

# ARTHRITIS COMMUNITY RESEARCH & EVALUATION UNIT (ACREU)

The Wellesley Hospital Research Institute

*WORKING PAPER: 95-5*

## A RETROSPECTIVE CHART REVIEW OF THE CTS GOAL ORIENTED RECORDING SYSTEMS

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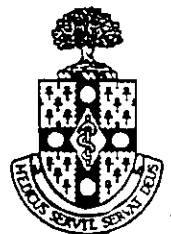
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## EXECUTIVE SUMMARY

- Program evaluation has been an integral part of The Arthritis Society, Consultation and Therapy Service (CTS). In 1994, the Regional Directors of the CTS requested that ACREU review the charting system, in particular, the goal-oriented system and quantitative outcomes introduced in 1993. A retrospective review of the charts of 66 clients with inflammatory polyarthritis (IP) was conducted in order to describe client identified goals of treatment, treatment interventions given, and outcomes measured in clients who had received a CTS occupational therapy (OT), physiotherapy (PT) or social work (SW) intervention and to examine the charts for completeness.
- The sample reviewed consisted of the charts of those clients (adults only) who received a home intervention by a CTS OT, PT or SW. In addition to regional criteria, the sample was limited to the charts of clients with suspected or confirmed inflammatory polyarthritis whose case was opened after July 1, 1993 and closed before March 31, 1994. A consensus approach was used by the study team to develop chart extraction forms. A multi-disciplinary team of reviewers was chosen to reduce interpretational bias based on occupational focus. Chart extraction occurred in a controlled environment under the supervision of the research team. Inter- and intra-rater reliability rates of the chart reviewers were excellent, ranging from 93% to 100%.
- Of the 66 charts reviewed, 26 were charts of clients who had been seen previously by CTS. Twenty-nine percent were defined by therapists as brief consults. Thirty percent of the clients had received two visits only.
- The population which was serviced by the CTS program, as represented by the charts reviewed, suggested that the consumers of the service were older women with chronic disease. Most of the population was married and most were not currently employed. These characteristics reflected those identified for the entire 1993-1994 CTS caseload.
- Decreasing pain, improving activities of daily living and increasing disease knowledge were the three most frequently identified goals requiring intervention by the CTS therapists, the same areas identified in the 1992 chart review. Compared with the previous 1992 chart review, three new goals were identified: acquisition of equipment, addressing psychosocial issues and improving walking/mobility. Sixty-seven percent of the 114 identified goals were either achieved or partially achieved at discharge. Outcome was not stated for 18% of all goals.

- Modalities of treatment (including aids and adaptations, exercise, splints, etc.), education and referrals were the three components of care most frequently recorded in the management of these goals. The most frequently recorded educational interventions were related to "other" (gait, posture), joint protection strategies, disease information and self-advocacy. The most frequently identified components of care identified in the 5 social work charts were education, therapist advocacy and referrals.
- The three most frequently identified outcomes assessed by the therapists were disease status, pain and disease management. At discharge, therapists identified the most success for disease management (86% of clients showed improvement), disease status (75% of clients showed improvement) and pain (73% of clients showed improvement).
- Chart completeness was identified as an issue. Missing data was most common for the baseline physical assessments and discharge summaries, followed by goals, discharge letters and progress notes. There was duplication of information in several sections of the chart (treatment plan, progress notes, discharge form and letter to doctor).
- In summary, the three most common areas of intervention (pain, activities of daily living and disease knowledge) and the two most common components of care (modalities, education) identified in the charts had not changed from those identified in the 1992 chart review.
- As a result of this manoeuvre, the chart review team recommended that charting expectations, including required content and legibility issues, be reviewed with all staff. The same information is often required in several places in the chart, therefore, it was recommended that the charting requirements be reviewed to eliminate the duplication in recording.

## A Retrospective Chart Review of the CTS Goal Oriented Recording System

### 1 INTRODUCTION

Program evaluation has been an integral part of The Arthritis Society, Consultation and Therapy Service (CTS). The most frequently requested intervention provided by the CTS is physiotherapy (PT) and the most frequently identified disease type referred to the CTS is inflammatory polyarthritis (IP). In 1992, a retrospective review of the charts of 57 clients with IP was conducted in order to describe client characteristics, client identified problems, treatment interventions given, and outcomes measured in clients who had received a CTS PT intervention.

The sample reviewed consisted of the charts of those clients who received a home intervention by a CTS physiotherapist. In addition to regional and service criteria, the sample was limited to the charts of clients with suspected or confirmed IP who had received 4 or more physiotherapist visits, and whose case was opened after January 1990 and closed by March 30, 1991. A consensus approach was used by the study team to develop chart extraction forms. A multi-disciplinary team of reviewers was chosen to reduce interpretational bias based on occupational focus. Chart extraction occurred in a controlled environment under the supervision of the research team. Inter- and intra-rater reliability rates were excellent, ranging from 96% to 100%.

