NEW ECG FORM

Var	Label	Explanation
1	FORM	21 = NEWECG
2	COMPID	Computer ID
3	SITE	Clinical site
4/5/6	MONTH/DAY/YEAR DATE19	Date ECG was done.
7	HTRATE HTRATE19	Heart rate
8 9 10	QRS1 QRS119 QRS2 QRS219 QRS3 QRS319	Q waves 1. Q wave and QRS abnormality codes for the leads 1, aVL and V6. For these and other Q and QRS codes the Minnesota code leading digit, digit 1, is dropped and the 2nd and the 3rd digits are filled into these two boxes. 2. Q codes for leads II, III, and aVF. Again the leading digit 1 is dropped. 3. Q codes for leads V1 - V5. The leading digit is dropped.
11 12 13	STD1 STD119 STD2 STD219 STD3 STD319	ST segment depression This is Minnesota code 4-1-1 through 4-4 (4-4-0) with the leading 4 dropped 1. for leads I, aVL and V6 2. for leads II, III, and a VF 3. for leads V1 through V5
14 15 16	TW1 TW119 TW2 TW219 TW3 TW319	T wave codes Category 5 of the Minnesota code. Drop the 5 and enter digits 1,2,3, or 4 in Col 31 when it applies to leads 1, aVL, or V6, in Col 32 when it applies to leads II, III or aVF, and Col 33 when it applies to V1 through V5.
17 18 19	STE1 STE119 STE2 STE219 STE3 STE319	ST segment elevation These codes are only 9-2-1 or 9-2-2. In this case the first two leading numbers are dropped, that is, 9-2 are dropped, leaving only the choice of digits 1 or 2 to apply for lead groups 1, aVL or V6 in Col 34, in leads II, III or aVF in Col 35 and in V1 through V5 in Col 36.

Var	Label		Explanation
20	AX	AX19	**QRS Axis** This is section 2 of the Minnesota code. The leading 2 is dropped leaving choices of 1 through 5 to be entered, depending on the category of axis.
21	RW	RW19	**R wave** This refers to high amplitude R waves of Minnesota code, section 3-1 through 3-4. The leading 3 is dropped and digits 1 through 4 are selected.
22	AVC	AVC19	**AV. - CD** AV conduction defect of the Minnesota code category 6-1 through 6-8. The leading 6 is dropped and a single digit 1 through 8 is selected.
23	VC	VC19	**V. CD.** Ventricular Conduction defect category 7 of the Minnesota code. The leading 7 is dropped and digits 1 through 6 are selected for this box.
24 25	ARR1 ARR2	ARR119 ARR219	**Arrhythmias** Arrhythmias, cateogry 8 of the Minnesota code. These two boxes correspond to two possible codings; the leading 8 is dropped and the most abnormal arrhythmia code is identified among 1-9 of the choices. This most severe (the lowest number) code is selected and put in the first box. If in addition to that, there is another codable arrhythmia, that is selected and put in the second box. If there is no arrhythmia, 0's are entered in both boxes. If there is only one arrhythmia, it is entered in the first box and a 0 put in the second. Since 8-1 is subdivided into 8-1-1, 8-1-2, and 8-1-3, 0's are added to 8-2 (8-2-0) through 8-9 (8-9-0).

Var	Label	Explanation
26 27	MISC1 } MISC119 MISC2 } MISC219	Miscellaneous Miscellaneous items at rest of the Minnesota code, category 9. In this case Col 45 carries a single digit with the 9 being dropped and leaving possibilities 1, 3, 4, 5 or 6 (the 9-2-1 and the 9-2-2 are treated elsewhere). The single most abnormal or lowest numbered miscellaneous item is selected and entered in Col 45. If there is another miscellaneous item codable, it is selected and put in Col 46. Only the second most abnormal miscellaneous item can be entered. Any other possible miscellaneous items must be neglected. If only one miscellaneous item is codable, it is entered in Col 45 and 0 is put in Col 46 If no miscellaneous items are present, both 45 and 46 are entered with 0's.
28 29	MI } MI19 LOCATN } LOCATN19	Myocardial Infarction These relate to the additional coding of a myocardial infarction and it is utilized always if Q waves were coded in Col 25 through 30 and are never used if no Q wave codes are entered in Col 25 through 30. Col 47 indicates whether the possible infarction is (1) acute, (2) unresolved, (3) healed. One of these is selected on the basis of the characteristic of the ST and T waves and entered. Col 48 indicates the best estimation of location among the choices 1 through 9: (1) inferior, (2) anterior septal, (3) lateral, (6) anterior inferior, (7) lateral inferior, (8) lateral anterior and (9) posterior or dorsal.
30	TQUAL TQUAL19	Technical Quality Enter 1 if the technical quality is satisfactory. Enter 2 if the technical quality is unsatisfactory.
31	NORMAL NORMAL19	Normal/Abnormal 1 is entered if no abnormal entry has been put in any of the boxes. However, if any abnormal entry has been entered before or in any of the succeeding Cols. through Col 59, then digit 2 is entered.

