

## An Experimental Practical Approach to Current Awareness\*

JULIUS FROME†  
U. S. Patent Office, Washington, D.C.

Received June 26, 1967

**A practical experimental approach for a low cost current awareness system, which was fitted into an ongoing computer retrieval system, combines the functions of a science newspaper in the field as well as a current accessions bulletin. It can provide users with cards of abstracts of the articles upon request. The low cost is achieved by using mainly the computer input and output of the already existing retrieval system. The system is responsive to monthly changes in interest. It is expandable with little additional cost.**

The National Clearinghouse for Mental Health Information is a specialized information evaluation center in the field of mental health. It is charged with acquiring, indexing, abstracting, storing, retrieving, evaluating, and disseminating all information in the field of mental health. This includes not only the published scientific literature, but also fiscal, programmatic, and legislative publications, as well as information about facilities, new and old, and current research. Dissemination in all its phases is an important aspect of the mission of the Clearinghouse, and current awareness is an important aspect of dissemination.

Most organizations having current awareness programs have used Selective Dissemination of Information (SDI) as a means of keeping their users informed. SDI, as it is commonly known, is a major undertaking and requires major resources. Many problems of the National Clearinghouse for Mental Health Information have caused it to look for a more practical means for current awareness than formalized SDI. Some of the problems that we had, at the time of the introduction of our practical approach, were: (1) Our resources, both in manpower and money, were fairly low for current awareness as compared with the other things that we had to do. (2) We were running on a very slow IBM 1401 computer having four 7330 tape drives, perhaps slowest tape drives made by IBM. (3) We had to serve literally thousands of people and keep them currently aware. We wanted them to be aware not only of published literature, but also of certain occurrences in their particular fields—previously described as newsworthy items—as well as information about research facilities. We have had requests, from time to time, from people who would like to keep their private files at their desk in order to make anything we had more useful. We have also had many requests from people who, in out-of-the-way places, did not have easy access to large libraries or collections. (4) To serve several thousands of users in a formalized SDI program would require

major computer time, major print time, a fairly large staff, and substantial resources.

### OBJECTIVES

In determining what our method would be, we formulated several objectives. We thought it would be ideal if the current awareness program were in part, at least, a by-product of our regular processing. It should not use substantial amounts of computer time. Mailing the information should be practical and capable of being expanded to large numbers of users. Also, it should have the advantage of almost immediate dissemination to our users (so that we could be certain of serving them in the manner in which they wish). Finally, user statistics should be easily kept, and the program should, of course, be practical regarding manpower and resources.

### METHOD

Before describing our current awareness method, I shall explain how we normally process our information and how the new method fits into our standard procedures. In the areas of Drug Dependence and Abuse and Occupational Mental Health, the National Clearinghouse for Mental Health Information has contracts with the American Social Health Information of New York and Occupational Mental Health, Inc., of White Plains, N. Y., to supply the Clearinghouse with indexes and abstracts of the current published articles. These organizations supply us with indexed code sheets (devised by the Clearinghouse) together with abstracts of currently published articles. The indexed code sheets and abstracts are then punched and fed into our 1401 computer to provide a comprehensive information storage and retrieval system.

One of the features of our system is the capability of printing out, either together or separately, the citation and the abstract of the article. An additional feature is the ability to perform a document search. If we know the document number, our system can print out the abstract and citation rapidly without going through an

\*Presented before the Division of Chemical Literature, Symposium on Selective Dissemination of Information, 153rd National Meeting of the American Chemical Society, Miami, Fla., April, 1967.

†Work done at National Clearinghouse of Mental Health Information, National Institute of Mental Health, National Institutes of Health, Bethesda, Md.

extensive search. A document search takes about two or three minutes.

At irregular intervals, the Clearinghouse issues a current awareness publication called "Notes." These "Notes" consist in part of information supplied by the contractors concerning relevant events of the past month. In a recent issue, we had about 10 such newsworthy paragraphs, describing seminars, talks by well-known people, new laws passed, new facilities available, and the description of a new treatment in one of the hospitals. This material is set up in a two-column format averaging two to three pages. The IBM 1401 computer is then asked to print out, from our input tapes, the citations, each with its assigned document number, of the current published information. Because we normally input in a particular area about 100 to 150 documents, printing the citations from the input tape takes very little computer time. These citations are printed directly from the tape on the printer in a form that is suitable for camera copy for our "Notes." There are normally 50 to 150 citations for each set of "Notes."

The back page of the "Notes" contains the name and address of the user to which the material is sent and a list of the document numbers of the citations appearing within the pamphlet. The names and addresses are printed by the computer on a mailing tape which can be affixed automatically to the back page of the "Notes." The document numbers are accompanied by the statement: "To receive copies of abstracts, circle the numbers corresponding to the appropriate citations and mail this page to: National Clearinghouse for Mental Health Information, National Institute of Mental Health, National Institutes of Health, Bethesda, Maryland 20014." The user circles the desired document numbers and returns the page to the Clearinghouse. Thereupon, we make a document search, which is a rapid procedure because of our particular system, and print out abstracts on tab cards. The abstracts, retrieved by the circled numbers, are packaged and sent to the individual, with the same back page of the "Notes" as an address label. Thus, we avoid the additional need of making out a new mailing label for the user.

