

Dataset Integrity Check for the DCCT-EDIC Baseline Analysis File

As a partial check of the integrity of the DCCT-EDIC datasets archived in the NIDDK data repository, a dataset integrity check (DSIC) was performed to verify that selected published results from the DCCT-EDIC study can be reproduced using archived datasets. A small number of analyses were performed to duplicate published results on the EDIC baseline dataset reported by the DCCT-EDIC Research Group [1] in *Diabetes Care* (Jan 1999, [22(1)]). Results of the DSIC are described below.

The intent of this DSIC is to provide confidence that the data distributed by the NIDDK repository is a true copy of the study data. Our intent is *not* to assess the integrity of the statistical analyses reported by study investigators. As with all statistical analyses of complex datasets, complete replication of a set of statistical results should not be expected on a first (or second) exercise in secondary analysis. This occurs for a number of reasons including differences in the handling of missing data, restrictions on cases included in samples for a particular analysis, software coding used to define complex variables, etc. Experience suggests that most discrepancies can ordinarily be resolved by consultation with the study DCC, however this process is labor-intensive for both DCC and Repository staff. It is thus not our policy to resolve every discrepancy that is observed in an integrity check. Thus, we do not attempt to resolve minor or inconsequential discrepancies with published results or discrepancies that involve complex analyses unless staff of the NIDDK Repository suspect that the observed discrepancy suggests that the dataset may have been corrupted in storage, transmission, or processing by repository staff. We do, however, document in footnotes to the integrity check those instances in which our secondary analyses produced results that were not fully consistent with those reported in the target publication.

DCCT-EDIC Baseline Analysis. Table 3 of the publication (p.104) compares characteristics of 1375 participants who completed the DCCT study and were recruited into EDIC, with those of 50 DCCT participants who declined to enroll into EDIC. Table 1 of this DSIC compares the published breakdown to results obtained from the archived SAS data file. The counts, percentages, means, and standard deviations obtained from analyses of the archived data closely match the published tabulations. Likewise^a, *P*-values for tests of differences between treatment groups calculated from archived data exactly match the published results.

^a In determining statistical significance of differences in group means or percentages, Wilcoxon rank-sum tests were used for continuous variables, and chi-square tests were used for categorical variables. These statistical methods are the same as those outlined in the footnotes in the published tables, with the exception of the comparison of event rates (see discussion under *Diabetes management of EDIC cohort during the first 2 years of EDIC*, p.7 of this DSIC).

TABLE 1. Characteristics of EDIC participants compared with nonparticipants: Top panel is calculated from Archived Data; Bottom panel contains published results (Table 3 in publication, p.104).

Characteristic	Participants	Nonparticipants	P value
N	1375	53 ^b	
Age (years)	33.6 ± 7.0	31.0 ± 7.7	0.016
Sex (% female)	48	45	NS
Duration of type 1 diabetes (years)	12.2 ± 4.8	11.6 ± 4.4	NS
Treatment group during DCCT (% intensive)	50	30	0.005
HbA _{1c} at closeout of DCCT (%)			
Intensive Group	7.4 ± 1.1	8.5 ± 1.6	0.003
Conventional group	9.1 ± 1.5	9.6 ± 1.4	0.112
Debriefed at DCCT study's end (%)	99	74	<0.0001
Care transferred to non-DCCT personnel (%)	48	79	<0.0001

Table 3—Characteristics of EDIC participants compared with nonparticipants

Characteristic*	Participants	Nonparticipants	P value
<i>n</i>	1,375	50	—
Age (years)	33.6 ± 7.0	31.0 ± 7.7	0.0155
Sex (% female)	48	45	NS
Duration of type 1 diabetes (years)	12.2 ± 4.8	11.6 ± 4.4	NS
Treatment group during DCCT (% intensive)	50	30	0.0048
HbA _{1c} at closeout of DCCT (%)			
Intensive group	7.4 ± 1.1	8.5 ± 1.6	0.0031
Conventional group	9.1 ± 1.5	9.6 ± 1.4	0.1123
Debriefed at DCCT study's end (%)	99	74	<0.0001
Care transferred to non-DCCT personnel (%)	48	79	<0.0001

Data are means ± SD or %. P values for continuous variables are from Wilcoxon's rank-sum test; P values for categorical variables are from the contingency-table χ^2 test.

^b The DCC acknowledges the discrepancy between the 50 nonparticipants in published data, and the 53 nonparticipants in archived data.

Risk factors during first 2 years of EDIC. Table 4 of the publication (p.104) presents the distribution of risk factors, by gender group, for participants in the first two years of EDIC. Table 2 of this DSIC compares the published breakdown to results obtained from the archived SAS data file. The counts, percentages, means, and standard deviations obtained from analyses of the archived data closely match the published tabulations. Any differences in estimates could be attributed to rounding error. Similarly, *P*-values for tests of differences between treatment groups calculated from archived data closely match the published results.

TABLE 2. Risk factors measured during the first two years of the EDIC study, based on the most recent observation from each patient: Results on current page are calculated from Archived Data; Next page contains published results (Table 4, p.104).