The population which was serviced by the CTS PT program, as represented by the charts reviewed, suggested that the consumers of the service were older women, most of whom were not employed, many of whom had other concurrent disorders and a chronic rheumatic disease condition. These characteristics reflected those identified for the entire 1991-1992 CTS caseload.

Pain, limited activities of daily living, and lack of disease knowledge were the three most frequently identified problems requiring intervention by the CTS physiotherapists. Modalities of treatment (including heat, exercise, splints, etc.) and education were the two components of care most frequently recorded in the management of these problems.

Approximately 53% of all identified problems had an outcome which was rated by the therapists to be resolved or improved. When considered on an 'per case' basis, 67% of all clients reviewed had a positive resolution of at least one problem.

The CTS Inflammatory Arthritis: Management Guidelines (IAMG) were developed by CTS directors and staff as a management tool for the treatment of the most common client problems. Quantification of the client identified problems revealed that 96% of these fell within the categories listed in the IAMG. This agreement suggested that the physiotherapy directors and staff had accurately identified the most frequent problems of clients requiring home therapy and that the physiotherapists had appropriately identified those problems within their diverse caseloads. However, it was not possible to determine whether the interventions performed by the physiotherapists were

appropriate, or to what extent the outcomes reflected the interventions employed.

This study provided a descriptive analysis of the PT intervention. The inability to attribute outcome to intervention supported the search for outcome measures which would accurately reflect change for the most frequently identified client problems (pain, activities of daily living, limited disease knowledge).

In addition, results from this study facilitated the following changes to the CTS charting system:

1. The problem-oriented method of recording was changed to a goal-oriented method.
2. Tick lists were incorporated into the charts to quantify educational interventions and equipment loaned or purchased.
3. Quantitative outcomes were incorporated into the charting system.

This new system was introduced to CTS staff at the February 1993 Annual General meeting using a workshop format. Changes went into effect April 1, 1993. Staff were informed that the new charting system process would be evaluated after year 1 (ie 1994).

### **1.1 The 1994 Audit**

A peer audit was completed in the spring of 1994. The audit process looks at chart completion not quality. Charts of clients with all diagnostic codes, with the exception of juvenile arthritis, who had been on home service, and whose files had been opened and closed between April 1, 1993 and March 31, 1994, were subject to the audit.

Computer generated random numbers were assigned to each of these files. The Directors pulled charts for each therapist using the random numbers. A standardized audit form was used for occupational therapy (OT) and physiotherapy (PT) charts and another for social work (SW) charts. Charts were evaluated and scored according to guidelines provided. Two charts were reviewed for each staff, only one of which could be a brief intervention. Each chart was audited independently by two therapists. On completion of the audit, the auditors' results were shared with the therapist. The completed audit forms were then forwarded to the Director.

Concerns expressed by staff regarding the use of quantitative outcomes led to a request from CTS in December 1994 that the retrospective chart review be redone for all 3 services using the revised goal-oriented charting system.

## 2 MANOEUVRE

### 2.1 Study Goal:

To examine the new system of charting (initiated in April 1993), including the identification and scoring of goals and outcomes and the care delivered by PT/OT and SW, as reflected in the progress notes.

### 2.2 Study Questions:

- What are the most frequently identified **goals** of treatment for PT/OT and SW, and the per cent improved, for adults with arthritis aged 18 and over.
- What are the most frequently identified outcomes for PT/OT and SW?
- What outcomes most frequently show improvement?
- How complete is the recording of goals and outcomes?
- What are the most frequently recorded components of care for PT/OT and SW?

### 2.3 Methods:

#### 1. *Sample selection*

The chart review sample consisted of the charts of those adult clients who received an intervention in the home by any CTS therapist. At least one chart was requested from each CTS office and at least one chart was requested per therapist. An equal number of charts was selected from areas with one service only versus all 3 services (PT, OT, SW). The sample was limited to the charts of clients with suspected or confirmed **Inflammatory Polyarthritis (category 1)** whose case was opened after July 1, 1993 (allowing 3 months for staff to get used to the system) and closed by March 31, 1994. Eligible clients were required to have a minimum of 2 visits to eliminate those clients receiving consults or brief interventions only.

Eligible charts were identified through the CTS client care database using dBASE IV. A complete copy of the eligible charts identified within each region were forwarded to the Arthritis Community Research and Evaluation Unit (ACREU) for review. An identification number (ID) was assigned to the chart upon receipt, and recorded on the Master List next to the client's full name. Prior to review, the client's name and the therapist's name were blinded from all pages; and only the ID was used to identify a client chart.

Demographics: The CTS case data form was used to extract all required demographic variables including sex, age, disease duration, work status and marital status.

