitations became apparent during the consultation project. One such limitation was access to data. Requests for proprietary data from the organization almost always resulted in a delay while data were retrieved and organized for the investigators. In addition, data sets were sometimes incomplete or not in the form requested, leading to a second request. For example, during an extended absence of the CFO in summer 2007, no data queries from the organization’s database could be conducted. Delays between data collection and data analysis created lag time between meetings and (consulting) decision-making.

Another example of data limitation involved the inability to calculate appointment capacity due to lack of proper data. In health clinics, it is not uncommon for clinicians to be absent from work due to conferences, seminars, occasions for continuing education, or paid time off (vacation time). Total appointments scheduled per month may be misrepresentative as a percentage or raw number if appointment opportunities are not
also considered. For example, if two clinicians are absent from the clinic for one week because they are attending an educational seminar, many appointment slots cannot be filled, creating a longer lag time in appointments, affecting the raw number of monthly appointments scheduled, and possibly skewing percentage of show appointments. If reliable and valid data on clinician availability were available, it would be possible to present a sensitive measure of appointments relative to capacity; however, the lack of data on appointment capacity prohibited such an analysis.

Sometimes recommended changes to organizational policy were difficult to make. For example, the organization was reluctant to make changes to organizational no-show policies. Clinicians voiced that they felt such a policy was unfair because there are unforeseen circumstances that can result in a no-show and therefore, the policy was not strictly enforced. Although the CEO stated that she had begun to enforce a recently updated no-show policy in early 2008, the clinic did not collect data on the number of clients removed from the clinic’s client list/services as a result of the policy.

Step 8 in the current project was the introduction of Performance Management tutorials. The purpose of the tutorials was to improve the Client Services manager’s effectiveness in her position and to create a positively charged environment. An increase in effective management skills may help sustain client services improvements in administrative responsibilities and appointment keeping. The CEO requested this service; however, it did not begin until late November 2007. Because the current consultation project was completed in January 2008 (with the exception of an exit in February 2008), there was not enough time to help the organization implement or
evaluate the effects of changes implemented following the tutorials. However, there was some evidence for the impact of the tutorials. Prior to the current project, the administrative business unit displayed financial collections on a whiteboard in the administrative office area. These data were displayed in a very busy, confusing, and chaotic line graph drawn with markers. Following the final consultation meeting, the Client Services manager showed the consultants the new feedback tools used to set goals and celebrate achievements: individually framed, easy to understand, simple line graphs. The consultants agreed that these new graphs would be much more effective in communicating milestones reached, calendar cyclic trends, and improved business results.

Because services to the clinic were delivered over 12 calendar months (January 2007-December 2007), and interventions were implemented during only six months, it is difficult to determine the full effect of the appointment reminders. In order to evaluate the full effect of these changes, it is recommended that the administrative business unit continue to monitor and analyze changes in appointments made, percentage of show appointments, appointment lag time, and other critical business measures. In addition, the effects of the client “sweeps”, clinician scheduling templates, and the organization’s no-show policy should be continuously evaluated as part of a systematic process that will help the clinic better serve clients.
APPENDIX A

TIMELINE
<table>
<thead>
<tr>
<th>Month</th>
<th>Events</th>
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| January 2007 | • Initial consultation meeting  
|             | • Statement of Work approved by CEO                                    |
| February 2007 | • Attended first Infrastructure Committee meeting  
|             | • Attended Clinician meeting to look at application process  
|             | • Randomly sampled/evaluated responses on client applications in an effort to identify problematic questions/information requests  
|             | • Initial data request (quantity, timeliness, quality metrics) –not available at time of request because CFO out of office |
| March 2007  | • Direct observation of processes in the administrative business unit  
|             | • Created and distributed the Clinician Input Form  
|             | • Compiled/evaluated Clinician Input Form responses                     |
| April 2007  | • Received data requested in February – initial Fail-to-Show appointment information analyzed according to department, insurance provider, and clinician  
|             | • 2 meetings with clinic personnel to discuss EPIC analysis of organizational performance issues, data questions, pinpoints for further investigation/analysis  
|             | • During meetings EPIC was able to gather more information about clinic processes and not-for-profit status |
| May 2007    | • CEO to meet with Client Services manager and CFO to discuss presented analysis information and pinpoints for further investigation/analysis |
| June 2007   | • Meeting with CFO to gather/pull requested appointment data  
|             | • Cross checked data sources for reliability  
|             | • Client interviews completed by clinic personnel  
|             | • EPIC begins intervention brainstorming based on all information/data collected from clinic personnel  
|             | • Meeting with clinic personnel to discuss/approve appointment reminders |
| July 2007   | • Clinic’s administrative business unit begins new appointment reminders via Live phone call  
|             | • Compiled/evaluated client interview responses  
|             | • CFO and Client Services manager attend MISYS™ conference-learn how to send written reminders |
| August 2007 | • Written appointment reminders sent to clients beginning first week in August  
|             | • Live phone call reminders made for new clients only  
|             | • Conference call with Client Services manager to discuss the new appointment reminder processes (call was an opportunity for information gathering and coaching) |
**September 2007**