Characteristic	Men	Women	P value
n (%) ^c	719 (52.4)	653 (47.6)	
Age (years)	36.4 ± 6.6	35.4 ± 7.2	0.0066
Duration of type 1 diabetes (years)	14.3 ± 4.8	14.8 ± 5.0	NS
BMI (kg/m2)	26.6 ± 3.9	26.0 ± 4.2	<0.0001
Overweight (%)	30.9	31.9	NS
Waist-to-hip ratio	0.88 ± 0.06	0.77 ± 0.07	<0.0001
Insulin dose	0.72 ± 0.25	0.70 ± 0.24	NS
HbA1c (%)	8.2 ± 1.3	8.3 ± 1.5	NS
Total cholesterol (mg/dl)	185.1 ± 35.6	188.1 ± 37.0	NS
Triglyceride (mg/dl)	96.8 ± 75.8	83.1 ± 73.3	<0.0001
HDL cholesterol (mg/dl)	49.5 ± 12.0	59.2 ± 14.0	<0.0001
<35 mg/dl (%)	8.2	1.6	<0.0001
LDL cholesterol (mg/dl)	116.4 ± 30.8	112.1 ± 30.3	0.0083
>130 mg/dl (%)	30.6	26.0	NS
Hypertension (%)	26.6	18.1	0.0002
Current cigarette smoker (%)	22.7	19.9	NS
Exercise level			<0.0001
Strenuous	10.4	2.9	
Vigorous	5.9	3.4	
Moderate	49.5	58.3	
Sedentary	34.3	35.4	
Current alcohol use (%)	47.4	32.1	<0.0001
Urinary albumin excretion (mg/24 h)	38.1 ± 118.4	41.8 ± 226.9	NS
DQOL total score	76.4 ± 9.4	75.3 ± 8.6	0.0186

^c Three subjects – one male and two females – are identified as EDIC participants in the archived dataset, but have no EDIC data except IMT in one subject. When these subjects are removed, the gender breakdowns on archived data match published gender breakdowns.

TABLE 2, cont'd. Risk factors measured during the first two years of the EDIC study, based on the most recent observation from each patient: Published results (Table 4 in publication, p.104)

Table 4—Risk factors measured during the first 2 years of the EDIC study, based on the most recent observation from each patient

	Men	Women	P value
n (%)	719 (52.4)	653 (47.6)	—
Age (years)	36.4 ± 6.6	35.4 ± 7.2	0.0068
Duration of type 1 diabetes (years)	14.3 ± 4.8	14.8 ± 5.0	NS
BMI (kg/m ²)	26.6 ± 3.9	26.0 ± 4.2	0.0001
Overweight (%)	30.9	31.8	NS
Waist-to-hip ratio	0.88 ± 0.06	0.77 ± 0.07	<0.0001
Insulin dose (U · kg ⁻¹ · day ⁻¹)	0.71 ± 0.25	0.69 ± 0.24	NS
HbA _{1c} (%)	8.2 ± 1.3	8.3 ± 1.5	NS
Total cholesterol (mg/dl)	185.1 ± 35.6	188.1 ± 37.0	NS
Triglyceride (mg/dl)	96.8 ± 75.8	83.1 ± 73.3	0.0001
HDL cholesterol (mg/dl)	49.5 ± 12.0	59.2 ± 14.0	<0.0001
<35 mg/dl (%)	8.2	1.6	<0.0001
LDL cholesterol (mg/dl)	116.4 ± 30.8	112.1 ± 30.3	0.0083
>130 mg/dl (%)	30.6	26.0	NS
Hypertension (%)	26.6	18.1	0.0002
Current cigarette smoker (%)	22.7	19.9	NS
Exercise level			<0.001
Strenuous	10.3	2.9	
Vigorous	5.9	3.4	
Moderate	49.5	58.2	
Sedentary	34.3	35.4	
Current alcohol use (%)	47.4	32.2	<0.001
Urinary albumin excretion (mg/24 h)	38.1 ± 118.4	41.8 ± 226.9	NS
DQOL total score	76.4 ± 9.4	75.3 ± 8.6	0.0184

Data are means ± SD or %. P values are for men versus women. Waist-to-hip ratio is based on natural waist circumference. Hypertension is percent diagnosed as hypertensive at any time during DCCT or EDIC and is defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg or use of anti-hypertensives. Alcohol use is percent reporting consumption of at least one alcoholic beverage per week. DQOL, Diabetes Quality of Life

Ankle-to-Arm Systolic Blood Pressure Ratio (PVD); Carotid Artery Intimal Medial Thickness (CIMT). Table 5 of the publication (p.105) presents the baseline measurements of ankle-to-arm systolic blood pressure ratio and carotid artery intimal-medial thickness, by age and gender group. Table 3 of this DSIC compares the published breakdown to results obtained from the archived SAS data file. The counts, percentages, means, and standard deviations obtained from analyses of the archived data closely match the published tabulations. Similarly, *P*-values for tests of differences between treatment groups calculated from archived data closely match the published results.