## **2. Chart extraction method**

Charts were allocated sequentially by ID to each of 3 trained chart reviewers (1 PT, 1 OT, 1 SW). Data extraction forms used for the previous study were modified to include relevant SW and OT interventions and to reflect the goals of the program. A pilot set of data extraction forms was designed and used by the research team to extract data from 10 charts. These completed forms were then reviewed by the research team to determine areas which required revision. Once consensus was reached, the revised forms were created for the initiation teaching/training session with the designated chart reviewers. The final version of the data extraction forms incorporated the suggestions of the chart reviewers upon completion of their initiation sessions.

a CTS Chart Review Form (Appendix A): The CTS Chart Review Form contained 14 variables which related to the completeness of the chart being reviewed, and allowed space for collection of clinical variables and goals. Goals identified conjointly by the client and therapist and recorded on the "Client Goals Relating to Treatment" page were extracted as well as their subsequent outcomes as a result of the intervention. These goals were copied verbatim by the reviewers and later recoded for quantitative analysis by the research team.

b Physical Findings (OT/PT) (Appendix B): A form was created to capture the OT/PT outcome variables verbatim as listed on the Discharge Summary Form of the OT/PT assessment.

c Psychosocial Findings (SW) (Appendix C): A form was created to capture the SW outcome variables verbatim as listed on the Discharge Summary Form of the SW assessment.

d Miscellaneous Management Form (OT/PT) & (SW) (Appendix D): A form was created to capture all interventions which were recorded in the chart. In order to be scored as an intervention, explicit action phrases were required to be present within the chart.

## **3. Train chart reviewers**

A physiotherapist, occupational therapist and social worker were selected to review the charts. A multi-disciplinary team of reviewers was chosen to reduce interpretational bias based on occupational focus. The three reviewers had a high level of experience in arthritis care and demonstrated ability to quickly and competently learn the skills required for the data extraction process. To maximize the objectivity of the data extraction process, retraining occurred at regular intervals throughout the chart review manoeuvre (Table 1).



**Table 1: Training of Chart Reviewers**

CTS CHART REVIEW SCHEDULE		
Day 1	Orientation	This session highlighted the context of the study, the study goals and objectives, and review of the data collection forms. Chart A was reviewed conjointly, followed by the individual extraction of chart B. Reviewers then discussed coding issues and retraining occurred. Four more charts were then reviewed, two at a time followed by discussion and retraining after each set. A final discussion and retraining took place at the end of this session. Reviewers were provided with a package of charts to review and data forms for home study.
	Training	
	Chart Review	
	Discussion & Retraining	
Day 2	Chart Review	This session consisted of a group review of 2 charts, the review of 30 unique charts (10 per reviewer) and 2 reliability charts followed by discussion.
	Consensus Discussion	
Day 3	Retraining	This session consisted of a group review of 2 charts, the review of 30 unique charts (10 per reviewer) and 2 reliability charts followed by discussion.
	Chart Review	

**4. Establish reliability of chart reviewers**

The chart extractors and the research team reviewed the four charts used in the intra- and inter-rater reliability (IIRR) exercises. Using a consensus approach, a gold standard for each IIRR chart was developed. These data were used to validate the inter-rater reliability measures.

**5. Perform chart review**

Chart review occurred in a controlled environment in which reviewers could not collaborate. A member of the research team was available at all times to field questions. Review activities took place in combination with training and consensus sessions (Table 1).

**6. Determine the most frequently identified client goals.**

The IAMG problem list was modified to reflect the new goal-oriented system and was used to classify and quantify all client goals (Appendix E).

**7. Analysis**

Data was managed and analyzed using SPSS PC+ Version 4.0 data entry and statistical package. Over 10% of all data entries were verified and the error rate deemed acceptable a priori was < 0.1%. Due to the nature of the analysis, missing data was minimal or, where necessary, considered in the interpretation of results.

### 3 RESULTS

#### I Chart selection

A list of all charts for clients with IP whose case had been opened after July 1, 1993 and closed before March 31, 1994 was compiled at the CTS head office. In addition, only those clients who had received at least two visits were selected. This list was randomly drawn from the database by regional area. A total of 558 charts were identified. To identify charts for the review, the first chart for each therapist was selected. In total, 66 charts from 53 staff were requested (Table 2). In order to balance the number of 'all service' area charts versus the single service area charts, second charts were requested for a random selection of therapists in single service areas. Two PT charts were unavailable due to a maternity leave and a house fire. These two charts were randomly replaced. In total 66 charts were received for this manoeuvre, 33 from single service sites and 33 from all services sites. The number of charts requested from each area is included in Table 3.