- Analyzed August appointment data
- Written appointment reminders continue, Live calls made to all clients
- Presented clinic personnel appointment data gathered since new reminders started in July
- Presented clinic Customer Management and Systems Management suggestions for further performance improvement in the administrative business unit. Also presented recommendations for future appointment reminders
- Clinic personnel met and updated the organizational Fail-to-Show appointment policy
- CEO suggested client “sweeps” and adhering to the new Fail-to-Show appointment policy (not started immediately)
- Clinic personnel took action to further understand FastCall™ system

**October 2007**

- Analyzed September appointment data
- Written appointment reminders continue, Live calls made to all clients
- CEO presented the EPIC analyses and suggestions to the organization’s board of directors
- Meeting with clinic personnel to update on Customer and Performance management strategies/processes, collect current appointment lag time data, discuss FastCall™
- Communication between EPIC and CEO regarding client sweeps (sweeps still on hold)
- Attended administrative business unit weekly meeting to observe team interactions and discussion of goals (if any)

**November 2007**

- Analyzed October appointment data
- Written appointment reminders continue, Live calls made to all clients
- Present Performance Tutorial 1 to clinic personnel
- Present Performance Tutorial 2 to clinic personnel

**December 2007**

- Analyzed November appointment data
- Written appointment reminders continue, Live calls made to all clients
### January 2008
- Present Performance Tutorial 3 to clinic personnel
- Present Performance Tutorial 4 to clinic personnel
- Analyzed December appointment data
- Collected up-to-date appointment lag time data
- Client Services manager requested FastCall™ vs. Live call data so a cost-benefit analysis of the FastCall™ system could begin
- CEO began client sweep with retiring clinician’s client list
- The administrative business unit began making “new client catch up” schedule templates/calendars for clinicians’ daily client intake
- EPIC created a presentation for clinic personnel highlighting improvements made since consultation began in January 2006

### February 2008
- Presented final results/improvements to CEO, CFO, and Client Services manager
APPENDIX B

CLINICIAN INPUT FORM
Please answer the following questions honestly. The completion of these questions can help us better understand the current organizational infrastructure. Please email completed forms to Stacey Hackett at (email address inserted here) by 12pm on Monday, March 12, 2007. If you have any questions, please send them to the same email address with the subject heading “Clinician Input Questions.” Thank you for your time and help!

1. Are you concerned with the number of no show appointments occurring each week? ___________ If yes, what are your concerns?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

2. Do you have a tracking system for the number of no show appointments you have each week? _______________ If yes, what is this system?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

3. Are you aware of no shows prior to scheduled appointment time, or do you have time that is lost due to waiting for client?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

4. Are you able to begin or complete other duties/responsibilities during no show appointments? ___________ If yes, what duties are you able to begin/complete?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

5. Are you concerned about the duration of time between scheduling client appointments and actual appointment date? ___________ If yes, what are your concerns?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

6. What information do you receive from the client during the first appointment? How is this information obtained?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

7. Do you review client application information before, during, or after your first time appointment?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
8. For your professional purposes, what are the most important/relevant fields of information on the current client application?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

9. How are follow-up appointments different from first time appointments? How does a follow-up appointment run?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

10. Who is responsible for uploading client information into your computer system? Is this information shared between all departments (pediatrics and psych)?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

11. If you could change anything about the client appointment process, what would it be?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

12. Additional information, comments, or suggestions you would like to share?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
APPENDIX C

CLIENT INTERVIEW RESULTS
What do you feel is an acceptable wait time to be seen at a specialty clinic like (clinic name inserted here)

Within 3 months
No more 1 month
Yes
Within 1 month -not available at recall time/interval
2 months
Depends on each professional, but on a parent's point of view one week to two
1 month
2 months or less (mom); less than 1 month (dad)
Wanted an earlier appt but understood why the long wait
Don't know
Yes
1 month instead of 3-4 months
Waited 6 months, feels unacceptable to wait for appt - she understands why, but feels she was losing time and her child needed help badly
Max 1 month -in an ideal world ASAP, but understands why took so long, but you want to help your child RIGHT THEN!
APPENDIX D

INTERVENTION WRITTEN REMINDER-PEDIATRICS
Dear Parent/Guardian:

(Insert child’s name here) has an appointment scheduled with the following clinician at (Clinic’s name here).

Clinician A  Clinician B  Clinician C  Clinician D  Clinician E

*The appropriate Clinician is circled*

Your new appointment is on (insert date here) at (insert time here).
Your follow-up appointment has been scheduled for (insert date here) at (insert time here).

*The appropriate information is completed according to appointment type*

Please consider the following important information prior to your appointment:

- (Clinic’s name here) will make every effort to contact you to confirm your appointment.
- Be aware that if you Fail-to-Show for your new patient appointment with (Clinic’s name here), we reserve the right to terminate your case due to the high volume of patients waiting to be seen.
- If you are a New Patient, please arrive 30 minutes early to complete necessary paperwork. Existing patients may arrive 15 minutes prior to the appointment time.
- Bring another adult to watch your child/ren while you visit with the clinician.
- Bring a translator to your appointment if necessary.
- If you have a change in insurance, notify (Clinic’s name here) at least 3 days prior to your appointment.
- If you have questions, need to reschedule or cancel this appointment, please call (insert phone number here) between the hours of 8:00am and 5:00pm Monday thru Friday.