TABLE 3. PVD and CIMT: Results on current page are calculated from Archived Data; Next page contains published results (Table 5 in publication, p.105).

Characteristic	Age decade	n ^d	Systolic blood pressure ratio of resting ankle to arm					
			Right	Left	Prevalence of abnormal ankle-to-arm ratio (% in any four ratios)			Percent either
					Percent <0.8	P (0.8)	Percent >1.4 ^e	
Women	20-29	154	1.08 ± 0.10	1.08 ± 0.10	2.6	0.9863	0.0	2.6
	30-39	289	1.11 ± 0.12	1.09 ± 0.13	2.8	0.1306	5.9	8.3
	40-49	202	1.10 ± 0.13	1.08 ± 0.12	3.5	0.7089	1.5	5.0
Men	20-29	117	1.07 ± 0.12	1.08 ± 0.10	2.6		2.6	5.1
	30-39	351	1.12 ± 0.13	1.10 ± 0.13	1.1		3.7	4.8
	40-49	241	1.13 ± 0.13	1.11 ± 0.14	4.2		3.7	7.9

Characteristic	Age decade	n	Maximum intimal-medial thickness of common and internal carotid artery	
			Common (mm)	Internal (mm)
Women	20-29	172	0.616 ± 0.073	0.583 ± 0.092
	30-39	278	0.657 ± 0.081	0.632 ± 0.147
	40-49	178	0.696 ± 0.079	0.719 ± 0.226
Men	20-29	125 ^f	0.636 ± 0.059	0.629 ± 0.083
	30-39	350	0.684 ± 0.083	0.684 ± 0.114
	40-49	211	0.745 ± 0.104	0.806 ± 0.261

^d Published n's for systolic blood pressure ratio are the largest n for an individual measure (right SBP ratio, left SBP ratio, prevalence of abnormal ankle-to-arm ratio)

^e The published heading, "Percent < 1.4", is clearly a typographical error.

^f One male DCCT subject, aged 20-29, had IMT data collected for EDIC, but died soon after. He is identified in the archived dataset as *not* an EDIC subject (IN_EDIC=0). Analyses of archived data match published results only when his IMT data are included in the sample. The DCC has confirmed that IMT was analyzed as a separate study from EDIC.

TABLE 3, cont'd. PVD and CIMT, published results (Table 5 in publication, p.105).

Table 5—New measurements in the EDIC protocol

	Age decade	n	Systolic blood pressure ratio of resting ankle to arm						Maximum intimal-medial thickness of common and internal carotid artery		
			Right	Left	Prevalence of abnormal ankle-to-arm ratio (percent in any four ratios)			n	Common (mm)	Internal (mm)	
					Percent <0.8	P (0.8)	Percent <1.4				Percent either
Women*	20–29	154	1.08 ± 0.11	1.08 ± 0.13	2.6	0.9864	0.0	2.6	172	0.616 ± 0.073	0.583 ± 0.092
	30–39	289	1.11 ± 0.12	1.10 ± 0.13	2.8	0.1307	5.9	8.3	278	0.657 ± 0.081	0.632 ± 0.147
	40–49	202	1.09 ± 0.12	1.07 ± 0.11	3.5	0.7093	1.5	5.0	178	0.696 ± 0.079	0.719 ± 0.226
Men*	20–29	117	1.07 ± 0.11	1.08 ± 0.10	2.6		2.6	5.1	125	0.636 ± 0.059	0.629 ± 0.083
	30–39	351	1.11 ± 0.12	1.10 ± 0.12	1.1		3.7	4.8	350	0.684 ± 0.083	0.684 ± 0.114
	40–49	241	1.13 ± 0.13	1.12 ± 0.14	4.1		3.7	7.9	211	0.745 ± 0.104	0.806 ± 0.261

Data are n, means ± SD, or %. Dorsalis pedis and posterior tibial pressures were combined using an algorithm of Hiatt et al. (51). P values are for men vs. women. *P value for trend in percent <0.8: women, 0.6171; men, 0.1513. P < 0.0001 for both common and internal intimal-medial thickness; all are from Wilcoxon's rank-sum test after linear adjustment for covariance with age.

Diabetes management of EDIC cohort during the first 2 years of EDIC. Table 6 of the publication (p.105) presents characteristics of diabetes management in the EDIC sample in the first 24 months after DCCT closeout. Table 4 of this DSIC compares the published breakdown to results obtained from the archived SAS data file. The counts, percentages, means, and standard deviations obtained from analyses of the archived data closely match the published tabulations. Similarly, *P*-values for tests of differences between treatment groups calculated from archived data closely match the published results. Differences in event rates of hypoglycemia and/or DKA could be attributed to differences in statistical analyses methods^g.

TABLE 4. Diabetes management in EDIC during the first 2 years: Results on current page are calculated from Archived Data; Next page contains published results (Table 6 in publication, p.105) (Note: Slightly different procedures were used in these analyses; see footnote^f).