Table 2: Number of Charts Reviewed by Therapist Type

Therapist type	
	n = 53
PT	36
OT	12
SW	5
Second chart requested	
	n = 13
PT	12
OT	1

Table 3: Number of Charts Reviewed by Service Area

Service Area	n	%
A	17	26
B1	6	9
B2	7	11
C	12	18
D	15	23
E	6	9
F	3	5

## II Inter/Intra-Rater Reliability

A total of 10 charts were used to compare the reliability of the 3 reviewers within and between themselves and against each other. In addition, all were compared to the Gold Standard for 4 charts using 149 key variables. Reliability scores between reviewers and as compared to the gold standard ranged from 93% to 100%. Intra-rater reliability ranged from 96% to 100%.

## III Demographics

The demographics of the study population were somewhat representative of the entire population serviced (by the CTS) in Ontario by the CTS. The mean age at referral was slightly older at 60 years while disease duration was longer, at an average of 13.1 years at referral. These differences are likely due to the fact that we did not eliminate re-referrals when selecting charts. The group studied was predominantly female, over two thirds were married or living common-law, and less than one third were employed (this category includes those who work full-time, part-time or who are self-employed).

Table 4: Client Demographics: Chart Review versus all new referrals to the CTS in 1993-94

		CTS Ontario Population 1993-94	1995 Chart Review All Services
		n = 4966	n = 66
Gender	% female	82	76
Age in years	mean	56	60
Work Status	% employed	35	29
Marital Status	% married/CL	61	68
Disease Duration (yrs)	mean	9	13

## IV Study Questions

### a Completeness of Data

Prior to beginning chart extractions, reviewers were requested to answer 14 questions relating to chart status, with particular emphasis on missing data. Of the 66 charts received, 26 were clients who had been seen before and 19 were brief consults (Table 5). One-half of all charts contained a baseline physical assessment and completed discharge summaries and two-thirds contained clients goals. Over 80% contained progress notes and 79% contained discharge letters to health professionals. In an attempt to explain missing data which should have been routinely collected, we decided to reanalyse the data after removing all charts of clients who had been seen before, all brief consults and all social work charts (Table 6). With these charts removed, 69% of the 32 charts reviewed contained a baseline physical assessment, 78% contained discharge summaries and 84% contained client goals. Over 90% had progress notes and 88% contained discharge letters to health professionals.

Table 5: Completeness of Data

Chart Status	n = 66	
	yes	%
Client has been seen before	26	39
Brief consult	19	29
Two visits only	20	30
Physical assessment completed at baseline	33	50
Discharge summary completed at baseline	35	53
Discharge summary completed at discharge	35	53
Client goals identified on goal form	42*	64
Client goals dated	44	67
Discharge outcomes identified on goal form	35	53
Progress notes filled out	56	85
Progress notes dated	55	83
Interim letter sent to referring health professional	7	11
Discharge letter sent to client's physician	50	76
Discharge letter sent to other health professional	10	15
Discharge letter sent to either	52	79
Clinical features collected	48	73

\* 2 additional charts listed comments indicating no goals could be identified

Table 6      Completeness of Data for subset including new clients only, not brief consults, not social work (n = 32)

Chart Status	yes	%
Three visits	11	34
Physical assessment completed at baseline	22	69
Discharge summary completed at baseline	25	78
Discharge summary completed at discharge	25	78
Client goals identified on goal form	27	84
Client goals dated	27	84
Discharge outcomes identified on goal form	24	75
Progress notes filled out	29	91
Progress notes dated	29	91
Interim letter sent to referring health professional	5	16
Discharge letter sent to client's physician	27	84
Discharge letter sent to other health professional	4	13
Discharge letter sent to either	28	88
Clinical features collected	30	94

**b Most frequently identified goals of treatment for PT/OT and SW, and the percent improved for adults with arthritis aged 18 and over.**

Goals were listed in 42 charts. These goals were classified using the IAMG categories (1-10) as described in Appendix E. Quantitative analysis identified Decreasing Pain, Improving Activities of Daily Living and Increasing Knowledge of the Disease Process and Management as the three most frequently identified goals addressed by the CTS therapists (See Table 7). In all, when the 114 goals were classified into the IAMG, 92% fell within the 10 categories. Of these 114 goals, 67% were identified as achieved or partially achieved at discharge (Table 8). Only 12% had not been achieved at time of discharge and 2% were not scored due to referrals. Over 18% of these goals were not addressed at discharge, resulting in missing data for 21 goals (Table 8).

Table 7: Most Frequently Identified Goals

Goals Identified	n = 114	%
Improve Pain	28	25
Improve Activities of Daily Living	20	18
Improve Disease Process/Management Knowledge	16	14
Increase Level of Fitness	14	12
Increase ROM and/or Decrease Stiffness	12	11
Other	9	8
Reduce Impact of Joint Deformity	8	7
Increase Muscle Strength/Decrease Weakness	7	6
Decrease Fatigue/Improve Sleep	0	0
Decrease Swelling & Effusions	0	0

Table 8: Goal Resolution

Goal resolution	n = 114	%
achieved	54	47
partially achieved	23	20
not achieved	14	12
referred	2	2
missing	21	18

A secondary analysis was conducted by dividing single goals into analyzable components (ie. 1 goal contained enough information to be broken into 2 or 3 categories). When this was done, 148 goals were identified and 3 additional classifications, not originally included in the IAMG emerged, namely: goals related to mobility/walking, equipment, and, psychosocial/role issues. Using this extended quantification process, Decreasing Pain, Improving Activities of Daily Living and

Increasing Knowledge of the Disease Process and Management remained the three most frequently identified goals followed closely by one of the 'new' categories, acquisition of equipment (Table 9).