Var	Label		Explanation
32	ECG	ECG19	A 1 is entered here for resting ECG
33	ADJUD	ADJUD19	Adjudication A 1, 2 or 3 can be entered. A 1 if no adjudication has been carried out, a 2 if there is adjudication and a change made as a result, and a 3 if there is adjudication and no change was made as a result.
34	PVCS	PVCS19	2 PVC's 1 or 2 are possible entries; a 1 indicates that there were not 2 PVC's in a row present, a 2 if there were. This box is not used to indicate the number of single PVC's which might be present.
35	PRVCS	RPVCS19	R on T PVC's 1 or 2 are the possible entries. A 1 indicates no such phenomenon, a 2 indicates that a PVC has occurred beginning before the preceding T wave has ended.

Estes Criteria for Left Ventricular Hypertrophy

36 ESTES1

ESTES119

Amplitude of R Wave

Points	Entry	R wave measurement
0	0	None of the following
3	1	Largest R or S in Limb leads $\geq$ 20mm
	2	Largest S in V1, 2 or 3 $\geq$ 25mm
	3	Largest R in V4, 5 or 6 $\geq$ 25mm

37 ESTES2

ESTES219

ST Segments

Points	Entry	ST Configuration
0	0	Normal
3	1	ST shift in vectoral direction opposite from mean QRS vector, in the absence of digitalis. (When used both ST code and T code, 4- and 5- codes, must be entered appropriately.)
1	2	Same as 1 above, except patient known to be receiving digitalis.

Var	Label		Explanation
38	ESTES3		QRS Axis
		Points	Entry	QRS Axis
	ESTES319	0	0	Not "1"
		2	1	QRS frontal axis more left - superior than -15°
39	ESTES4		QRS Duration
		Points	Box Entry	Measurement
	ESTES419	0	0	None of the following
		1	1	QRS duration ≥ 0.09 sec.
			2	Intrinsicoid deflection in V5 or 6 ≥ .04 sec.
40	ESCORE	ESCORE19	Estes Score
			Add the point values for the entries ESTES1 through ESTES 4 and enter sum. A score ≥ 5 ... definite LVH 4 ..... probable LVH 0-3 ... not LVH
41	DIG	DIG19	Digitalis
			1 - no 2 - yes
42	QLIMB	QLIMB19	Q-Limb
			Number of Limb leads with codable QS patterns and Q patterns, when Q ≥ .03 sec.
43	QCHEST	QCHEST19	Q-Chest
			Number of Chest leads with codable QS patterns and Q patterns, when Q ≥ .03 sec.
44	PRINT	PRINT19	PR Interval
			This is the interval in 100ths of a second from the beginning of the P wave to the beginning of the QRS complex.
45	QRSDUR	QRSDUR19	QRS Duration
			This is the interval in 100ths of a second from the beginning of the QRS complex to the end of the QRS complex.
46	CALIB	CALIB19	Calibration
			Scale of tracing.

Var	Label	Explanation
47	ECGLOG ECGLOG19	ECG Log A 1 if a log, a 0 if a complete form.
48/49/50 DVLOG19	LOGMO/LOGDY/LOGYR	Date of ECG Log Date ECG was sent to CEL Lab. Date will be 0's when the completed form replaces the log.
51	ID	Site ID