Characteristic	DCCT treatment group assignment		
	Intensive	Conventional	P value
n	687	688	
Insulin delivery during EDIC			<0.0001
CSII	37.0	12.6	
MDI	57.6	56.9	
One or two injections/day	5.3	30.3	
Unknown	0.2	0.3	
Human insulin (% of subjects using)	91.1	90.8	NS
Insulin dose (U * kg ⁻¹ * day ⁻¹)	0.75 ± 0.28	0.67 ± 0.20	<0.0001
Self-monitored blood glucose ≥4/day (%)	46.4	36.4	0.0002
Hypoglycemia (rate per 100 patient-years)			
Coma/seizure	6.2	7.2	NS
Requiring assistance	24.9	26.3	NS
DKA (rate per 100 patient-years)	2.76	2.36	NS
Overweight (%)			
Men	32.5	29.7	NS
Women	38.0	25.2	0.0005

^g Event rates were calculated by multiplying each individual daily rate -- available in the archived dataset -- by a constant (365.25) to get the yearly rate, and then taking the mean across individuals. To compare group event rates, Wilcoxon's rank sum test was used. This is in contrast to published analyses methods, where a Wald test of the log-relative, adjusted for overdispersion, was used to compare event rates. However, conclusions resulting from statistical comparisons remained the same between analyses of archived data and published results.

TABLE 4, cont'd. Diabetes management in EDIC during the first 2 years: Published results (Table 6 in publication, p.105).

Table 6—Diabetes management of EDIC cohort during the first 2 years of EDIC

	DCCT treatment group assignment		
	Intensive	Conventional	P value
n	687	688	—
Insulin delivery during EDIC			<0.0001
CSII	37.0	12.6	
MDI	57.6	56.9	
One or two injections/day	5.3	30.3	
Unknown	0.1	0.3	—
Human insulin (% of subjects using)	91.1	90.8	NS
Insulin dose (U · kg ⁻¹ · day ⁻¹)	0.75 ± 0.28	0.67 ± 0.20	<0.0001
Self-monitored blood glucose ≥4/day (%)	46.4	36.4	0.0002
Hypoglycemia (rate per 100 patient-years)			
Coma/seizure	6.3	7.1	NS
Requiring assistance	25.4	25.7	NS
DKA (rate per 100 patient-years)	2.68	2.37	NS
Overweight (%)			
Men	32.5	29.7	NS
Women	38.4	25.2	0.0005

Data are means ± SD. P values are from the contingency-table χ^2 test for categorical variables, Wilcoxon's rank-sum test for continuous variables, and from a Wald test of the log-relative adjusted for overdispersion of event rates. Overweight is defined for men as BMI (kg/m²) >27.8 from the second National Health and Nutrition Examination Survey (NHANES II) of 1976 to 1980 (50) and for women as BMI (kg/m²) >27.3.

APPENDIX A

Epidemiology of Diabetes Interventions and Complications (EDIC) Research Group (1999). Epidemiology of Diabetes Interventions and Complications (EDIC): Design, implementation, and preliminary results of a long-term follow-up of the Diabetes Control and Complications Trial cohort. *Diabetes Care*, 22(1):99-111.

The full text of the article referenced will be provided to approved requestors along with the data archive.

APPENDIX B

**SAS 9.1 Log for programming code submitted
for the replication of results
in Tables 3-6 of EDIC Baseline Paper**

1
Wednesday, July 11, 2007

The SAS System

19:17

NOTE: Copyright (c) 2002-2003 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) 9.1 (TS1M3)
Licensed to RESEARCH TRIANGLE INSTITUTE, Site 0047670011.
NOTE: This session is executing on the XP_PRO platform.

NOTE: SAS 9.1.3 Service Pack 3

NOTE: SAS initialization used:
real time 1.62 seconds
cpu time 0.37 seconds

```
1      * Filename:  EDICbsln.SAS
2      Location:
\\Rtints23\niddk2\05_Users\Sylvia\DCCT_EDIC\IntegCheck\EDIC_bsln
3      Project:  NIDDK Data Repository -- Dataset Integrity Checks
4      By:       Sylvia Tan
5      Purpose:  Analysis of integrity of EDIC Baseline archived
dataset in the NIDDK Data
5      ! Repository
6      Compare results to tables in paper published by
7      DCCT-EDIC Research Group in 1999 (Diabetes Care, [22(1)])
8      Last updated:  7/11/07 *;
9
10     options ps=500 ls=180 nonumber formchar='|----|+\---+=|~^<>*'
mprint
10     ! orientation=portrait;
11
12     libname EDICBase "C:\DATA\NIDDK\EDICbase\DSIC";
NOTE: Libref EDICBASE was successfully assigned as follows:
Engine:          V9
Physical Name:  C:\DATA\NIDDK\EDICbase\DSIC
13     libname EDICBa_x xport
13     !
"\\Rtints23\niddk2\03_Data_And_Tools\Database\Databases\DCCT_EDIC\DCCT Old
13     ! Versions\EDIC_NEW\Phase3\Study1\edicBASE.xpt";
NOTE: Libref EDICBA_X was successfully assigned as follows:
Engine:          XPORT
Physical Name:
\\Rtints23\niddk2\03_Data_And_Tools\Database\Databases\DCCT_EDIC\DCCT Old
Versions\EDIC_NEW\Phase3\Study1\edicBASE.xpt
14     libname library
"\\Rtints23\niddk2\03_Data_And_Tools\Database\Databases\DCCT_EDIC\DCCT
14     ! Old Versions\EDIC_NEW\All Formats";
NOTE: Libref LIBRARY was successfully assigned as follows:
Engine:          V9
Physical Name:
\\Rtints23\niddk2\03_Data_And_Tools\Database\Databases\DCCT_EDIC\DCCT Old
Versions\EDIC_NEW\All Formats
15
16     * create SAS dataset from XPT file *;
17     proc cimport data=EDICBase.EDICbase infile=EDICBa_x; run;
```