Table 9: Extended Classification of Goals

Goals Identified	n = 148	%
Improve Pain	28	19
Improve Activities of Daily Living	20	14
Improve Disease Process/Management Knowledge	16	11
<b>Acquisition of Equipment</b>	<b>15</b>	<b>10</b>
Increase Level of Fitness	14	10
<b>Address Psychosocial/Role Issues</b>	<b>13</b>	<b>9</b>
Increase ROM and/or Decrease Stiffness	12	8
<b>Improve Walking/Mobility</b>	<b>11</b>	<b>7</b>
Reduce Impact of Joint Deformity	8	5
Increase Muscle Strength/Decrease Weakness	7	5
Decrease Fatigue/Improve Sleep	0	0
Decrease Swelling & Effusions	0	0

c. **Most frequently identified outcomes and outcomes which most frequently showed improvement (as per discharge summary)**

Of the 66 charts, 33 contained completed Discharge Summaries. Of those completed, the three most often identified areas of outcome for assessment were Disease Status, Pain, and, Disease Management (Table 10). Of those outcomes which were recorded at discharge, therapists identified most success for Disease Management (86% of clients showed improvement), Disease Status (75% of clients showed improvement), and, Pain (73% of clients showed improvement).

Table 10: Most Frequently Identified Outcomes and Percent of Clients with Improvement

	n = 33	%	% who improved
Disease Status	28	85	75
Pain	26	79	73
Disease Self-Management	21	64	86
Activity Tolerance	19	58	58
Fatigue	18	55	61
Range of Motion	16	49	38
Function	11	33	55
Mobility	11	33	73
Household Management	7	21	57
Self Care	6	18	67
Work/Leisure	2	6	50
Communication	0	0	0
Muscle Strength	2	6	50
Other			



#### d Components of Care

The most frequently recorded components of care for the 61 PT or OT charts were modalities of treatment (95%), education (85%) and referrals (31%) (Table 11).

Table 11: Most Frequently Recorded Components of Care for PT/OT Charts (n = 61)

Management	yes	%
Modalities of Treatment	58	95
Education	52	85
Referrals	19	31
Therapist Advocacy	12	20
Miscellaneous	10	16
Social Support	1	2
Counselling	0	0

The most frequently identified interventions for those clients who received Modalities of Treatment were aids and adaptations (84%) and exercise (78%) (Table 12). For those clients who received education, the most frequently identified topics were Other (particularly gait and posture) (75%), followed by joint protection, disease information and self-advocacy (33% each) (Table 13).

Table 12: Most Frequently Identified Modalities of Treatment

Modalities of Treatment	yes n = 58	%
aids & adaptations	49	84
exercise	45	78
splints	17	29
ice	9	16
heat	9	16
insoles	2	3
massage	1	2
relaxation	0	0

Table 13: Most Frequently Identified Education Topics

Education	yes n = 52	%
other (gait, posture)	39	75
joint protection	17	33
disease information	17	33
self-advocacy	17	33
energy conservation	11	21
medication	6	12
family education	5	10
pain management	5	10
community resources	3	6
self-efficacy	2	4

The most frequently recorded components of care identified in the 5 SW charts were education, therapist advocacy and referrals (Table 14). Due to the small number of such charts, no further analysis was conducted.

Table 14: Most Frequently Recorded Components of Care for SW Charts (n = 5)

Management	yes	%
Education	5	100
Therapist Advocacy	4	80
Referrals	2	40
Miscellaneous	1	20
Social Support	1	20
Counselling	1	20
Modalities of Treatment	0	0

## **4 DISCUSSION:**

Compared with the 1992 chart review, three new goals of treatment were identified (Acquisition of Equipment, Address Psychosocial/Role Issues, Improve Walking/Mobility). This likely reflects the inclusion of OT's and SW's in this review. The increased emphasis on walking/mobility may be a result of the increased awareness among therapists that fitness is an important component of an exercise program for people with arthritis.

This study provided a descriptive analysis of the CTS intervention as recorded using the CTS goal oriented recording system. With regards to chart completeness, it was identified that CTS staff were still experiencing problems with the charting guidelines resulting in many areas of missing data. Problems included the repetition of information in several places and the inapplicability of many of the variables expected to be collected. It was also identified that writing legibility would also need to be addressed with staff. With regards to the content and provision of service, the results of this review almost mirror the results of the chart review completed in 1992, for physiotherapy only, which found that the management guidelines accurately reflected the goals of CTS clients and the majority of outcomes were successfully achieved despite relatively brief interventions.

