TECHNICAL NOTE

THE USE OF A CREDIT CARD IN A TOKEN ECONOMY¹

At the Adolescent Service of Boston State Hospital (Kris and Schiff, 1968), a credit card system has been used as the means of transaction in a token economy for the past three years. The medium has been "points", where one point is worth approximately one penny. The credit card system has proven to be economical and adaptable for use in the clinical management of a diverse patient population. In addition, it insures that data are collected automatically at each points transaction. This makes the system particularly useful where treatment takes place in diverse settings, rather than on a single centralized ward, and where many staff members may not understand the importance of keeping accurate records. At Boston State Hospital this system has been used by over 100 staff members throughout the hospital with a minimum of training and supervision.

The system works as follows: each patient is given a small plastic credit card with his name and other identifying data embossed on it. The card is similar to ordinary gasoline company credit cards. Each time a patient earns or spends points his name is stamped on a "points slip" using an imprinter. (If an imprinter is not available the slip can be filled out by hand.) The cards, imprinters, and points slips are all available commercially.² Points slips can be produced with several carbon copies and/or a final copy suitable for use as a computer card. The Adolescent Service uses one carbon copy. The original copy is given to the patient as a receipt, and the carbon copy is given to a secretary in the central office of the Adolescent Service. In addition

to the patient's name and the amount of the transaction, the following information is entered on the slip: date, identification number of the imprinter with

Table 1
Codes for Points Transactions: Payoffs (Codes 00-49)

00. More than one payoff; specify in payoff slip

School (01-09)

- 01. Attendance—incomplete day
- 02. Attendance—complete day
- 03. Attendance—night school
- 04. School bonus, classroom productivity
- 06. School bonus, special program
- 08. Homework, describe
- 09. Library, describe

Activities (10-19)

- 10. Sports
- 11. Occupational therapy
- 13. Community meeting
- 14. Activity bonus (describe)
- 15. Evening groups
- 16. Other daytime groups (describe)
- 17. Weekend groups
- 18. Vacation attendance
- 19. Ward recreational activities

Other (20-49)

- 20. Occasional job
- 21. Regular job
- 22. Bonus for earning criterion number of points
- 23. Group bonus
- 24. Individual bonus (describe)
- 27. Points statement conference
- 28. Special program
- 29. Ward job
- 31. Curiosity bonus
- 41. Attendance—incomplete day (Vocational Training Program)
- 42. Attendance—complete day (Vocational Training Program)
- 43. Work simulated productivity (Vocational Training Program)
- 44. Written productivity (Vocational Training Program)
- 48. Other (describe)
- 49. Bookkeeping correction

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²The Adolescent Service purchased the credit cards and imprinters from the Farrington Manufacturing Company. The price of the imprinters varies between \$50 and \$85, and the price of credit cards is \$30 per thousand. Patients' names are embossed on the credit cards using a hand embosser. The embosser used is available from Pitney-Bowes for approximately \$600. If an embosser is unavailable, embossing can be done commercially at nominal cost. Also, temporary cards can be made inexpensively using an ordinary label maker that embosses the patient's name on a strip of plastic adhesive tape. The tape can then be applied to the credit card. The points slips used at the Adolescent Service were purchased from Moore Business Forms, Inc. for approximately \$6 per thousand.

11-83454
MR JOHN DOE
M 5-4-69
ADOLESCENT UNIT

ADOLESCENT UNIT 050670
STATION 4

DATE

005010P.M.L.

AMOUNTCODEPAYER'S INITIALS

85613

DESCRIPTION:

TRANSACTION CONFIRMED

X

ADOLESCENT SERVICE
CHARGE - CARD

FOR EXPLANATION OF CODE
SEE CODE SHEET

CUSTOMER COPY

Fig. 1. Sample points slip.

Table 2
Codes for Points Transactions: Charges (Codes 50-99)

50. More than one charge; specify on charge slip

Lounge (51-59)

51. Morning snack period
52. Other morning times
55. Afternoon (2:00-5:00 P.M.)
58. Evening (5:00-9:00 P.M.)
59. Special lounge charge

Specials (60-79)

60. Special purchases, personal (describe)
61. Special purchases, materials for activities
62. Rentals
63. Locker room purchases
65. Other meals (off campus)
66. Special events (on campus)
68. Personal money withdrawal
70. Off campus trip
71. Bus
72. Staff (describe)
73. Psychotherapy
74. Tutorial
75. Special course tuition (school only)
76. Special program
77. Library book deposits
78. Sheltered workshop fee
79. Other specials (describe)

Penalties (80-99)

80. Leaving lounge without paying (50 points)
81. Service charge missing card (25 points)
82. Lost card replacement (50 points)
83. Loan interest
85. Fine, group
86. Fine, individual (no summons)
87. Summons fine (describe)

99. Bookkeeping correction

which the slip was stamped, initials of the staff member who filled it out, and the code of the transaction that specifies whether it is a payment or a charge and identifies the type of payment or charge (see Fig. 1). Extra space is available to explain the nature of the charge or payment in cases where the code may not be sufficiently specific. The current list of codes used is shown in Tables 1 and 2.