NOTE: Proc CIMPORT begins to create/update data set EDICBASE.EDICbase
NOTE: Data set contains 46 variables and 1428 observations.
Logical record length is 304

NOTE: PROCEDURE CIMPORT used (Total process time):
real time 1.85 seconds
cpu time 0.03 seconds

```
18  
19 data EDICBASE; set edicbase.edicbase;  
20  
21 *****;  
22 * EDIC Baseline: Table 3 *;  
23 * compare EDIC participants vs non-part *;  
24 *****;  
25 ods rtf file="C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T3.rtf"  
style=sasdocprinter;  
NOTE: Writing RTF Body file: C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T3.rtf  
26  
27 title EDIC Bsln Paper - Replicate Table 3;
```

NOTE: There were 1428 observations read from the data set EDICBASE.EDICBASE.
NOTE: The data set WORK.EDICBASE has 1428 observations and 46 variables.
NOTE: DATA statement used (Total process time):
real time 2.43 seconds
cpu time 0.46 seconds

```
28 proc freq; tables in_edic; run;
```

NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE FREQ printed page 1.
NOTE: PROCEDURE FREQ used (Total process time):
real time 0.18 seconds
cpu time 0.01 seconds

```
29 proc means maxdec=1 n mean std; var exit_age exit_dur; class  
in_edic; run;
```

NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE MEANS printed page 2.
NOTE: PROCEDURE MEANS used (Total process time):
real time 0.12 seconds
cpu time 0.01 seconds

```
30 proc npar1way wilcoxon; var exit_age exit_dur; class in_edic; run;
```

NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE NPAR1WAY printed pages 3-4.
NOTE: PROCEDURE NPAR1WAY used (Total process time):
real time 0.10 seconds
cpu time 0.01 seconds

```
31
32      proc sort; by group;
```

```
NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The data set WORK.EDICBASE has 1428 observations and 46 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time          0.01 seconds
      cpu time           0.00 seconds
```

```
33      proc means maxdec=1 n mean std; var  hbam999; class in_edic; by
group; run;
```

```
NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE MEANS printed page 5.
NOTE: PROCEDURE MEANS used (Total process time):
      real time          0.10 seconds
      cpu time           0.00 seconds
```

```
34      proc npar1way wilcoxon; var  hbam999; class in_edic; by group;
run;
```

```
NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE NPAR1WAY printed pages 6-7.
NOTE: PROCEDURE NPAR1WAY used (Total process time):
      real time          0.14 seconds
      cpu time           0.03 seconds
```

```
35      proc freq; tables (sex group mab1 mac1)*in_edic/chisq exact; run;
```

```
NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE FREQ printed pages 8-13.
NOTE: PROCEDURE FREQ used (Total process time):
      real time          0.32 seconds
      cpu time           0.07 seconds
```

```
36
37      ods rtf close; run;
38
39      *****;
40      * EDIC Baseline: Table 4 *;
41      * Risk factors during 1st 2 yrs of EDIC *;
42      *****;
43      * just EDIC participants *;
44      DATA EDICBASE_A; set edicbase;
45      if in_edic=1;
46      if smoking=3 then currsmok=1; else if smoking in (1,2) then
currsmok=0;
47
48      if age=. and yrs_iddm=. and bmi=. and hbalc=. and tchol=. and
triglyc=. and hdl=. and
49      ldl=. and aer=. and qol=. and whr=. and std_ins=.
50      and over_wt=. and low_hdl=. and high_ldl=. and ht=. and
smoking=. and currsmok=. and
```

```
51          exercise=. and obdrink1=. then NODATA=1; /* 2females and 1male
were missing all data,
51          ! except
52          IMT in one subject, take them out to match gender breakdowns in
published Table 4;
52          ! */run;
```

```
NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The data set WORK.EDICBASE_A has 1375 observations and 48 variables.
NOTE: DATA statement used (Total process time):
      real time           0.38 seconds
      cpu time            0.03 seconds
```

```
53
54          ods rtf file="C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T4.rtf"
style=sasdocprinter;
NOTE: Writing RTF Body file: C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T4.rtf
55
56          title EDIC Bsln Paper - Replicate Table 4;
57          proc freq; tables sex; WHERE NODATA^=1; run;
```

```
NOTE: There were 1372 observations read from the data set WORK.EDICBASE_A.
WHERE NODATA not = 1;
NOTE: The PROCEDURE FREQ printed page 14.
NOTE: PROCEDURE FREQ used (Total process time):
      real time           0.06 seconds
      cpu time            0.01 seconds
```

```
58          proc means n mean std maxdec=1; class sex; WHERE NODATA^=1;
59          var age yrs_iddm bmi hbalc tchol triglyc hdl ldl aer qol; run;
```

```
NOTE: There were 1372 observations read from the data set WORK.EDICBASE_A.
WHERE NODATA not = 1;
NOTE: The PROCEDURE MEANS printed pages 15-16.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.12 seconds
      cpu time            0.03 seconds
```

```
60          proc means n mean std maxdec=2; class sex; WHERE NODATA^=1;
61          var whr std_ins; run;
```

```
NOTE: There were 1372 observations read from the data set WORK.EDICBASE_A.
WHERE NODATA not = 1;
NOTE: The PROCEDURE MEANS printed page 17.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.12 seconds
      cpu time            0.01 seconds
```

```
62          proc nparlway wilcoxon; class sex; WHERE NODATA^=1;
63          var age yrs_iddm bmi whr std_ins hbalc tchol triglyc hdl ldl aer
qol; run;
```

```
NOTE: There were 1372 observations read from the data set WORK.EDICBASE_A.
```

```
WHERE NODATA not = 1;
NOTE: The PROCEDURE NPAR1WAY printed pages 18-29.
NOTE: PROCEDURE NPAR1WAY used (Total process time):
      real time          0.17 seconds
      cpu time           0.07 seconds
```

```
64      proc freq; tables (over_wt low_hdl high_ldl ht smoking currsmok
exercise obdrink1)*sex/
65      chisq exact; WHERE NODATA^=1;
66      run;
```

```
NOTE: There were 1372 observations read from the data set WORK.EDICBASE_A.
WHERE NODATA not = 1;
NOTE: The PROCEDURE FREQ printed pages 30-39.
NOTE: PROCEDURE FREQ used (Total process time):
      real time          0.40 seconds
      cpu time           0.14 seconds
```

```
67
68      ods rtf close; run;
69
70      *****;
71      * EDIC Baseline: Table 5 *;
72      * New measurements in EDIC protocol *;
73      *****;
74      data EDICBASE_A; set edicbase_a;
75      if low_aar=1 or high_aar=1 then lowhigh_aar=1;
76      else if low_aar=0 and high_aar=0 then lowhigh_aar=0;
77
78      ods rtf file="C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T5.rtf"
style=sasdocprinter;
NOTE: Writing RTF Body file: C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T5.rtf
79
80      title EDIC Bsln Paper - Replicate Table 5;
```

```
NOTE: There were 1375 observations read from the data set WORK.EDICBASE_A.
NOTE: The data set WORK.EDICBASE_A has 1375 observations and 49 variables.
NOTE: DATA statement used (Total process time):
      real time          0.67 seconds
      cpu time           0.17 seconds
```

```
81      proc means n mean std maxdec=2 data=edicbase_a; where decade not
in (' ', '50 plus');
82      class sex decade; var ldp_mean rdp_mean; run;
```

```
NOTE: There were 1355 observations read from the data set WORK.EDICBASE_A.
WHERE decade not in (' ', '50 plus');
NOTE: The PROCEDURE MEANS printed page 40.
NOTE: PROCEDURE MEANS used (Total process time):
      real time          0.14 seconds
      cpu time           0.03 seconds
```

```
83      proc freq; where decade not in (' ', '50 plus');
```

```

84          tables sex*(low_aar high_aar lowhigh_aar)*decade; run;

NOTE: There were 1355 observations read from the data set WORK.EDICBASE_A.
      WHERE decade not in (' ', '50 plus');
NOTE: The PROCEDURE FREQ printed pages 41-43.
NOTE: PROCEDURE FREQ used (Total process time):
      real time          0.18 seconds
      cpu time           0.01 seconds

85          proc sort data=edicbase_a; by decade;

NOTE: There were 1375 observations read from the data set WORK.EDICBASE_A.
NOTE: The data set WORK.EDICBASE_A has 1375 observations and 49 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time          0.01 seconds
      cpu time           0.00 seconds

86          proc freq; where decade not in ('','50 plus');
87          by decade; tables sex*low_aar/chisq exact; run;

NOTE: There were 1355 observations read from the data set WORK.EDICBASE_A.
      WHERE decade not in (' ', '50 plus');
NOTE: The PROCEDURE FREQ printed pages 44-49.
NOTE: PROCEDURE FREQ used (Total process time):
      real time          0.17 seconds
      cpu time           0.03 seconds

88
89          * run IMT analysis on entire dataset to get published n's (DCC:
IMT was a separate
89          ! study) *;
90          proc means n mean std maxdec=3 DATA=EDICBASE; class sex dec_imt;
var common internal;
90          ! run;

NOTE: There were 1428 observations read from the data set WORK.EDICBASE.
NOTE: The PROCEDURE MEANS printed pages 50-51.
NOTE: PROCEDURE MEANS used (Total process time):
      real time          0.10 seconds
      cpu time           0.03 seconds

91
92          ods rtf close; run;
93
94          *****;
95          * EDIC Baseline: Table 6 *;
96          * Diab mgmt during 1st two yrs of EDIC *;
97          *****;
98          ods rtf file="C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T6.rtf"
style=sasdocprinter;
NOTE: Writing RTF Body file: C:\DATA\NIDDK\EDICbase\DSIC\EDICBASE_T6.rtf
99
100         title EDIC Bsln Paper - Replicate Table 6;