### **4.1 Limitations of the Study:**

Limitations of the study include that the charts reviewed consisted of adults only and IP only. Unlike the PT Chart Review Study, the sample was not limited to the first referral only. In addition, a limited timeframe was involved for the eligibility of charts (referred and discharged between July 1, 1993 until March 31, 1994). While 558 eligible charts were identified, only 12% of all eligible charts were reviewed. Social work charts were limited (n = 5).

## **5 RECOMMENDATIONS:**

Appendix F includes comments from ACREU staff and chart extractors following the chart review process. Taking these into account we recommend the following:

1. Charting expectations, including required content and handwriting legibility need to be reviewed with all staff.
2. The charting system needs to be reviewed to reduce duplication in the charts.
3. While the IAMG was able to classify the majority of all identified goals, it should be reviewed and revised to: a) reflect a goal-oriented charting system, b) to incorporate the goals of all 3 disciplines and c) should include at least the addition of walking/mobility, acquisition of equipment and psychosocial/role issues.

Patient ID# |\_\_|\_\_|\_\_|

REVIEWER:|\_\_\_\_\_|

DATE OF REVIEW: DD|\_\_|\_\_|/04/95

**CHART STATUS:** (circle the appropriate answer for each of the following)

Has this client been seen before (from Case Data Sheet)? 1 Yes 2 No (unkown/not stated)

Total Number of Visits: |\_\_|\_\_| (excluding no shows/cancellations)

Was this a brief consult? 1 Yes 2 No (not stated/unable to determine)

Was a physical assessment completed at baseline? 1 Yes 2 No 3 Partially 4 not required

Has the Discharge Summary Form been completed at baseline? 1 Yes 2 No

Has the Discharge Summary Form been completed at discharge? 1 Yes 2 No

Have client goals been identified on goal form? 1 Yes 2 No (not listed on goal form)

Have client goals been dated? 1 Yes 2 No

Have discharge outcomes been identified on goal form? 1 Yes 2 No

Have progress notes been filled out? 1 Yes 2 No

Have progress notes been dated? 1 Yes 2 No

Has an interim letter been sent to the referring health professional? 1 Yes 2 No

Has a discharge letter been sent to the client's physician? 1 Yes 2 No

Has a discharge letter been sent to other health care professionals? 1 yes 2 No 3 insurance company

**CLINICAL FEATURES:** All clinical features may not have been assessed per visit; if any measures recorded in chart (ie.morning stiffness) they are to be recorded regardless of if there is a joint man.

Date	Joint Count	AM Stiffness	Grip Right #/20	Grip Left #/20	Fibro Points #/18
DD __ __ MM __ __ YY __ __  9 missing	9 missing	__ __  hrs  __ __  min 9 missing	9 missing	9 missing	9 missing
DD __ __ MM __ __ YY __ __  9 missing	9 missing	__ __  hrs  __ __  min 9 missing	9 missing	9 missing	9 missing
DD __ __ MM __ __ YY __ __  9 missing	9 missing	__ __  hrs  __ __  min 9 missing	9 missing	9 missing	9 missing

**GOAL LIST:** List from 'Client Goals Relating to Treatment' page only

	1 achieved; 2 part achieved 3 not achieved; 4 referred 9 missing
	. 1 2 3 4 9
	1 2 3 4 9
	1 2 3 4 9
	1 2 3 4 9
	1 2 3 4 9

Patient ID# |\_\_|\_\_|\_\_|

REVIEWER: |\_\_\_\_\_|

DATE OF REVIEW: DD|\_\_|\_\_|/04/95

VARIABLE 9 - missing/not done	INDICATOR	INITIAL STATUS	DISCHARGE STATUS	OUTCOME 1 IMPROVED 2 NO CHANGE 3 WORSE 9 missing
Disease Status	Active Joint Count	___	___	1 2 3 9
	Number of Effusions	___	___	1 2 3 9
	AM Stiffness	___ hrs	___ hrs	1 2 3 9
	Grip Strength	R ___/20	R ___/20	1 2 3 9
L ___/20		L ___/20	1 2 3 9	
Pain	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Range of Motion	9	1 2 3 4	1 2 3 4	1 2 3 9
Muscle Strength	9	___ mm/Hg	___ mm/Hg	1 2 3 9
Fatigue	9	1 2 3 4	1 2 3 4	1 2 3 9
Activity Tolerance	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Self Care	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Functional Mobility	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Household Management	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Work/Leisure/School	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Communication	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Disease Management	9	1 2 3 4	1 2 3 4	1 2 3 9
Other	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Other	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
TOTAL NUMBER OF INDICATORS MEASURED				___
Number Improved				___
Number No Change				___
Number Worse				___