Sincerely,
(Clinic’s name here)
Client Services Representative
APPENDIX E

NEW FAIL-TO-SHOW POLICY AND TERMINATION LETTER
DEFINITION(S):

I. INTENT:
It is the intent of (Clinic’s name here) to provide quality care to all patients seen and to keep an efficient schedule so as to provide care to as many patients as possible.

II. POLICY:
It is the policy of (Clinic’s name here) to terminate patients who Fail-to-Show for three scheduled recall appointments.

III. PROCESS:

A. Depending on the type of appointment, and time allotted for the appointment, a patient may be discharged at the clinicians’ discretion after two Fail-to-Show recall appointment(s).
B. *All patients who Fail-to-Show for 3 recall appointments will be discharged from (Clinic’s name here) per clinician orders.*
C. A termination letter will be sent by Client Services to the family per the clinician’s orders.
D. A medication weaning schedule will be provided with the termination letter when necessary.
E. *Client Services will create a clinical alert in EMR when noted that a patient has failed to show 2 or more times.*

* =New to policy (not on the clinic’s policy prior to 9/15/07)
Date:

Parent name/address…
Parent name/address…
Parent name/address…

Client Name:
Chart #:
DOB:

Dear (parent/guardian name here):

Due to your repeated failure to show for scheduled appointments, we are unable to provide services for your child at (Clinic’s name here). Blocks of time are reserved for your child at each appointment, and when you fail to keep a scheduled appointment without notifying us we have no way to offer this reserved time to another child who needs to be seen. There are a large number of patients waiting to be seen at (Clinic’s name here), and in an effort to see children as quickly as possible, we are not able to reschedule patients who continually Fail-to-Show for their appointments.

If another physician referred you to (Clinic’s name here), that physician will be notified of your appointment status.

Sincerely,

(CEO’s name here)
President/CEO/Medical Director
Schur Chair of Neurodevelopmental Pediatrics
APPENDIX F

FIGURES
Client hands in all paperwork

Performer 1: Verifies all required paperwork/application is appropriately completed/collection

CEO receives applications and filters as appropriate

Performer 2: Psych Triage

Performer 3: Pedi Triage

Performer 4: Behavior Analysis Triage

Performers call client and set up initial appointment after Insurance approved

Performers contact Insurance companies (Medicaid or Commercial)

Performer immediately sends client verification of application acceptance/initial appointment

Figure F.1. Flowchart of triage process in the clinic’s administrative business unit. Average turnaround time of -10 days.
Figure F.2. Number of cancelled and rescheduled appointments obtained during automated FastCall™ appointment reminders and Live telephone appointment reminders in intervention months.
Figure F.3. Percentage of total show appointments for the clinic across 2006 and 2007 (pediatrics and psychology combined). Live call reminders (L) in July, and September were made one day prior to scheduled appointment, and FastCall™ (FC) reminders were made two days prior to scheduled appointment. Written reminders (W) were sent out two weeks prior to scheduled appointment for all appointment reminder intervention months. Live call reminders made in August were made to new clients only (Ln). In October, November, and December, appointment reminders were pushed “back”; Live call reminders (L) were made two days prior to scheduled appointment, and FastCall™ (FC) reminders were made three days prior to the scheduled appointment.
**Figure F.4.** Percentage of show appointments for pediatrics across 2006 and 2007.

**Figure F.5.** Percentage of show appointments for psychology across 2006 and 2007.
Figure F.6. Total number (raw) of appointments scheduled per month for pediatrics in 2006 and 2007. Number of clinicians serving clients per month is also listed.

Figure F.7. Total number (raw) of appointments per month for psychology in 2006 and 2007. Number of clinicians serving clients per month is also listed.
**Figure F.8.** Number of lag days, (number of days between date the appointment scheduled and actual appointment visit/date) for pediatric clients. Lag days are according to the specific month/date listed in x-axis.

**Figure F.9.** Number of lag days, (number of days between date the appointment scheduled and actual appointment visit/date) for psychology clients. Lag days are according to the specific month/date listed in x-axis.
### Figure F.10

Percentage of show appointments for pediatrics across 2006 and 2007 divided into six-month periods, displaying the highest show percentage July-December 2007, the months the appointment reminders were added at the clinic.

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</thead>
<tbody>
<tr>
<td>Pediatric % Show Appointments</td>
<td>77.6%</td>
<td>79.7%</td>
<td>80.95%</td>
<td>86.95%</td>
</tr>
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### Figure F.11

Percentage of show appointments for psychology across 2006 and 2007 divided into six-month periods. Show percentages in psychology remained high across all periods and no noticeable change, the months the appointment reminders were added at the clinic.

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<tbody>
<tr>
<td>Psychology % Show Appointments</td>
<td>92.37%</td>
<td>90.82%</td>
<td>87.96%</td>
<td>89.34%</td>
</tr>
</tbody>
</table>
REFERENCES