```

```
101
102      proc freq data=edibase_a; tables group; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDIBASE_A.

NOTE: The PROCEDURE FREQ printed page 52.

NOTE: PROCEDURE FREQ used (Total process time):

```
real time      0.12 seconds
cpu time       0.01 seconds
```

```
103      proc freq data=edibase_a; tables (obinsreg hum_ins
sbgm_4)*group/chisq exact; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDIBASE_A.

NOTE: The PROCEDURE FREQ printed pages 53-58.

NOTE: PROCEDURE FREQ used (Total process time):

```
real time      0.21 seconds
cpu time       0.07 seconds
```

```
104      proc means n mean std maxdec=2; var std_ins; class group; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDIBASE_A.

NOTE: The PROCEDURE MEANS printed page 59.

NOTE: PROCEDURE MEANS used (Total process time):

```
real time      0.12 seconds
cpu time       0.01 seconds
```

```
105      proc nparlway wilcoxon; var std_ins; class group; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDIBASE_A.

NOTE: The PROCEDURE NPAR1WAY printed page 60.

NOTE: PROCEDURE NPAR1WAY used (Total process time):

```
real time      0.07 seconds
cpu time       0.01 seconds
```

```
106
107      data EDIBASE_A; set edibase_a;
108      pt_cs_b=365.25*pt_cs;
109      pt_ra_b=365.25*pt_ra;
110      pt_dka_b=365.25*pt_dka;
111
112      title2 mean rates per year;
```

NOTE: Missing values were generated as a result of performing an operation on missing values.

Each place is given by: (Number of times) at (Line):(Column).

7 at 108:17 7 at 109:17 7 at 110:18

NOTE: There were 1375 observations read from the data set WORK.EDIBASE_A.

NOTE: The data set WORK.EDIBASE_A has 1375 observations and 52 variables.

NOTE: DATA statement used (Total process time):

```
real time      0.37 seconds
cpu time       0.01 seconds
```

```
113      proc means mean maxdec=2; class group; var pt_cs_b pt_ra_b
pt_dka_b; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDICBASE_A.

NOTE: The PROCEDURE MEANS printed page 61.

NOTE: PROCEDURE MEANS used (Total process time):

real time	0.13 seconds
cpu time	0.03 seconds

```
114      proc nparlway wilcoxon; class group; var pt_cs_b pt_ra_b
pt_dka_b; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDICBASE_A.

NOTE: The PROCEDURE NPAR1WAY printed pages 62-64.

NOTE: PROCEDURE NPAR1WAY used (Total process time):

real time	0.09 seconds
cpu time	0.01 seconds

```
115      title;
```

```
116      proc freq data=edibase_a; tables sex*ow*group/all; run;
```

NOTE: There were 1375 observations read from the data set WORK.EDICBASE_A.

NOTE: The PROCEDURE FREQ printed pages 65-71.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.28 seconds
cpu time	0.03 seconds

```
117
```

```
118      ods rtf close; run;
```

```
119
```

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414

NOTE: The SAS System used:

real time	13.70 seconds
cpu time	2.17 seconds

APPENDIX C

**SAS 9.1 Output for programming code submitted
for the replication of results
in Tables 3-6 of EDIC Baseline Paper**

EDIC Bsln Paper - Replicate Table 3

The FREQ Procedure

EDIC participant				
IN_EDIC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0: No	53	3.71	53	3.71
1: Yes	1375	96.29	1428	100.00

EDIC BslIn Paper - Replicate Table 3

The MEANS Procedure

EDIC participant	N Obs	Variable	Label	N	Mean	Std Dev
0: No	53	EXIT_AGE	Age (years) at DCCT Close-Out (Table 3)	51	31.0	7.7
		EXIT_DUR	Duration of IDDM (years) at DCCT Close-Out	51	11.6	4.4
1: Yes	1375	EXIT_AGE	Age (years) at DCCT Close-Out (Table 3)	1372	33.6	7.0
		EXIT_DUR	Duration of IDDM (years) at DCCT Close-Out	1372	12.2	4.8

EDIC BsIn Paper - Replicate Table 3

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable EXIT_AGE
Classified by Variable IN_EDIC**

IN_EDIC	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1: Yes	1372	983836.50	976864.0	2879.12406	717.081997
0: No	51	29339.50	36312.0	2879.12406	575.284314

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	29339.5000
------------------	------------