Once each week a secretary collates the carbon copies of the points slips and prints out a statement for each patient that lists all the patient's earnings and spendings for the preceding week by code and amount. It also shows the patient's points balance for the coming week.^a A sample points statement is shown in Fig. 2. The secretarial time involved is approximately 8 hr per week for approximately 50 patients. The points statement provides a convenient and reliable source of data both for research and for program planning. The information about a patient's performance necessary for carrying out special reinforcement programs is available at a glance from the points statement. The points statement can thus be used as a focus for weekly sessions with staff members in which patients' programs are reviewed. For the purpose of research, carbon copies of the points slips and/or weekly statements can be filed concurrently according to several classifications (*e.g.*, by patient, by date, *etc.*) to facilitate making a statistical summary of points activity.

Although primary reinforcement is necessarily delayed until the end of each week, patients do receive immediate secondary reinforcement in the form of a receipt and the social reinforcement that accompanies the payment transaction. The delay in tallying patients'

^aIn preparing statements, the secretary uses a NCR Model 160 Billing Machine, which costs \$1465. The statements can also be prepared by hand. Forms for the statements can be mimeographed or can be purchased commercially in printed form with several carbon copies. The Adolescent Service has purchased these forms from Moore Business Forms, Inc. for approximately \$65 per thousand.

11-83454
MR JOHN DOE
N 5-4-69
ADOLESCENT UNIT

ADOLESCENT UNIT POINTS SYSTEM
WEEKLY STATEMENT

OLD BALANCE 3223 NEW BALANCE 3561

TOTAL EARNINGS 1497 TOTAL CHARGES 1169

4 6 70

DATE	DAILY EARNINGS						DAILY CHARGES						DAILY BALANCE
	SCHOOL CODE	AMT.	ACTIVITY CODE	AMT.	OTHER CODE	AMT.	LOUNGE CODE	AMT.	SPEC. & SERV. CODE	AMT.	CHARGES CODE	AMT.	
6 APR 70	1												
6 APR 70	4	.75											
6 APR 70	5	.45											
6 APR 70	6	.55	13	1.5			58	.60					3353 *
7 APR 70	2	.55	15	.30									
7 APR 70	5	1.29	11	.40			58	1.45			80	.50	3452 *
			11	.40									
8 APR 70	2	.80											
8 APR 70	4	.75											
8 APR 70	5	.97	11	1.0									
8 APR 70	6	.25	10	.40			58	.95					3624 *
9 APR 70	2	.80											
9 APR 70	4	.75											
9 APR 70	5	.72											
9 APR 70	5	.50	16	.50	27	.25	58	2.29	68	5.00			3307 *
10 APR 70	2	.45											
10 APR 70	4	1.00					55	.70					3411 *
10 APR 70	5	.29											
					22	15.0							3561 *
10 APR 70 TOTAL		10.87		2.25		1.75		5.99		5.00		.50	3561 *

COMMENTS:

Fig. 2. Sample points statement.

points activity is useful in teaching these relatively impulsive patients to plan ahead financially. The more regressed and/or retarded patients who cannot tolerate a week's delay in primary reinforcement are put on an "immediate payment" plan in which they use their payment receipts as cash. This is also done routinely with new patients until they become "involved" in the activities of the Adolescent Service.

A word should be added on how to handle patients who chronically spend more than they earn. Most patients are good credit risks. For those who are not, a weekly list of debtors is maintained in the canteen where most of the points are spent. A patient's name cannot be released from the debtor's list until the following week's points statement appears, assuming that the patient has earned his way out of debt by then. Although a harrassed staff member has occasionally failed to check the debtor's list and thus has occasionally allowed a debtor to spend, this has never continued very long. Illegal spending by debtors is made a major issue at community meetings and bad credit risks soon become well known to the canteen staff, who check on them more carefully. In such cases, patients soon learn

that illegal spending only deepens and prolongs their indebtedness.

REFERENCES

- Kris, A. O. and Schiff, L. F. An adolescent consultation service in a state mental hospital: maintaining treatment motivation. *Seminars in Psychiatry*, 1969, 1, 15-23.

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