Occupational Mental Health "Notes"  
Number of Notes mailed: 1228

July 1965			
Total Abstracts available: 94		Total number of abstracts in	
Individual requests received: 11		this issue requested: 594	
No. of Abstracts Requested	No. of Individual Requests	No. of Abstracts Requested	No. of Individual Requests
4	1	24	1
7	1	34	1
14	1	41	1
		94	5
January 1966			
Total abstracts available: 175		Total number of abstracts in	
Individual requests received: 89		this issue requested: 3758	
No. of Abstracts Requested	No. of Individual Requests	No. of Abstracts Requested	No. of Individual Requests
1	1	26	2
2	1	28	1
3	2	30	1
4	4	31	1
5	3	34	1
6	3	41	2
7	2	45	1
8	4	47	1
9	5	57	1
10	1	60	1
12	3	61	1
13	2	63	1
14	4	68	1
15	1	74	1
16	2	79	1
17	1	92	1
21	1	108	1
22	3	113	1
23	2	175	12
25	2		

August 1965			
Total abstracts available: 40		Total number of abstracts in	
Individual requests received: 87		this issue requested: 1633	
No. of Abstracts Requested	No. of Individual Requests	No. of Abstracts Requested	No. of Individual Requests
1	2	12	2
2	5	14	1
3	2	15	2
4	4	16	4
5	10	17	3
6	10	18	2
7	1	19	2
8	1	23	1
9	2	24	2
10	1	27	1
11	1	30	1
		40	26

March 1966			
Total abstracts available: 35		Total number of abstracts in	
Individual requests received: 58		this issue requested: 884	
No. of Abstracts Requested	No. of Individual Requests	No. of Abstracts Requested	No. of Individual Requests
1	2	11	2
2	2	13	1
3	2	14	3
4	6	15	1
5	4	16	1
6	4	17	1
7	2	19	1
8	4	20	1
9	3	29	1
10	2	35	15

## AN EXPERIMENTAL PRACTICAL APPROACH TO CURRENT AWARENESS

Because the abstracts are on tab cards, the individual user can file those which he particularly desires and discard the others. Furthermore, if after reading the abstract, the user desires the original document, he may request it from the National Clearinghouse for Mental Health Information, particularly in those cases where no library facilities are available. To date, we have published five "Notes"—four in the area of Occupational Mental Health and one in the area of Drug Dependence and Abuse. We have scheduled four more, which will be printed approximately three to five weeks apart.

### STATISTICS

In any such method as this, it is important to have operational statistics so that the reader may see what

#### Drug Dependence and Abuse "Notes"

Number of Notes mailed: 1702

January 1966

Total abstracts available: 183		Total number of abstracts in	
Individual requests received: 80		this issue requested: 2974	
No. of Abstracts Requested	No. of Individual Requests	No. of Abstracts Requested	No. of Individual Requests
1	3	27	1
2	2	28	1
3	4	29	2
4	4	31	2
5	1	33	1
6	4	34	1
7	6	36	2
8	4	38	1
9	1	41	1
10	4	44	1
11	3	45	1
12	1	46	1
14	1	50	1
15	1	51	2
16	1	62	1
17	2	70	1
20	1	80	1
21	2	87	1
22	2	88	1
25	1	158	1
26	1	183	7

the results are and if they are suitable to his particular application. The "Notes" on Occupational Mental Health were mailed to 1228 users and the "Notes" on Drug Dependence and Abuse have gone to 1702 users. The number of users, in this particular method, can be easily expanded to four or five times without any strain upon the system.

The statistics given indicate the response received on abstracts that were requested.

### CONCLUSIONS

The method described has the following advantages:

- (1) It is a by-product of our regular computer processing.
- (2) The names and addresses of our users are generated by the computer for easy application onto the "Notes," and they are used twice: to send the original "Notes" to the user and to return the abstracts to the users.
- (3) The "Notes" serve the function of a science newspaper because they have newsworthy items in addition to the published literature.
- (4) The camera copy for the citations is generated by the computer as a by-product of the computer with little additional effort.
- (5) The reader can in effect change his profile with each "Note" by selecting the abstracts he desires.
- (6) The "Notes" are fairly short, only 12 to 16 pages, because they do not contain the abstracts.
- (7) The individual user has copies of abstracts on cards for keeping up individual files, if so desired.
- (8) The method can be expanded easily to include additional thousands of users with very little expenditure of manpower and time.

### LITERATURE CITED

- (1) Luhn, H. P., "Selective Dissemination of New Scientific Information with the Aid of Electronic Processing Equipment," *Am. Document.* 12 (2), 131-38 (1961); also, "IBM Advanced Systems," Development Division, Yorktown Heights, N. Y., 1959, 19 pages.
- (2) Bouthilet, L., and Frome, J., "Developing an Information System for Mental Health," *Intern. Fed. for Documentation* (FID), 1965 Congress, p. 62.
- (3) Schultz, L., "RAPID, A System for Retrieval through Automated Publication and Information Digest," *Proc. Am. Document. Inst.*, Philadelphia, Pa., Oct. 5-8, 1964, pp. 79-87.