Patient ID# |\_\_|\_\_|\_\_|

REVIEWER: |\_\_\_\_\_|

DATE OF REVIEW: DD|\_\_|\_\_|/04/95

VARIABLE 9 - missing/not done	INDICATOR	INITIAL STATUS	DISCHARGE STATUS	OUTCOME 1 IMPROVED 2 NO CHANGE 3 WORSE 9 missing
Adjustment to Chronic Illness	9	1 2 3 4	1 2 3 4	1 2 3 9
Self-Esteem	9	1 2 3 4	1 2 3 4	1 2 3 9
Utilization of Community Resources	9	1 2 3 4	1 2 3 4	1 2 3 9
Activities/Interests	9	1 2 3 4	1 2 3 4	1 2 3 9
Support Systems	9	1 2 3 4	1 2 3 4	1 2 3 9
Depression	9	1 2 3 4	1 2 3 4	1 2 3 9
Family Relationships	9	1 2 3 4	1 2 3 4	1 2 3 9
Spousal Relationships	9	1 2 3 4	1 2 3 4	1 2 3 9
Other	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
Other	9	1 2 3 4 5	1 2 3 4 5	1 2 3 9
TOTAL NUMBER OF INDICATORS MEASURED				___
Number Improved				___
Number No Change				___
Number Worse				___

Patient ID# | | | |

REVIEWER : | | | |

DATE OF REVIEW: DD | | /04/95

		Action	
		E/TA	C
Education	1 energy conservation	Y	Y
	2 joint protection	Y	Y
	3 self-efficacy	Y	Y
	4 family education	Y	Y
	5 medication	Y	Y
	6 disease information	Y	Y
	7 pain management	Y	Y
	8 self-advocacy	Y	Y
	10 community resources	Y	Y
	11 other	Y	Y
	_____	Y	Y
	12 other	Y	Y
Modalities of treatment	1 splint-custom	Y	Y
	2 insoles-custom	Y	Y
	2 ice	Y	Y
	3 heat	Y	Y
	4 exercise	Y	Y
	5 relaxation	Y	Y
	6 massage	Y	Y
	7 aids, list below:	Y	Y
	_____	Y	Y
	_____	Y	Y
8 other	Y	Y	
_____	Y	Y	
10 other	Y	Y	
_____	Y	Y	
Social Support	1 therapist-patient	Y	Y
	2 therapist- family	Y	Y
	3 crisis intervention	Y	Y
	4 other	Y	Y
	_____	Y	Y
5 other	Y	Y	
_____	Y	Y	
Therapist Advocacy	1 with family gp/spec	Y	Y
	2 social services	Y	Y
	3 letters (CPP etc)	Y	Y
	4 other	Y	Y
	_____	Y	Y
5 other	Y	Y	
_____	Y	Y	

KEY FOR ACTION RECORDED	
E	Education Only
TA	Therapist Action: performance/demonstration/fabrication/loan etc.
C	Reported patient compliance/performance/purchase
CIRCLE:	
Y	Yes - clearly stated in chart

CONTINUED...		Action	
		E/TA	C
Counselling	1 contact with employer	Y	Y
	2 with spouse/family	Y	Y
	3 other	Y	Y
	4 other	Y	Y
Referrals	1 referral to md/specialist	Y	Y
	2 TAS hydrotherapy	Y	Y
	3 Other hydrotherapy	Y	Y
	4 Home Care (HC)	Y	Y
	5 HC - nursing	Y	Y
	6 HC - OT	Y	Y
	7 HC - homemaking	Y	Y
	8 HC - lab	Y	Y
	10 HC - transport	Y	Y
	11 HC - drug card	Y	Y
	12 TAS - OT	Y	Y
	13 TAS - PT	Y	Y
	14 TAS - SW	Y	Y
	15 other OT	Y	Y
	16 other PT	Y	Y
	17 other SW	Y	Y
	18 CTS Group	Y	Y
	19 Bluebird Club	Y	Y
	20 disease specific self-help	Y	Y
	21 ASMP	Y	Y
	22 footwear	Y	Y
	23 other	Y	Y
	Miscellaneous	1 _____	Y
2 _____		Y	Y
3 _____		Y	Y

Patient ID#

REVIEWER :

