

Title : REDUCING ABUSE POTENTIAL AND CONTROLLED DRUG MANAGEMENT

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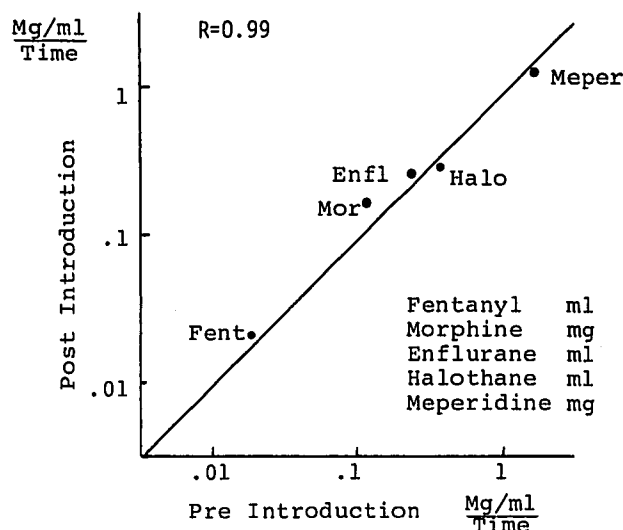
**Introduction.** A new solution to the problem of dispensing controlled drugs to residents and nurse anesthetists was arrived at in the UCSD Hospital in October 1978. Prior to that date, the resident/CRNA who gave the anesthetic obtained the drugs, filled out the narcotic log, gave the drugs, returned unopened ampules (with a note in the narcotic log) and wasted the remains of opened ampules. This system presented numerous deficiencies, led to poor record keeping and presented a drug abuse potential because of the lack of accountability and the attitude that this was a matter of minimal significance. Therefore, a system was evolved to correct this, cost analysis of the system performed, and the impact on anesthetic practice of increased restriction on the use of narcotics examined.

**Methods.** To obtain an intermediary, the help of the O.R. nurses was obtained. These nurses were willing to obtain drugs and document the issuance, but were unwilling to be responsible for witnessing administration/waste. Therefore, a Controlled Drug Request form was designed, with a self-carbon, on which drugs were to be ordered. The nurse was to obtain the drugs, leave the original of the form with the narcotic log and return the drugs with the carbon copy. The requestor was to open all ampules, draw up the drugs, use them as required, waste the remainder and note the waste on the carbon copy, which accompanied the Anesthesia Record. The next day a department administrative member checked the amount of drug drawn, used and wasted to check compliance. The original copy of the request form is maintained, as a record of control drug administration and future data analysis.

**Results.** The cost of wasting drugs could not be compared because of insufficient prior data, but the following could be obtained for the five months after the introduction of the system.

	Nov	Dec	Jan	Feb	Mar
\$Cost of waste-full amps	\$30	\$72	\$89	\$89	\$39

The total pharmacy bill was analyzed, pre- and post introduction, and if corrected for time of anesthesia administered, no significant difference was noted. Finally, the impact of the system on the technique of practice was analyzed by normalizing amount of each drug (narcotics and inhalation anesthetics) used per unit of time and comparing the data pre- and post induction. No significant impact was seen. See Figure I.



**Discussion.** The system was intentionally brought into service after the new residents were acclimatized and while the personnel in the operating room underwent minimal turnover. No major change in practice of anesthesia was experienced during this period. A question that was asked prior to introduction was the difficulty in obtaining compliance with this amount of complexity. The question seemed critical in the first 30 days, but no longer poses a major problem.

In summary, the system functions well. Record keeping is improved, drugs are available as needed, the financial/medical impact of the system is minimal and the potential for abuse of narcotics seems much reduced. This last point is based on the introduction of a neutral intermediary and the knowledge that records are indeed kept, giving credence to the concept that this is a serious matter. The system does not lend itself to all situations, but the analysis carried out surrounding the introduction is recommended to uncover unfavorable medical or financial sequelae of administrative decisions.