DATE OF REVIEW: DD  /  / 04/95

		Action	
		E/TA	C
Education	1 diagnosis	Y	Y
	2 the grieving process	Y	Y
	3 depression	Y	Y
	4 problem-solving skills	Y	Y
	5 prognosis of disease	Y	Y
	6 family education	Y	Y
	7 medication/side effects	Y	Y
	8 disease information	Y	Y
	9 pain management	Y	Y
	10 self-advocacy	Y	Y
	11 community resources	Y	Y
	12 activities & interests	Y	Y
	13 diagnosis & grief	Y	Y
	14 credibility	Y	Y
	15 identity	Y	Y
	16 relationships	Y	Y
	17 communication	Y	Y
	18 moving on - future	Y	Y
	19 sexuality	Y	Y
	20 sleep	Y	Y
	21 body image	Y	Y
	22 physical changes	Y	Y
	23 role changes	Y	Y
	24 fatigue	Y	Y
	25 memory/concentration	Y	Y
	26 obtaining diagnosis	Y	Y
	27 stress management	Y	Y
	28 self esteem	Y	Y
	29 other	Y	Y
	30 other	Y	Y
Modalities of treatment	1 relaxation	Y	Y
	2 role-playing	Y	Y
	3 imagery	Y	Y
	3 self-talk	Y	Y
	4 communication tasks	Y	Y
	5 use of physical aides	Y	Y
	6 other	Y	Y
7 other	Y	Y	
Social Support	1 therapist-client	Y	Y
	2 client-client	Y	Y
	3 therapist-family	Y	Y
	4 client-family	Y	Y
	5 crisis intervention	Y	Y

KEY FOR ACTION RECORDED	
E/TA	Education Only Therapist Action: performance/demonstration/fabrication/loan etc.
C	Reported patient compliance/performance/purchase
CIRCLE:	
Y	YES - clearly stated in chart

		Action	
		E/TA	C
CONTINUED...			
Therapist Advocacy	1 client's family	Y	Y
	2 family gp/specialist	Y	Y
	3 social services	Y	Y
	4 letters (CPP etc)	Y	Y
	5 employer	Y	Y
	6 other	Y	Y
Counselling	1 individual	Y	Y
	2 contact with employer	Y	Y
	3 with spouse/family	Y	Y
	4 other	Y	Y
Referrals	1 referral to md/specialist	Y	Y
	2 hydrotherapy	Y	Y
	3 Home Care (HC)	Y	Y
	4 community programs	Y	Y
	5 psychologist	Y	Y
	6 psychiatrist	Y	Y
	7 ASMP	Y	Y
	8 disease specific self-help	Y	Y
	9 Bluebird Club	Y	Y
	10 TAS - OT	Y	Y
	11 TAS - PT	Y	Y
	12 TAS - group	Y	Y
	13 other	Y	Y
Miscellaneous	1 _____	Y	Y
	2 _____	Y	Y



## Inflammatory Arthritis:

## APPENDIX E

### Management Guidelines Problem List - Converted to GOALS

In 1989, the physiotherapy directors of The Arthritis Society (Ontario Division) Consultation and Therapy Service identified the need for inflammatory polyarthritis management guidelines for use in the orientation of new staff. After a literature review and comprehensive consensus manoeuvre, a set of goal-based guidelines were compiled into a management package called "Inflammatory Arthritis: Management Guidelines".

Within this package, the ten most common problems encountered in the physical management of the client with rheumatoid arthritis are identified and accompanied by suggestions for successful management. These problems have been changed to 'goals' to reflect the goal-oriented charting procedures. When implementing the management guidelines, it is assumed that the goals to be addressed have been developed conjointly with the client, that the risks and benefits of each plan to be undertaken are understood by the client, and consent is given before any intervention is initiated.

The standardized management guidelines address interventions to:

1. Decrease Pain
2. Monitor Uncontrolled Disease
3. Increase Knowledge of Disease
4. Increase ROM and/or Decrease Stiffness
5. Increase Muscle Strength/ Decrease Weakness
6. Reduce Impact of Joint Deformity
7. Decrease Fatigue/Improve Sleep
8. Decrease Swelling/Effusion
9. Increase Level of Fitness
10. Improve Activities of Daily Living

## Recommendations from Chart Reviewers

## Appendix F

- How about the directors going through this process (chart review) with their therapists using one 'good' chart and one 'bad' chart. It would be a good review and may improve charting.
- brief consults have not been clearly marked - a tick box may help, ? therapist not informed?
- SOAPING was not checked, but I know it was not used in all charts - needs reviewing
- progress notes should be computer generated or legible writing should be enforced
- incorporate checklist of brochures and interventions into the chart (separate sheet to be used if desired)
- incorporate the treatment plan into the progress notes since many therapists outline what they have done in the first session in the treatment plan
- more interventions, outcomes and physical findings were recorded in the discharge letter to physicians versus in the chart
- ~~OE39~~ if copies were sent to other doctors is unknown if not specified in the chart
- not many therapists used the S,E,C columns on the progress notes
- discharge summary often means one extra final visit to complete the chart
- discharge summary sheet - where to put walking, exercise; people don't know to put it under functional tolerance versus functional mobility.
- disease status on the discharge summary should be reduced to 1 outcome
- put the baseline and discharge joint count homonculus on the discharge summary sheets