Normal Approximation

Z	-2.4216
One-Sided Pr < Z	0.0077
Two-Sided Pr > Z 	0.0155

t Approximation

One-Sided Pr < Z	0.0078
Two-Sided Pr > Z 	0.0156

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square	5.8648
DF	1
Pr > Chi-Square	0.0154

EDIC BsIn Paper - Replicate Table 3

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable EXIT_DUR
Classified by Variable IN_EDIC**

IN_EDIC	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1: Yes	1372	979027.0	976864.0	2881.48724	713.576531
0: No	51	34149.0	36312.0	2881.48724	669.588235

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	34149.0000
------------------	------------

Normal Approximation

Z	-0.7505
One-Sided Pr < Z	0.2265
Two-Sided Pr > Z 	0.4530

t Approximation

One-Sided Pr < Z	0.2265
Two-Sided Pr > Z 	0.4531

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test

Chi-Square	0.5635
DF	1
Pr > Chi-Square	0.4529

EDIC Bsln Paper - Replicate Table 3

The MEANS Procedure

TREATMENT GROUP=EXPERIMENTAL: Intensive Treatment

**Analysis Variable : HBAM999 DCCT
close-out HBA1c (Table3)**

EDIC participant	N Obs	N	Mean	Std Dev
0: No	16	12	8.5	1.6
1: Yes	687	685	7.4	1.1

TREATMENT GROUP=STANDARD: Conventional Treatment

**Analysis Variable : HBAM999 DCCT
close-out HBA1c (Table3)**

EDIC participant	N Obs	N	Mean	Std Dev
0: No	37	35	9.6	1.4
1: Yes	688	687	9.1	1.5

EDIC BsIn Paper - Replicate Table 3

The NPAR1WAY Procedure

TREATMENT GROUP=EXPERIMENTAL: Intensive Treatment

**Wilcoxon Scores (Rank Sums) for Variable HBAM999
Classified by Variable IN_EDIC**

IN_EDIC	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1: Yes	685	237019.50	239065.0	691.027395	346.013869
0: No	12	6233.50	4188.0	691.027395	519.458333

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	6233.5000
------------------	-----------

Normal Approximation

Z	2.9594
One-Sided Pr > Z	0.0015
Two-Sided Pr > Z 	0.0031

t Approximation

One-Sided Pr > Z	0.0016
Two-Sided Pr > Z 	0.0032

**Z includes a continuity correction
of 0.5.**

Kruskal-Wallis Test

Chi-Square	8.7621
DF	1
Pr > Chi-Square	0.0031

EDIC BsIn Paper - Replicate Table 3

The NPAR1WAY Procedure

TREATMENT GROUP=STANDARD: Conventional Treatment

**Wilcoxon Scores (Rank Sums) for Variable HBAM999
Classified by Variable IN_EDIC**

IN_EDIC	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1: Yes	687	246439.0	248350.50	1203.33963	358.717613
0: No	35	14564.0	12652.50	1203.33963	416.114286

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	14564.0000
------------------	------------

Normal Approximation

Z	1.5881
One-Sided Pr > Z	0.0561
Two-Sided Pr > Z 	0.1123

t Approximation

One-Sided Pr > Z	0.0564
Two-Sided Pr > Z 	0.1127

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square	2.5233
DF	1
Pr > Chi-Square	0.1122

EDIC BsIn Paper - Replicate Table 3

The FREQ Procedure

Table of SEX by IN_EDIC

SEX(Gender (coded M or F))	IN_EDIC(EDIC participant)		
	0: No	1: Yes	Total
F: Female	24	655	679
	1.68	45.87	47.55
	3.53	96.47	
	45.28	47.64	
M: Male	29	720	749
	2.03	50.42	52.45
	3.87	96.13	
	54.72	52.36	
Total	53	1375	1428
	3.71	96.29	100.00

Statistics for Table of SEX by IN_EDIC

Statistic	DF	Value	Prob
Chi-Square	1	0.1133	0.7364
Likelihood Ratio Chi-Square	1	0.1135	0.7362
Continuity Adj. Chi-Square	1	0.0386	0.8442
Mantel-Haenszel Chi-Square	1	0.1132	0.7365
Phi Coefficient		-0.0089	
Contingency Coefficient		0.0089	
Cramer's V		-0.0089	

Fisher's Exact Test

Cell (1,1) Frequency (F)	24
Left-sided Pr <= F	0.4230
Right-sided Pr >= F	0.6825
Table Probability (P)	0.1055
Two-sided Pr <= P	0.7804

Sample Size = 1428

EDIC BsIn Paper - Replicate Table 3

The FREQ Procedure

Table of GROUP by IN_EDIC				
GROUP(TREATMENT GROUP)	IN_EDIC(EDIC participant)			
	0: No	1: Yes	Total	
EXPERIMENTAL: Intensive Treatment	Frequency	16	687	703
	Percent	1.12	48.11	49.23
	Row Pct	2.28	97.72	
	Col Pct	30.19	49.96	
STANDARD: Conventional Treatment	Frequency	37	688	725
	Percent	2.59	48.18	50.77
	Row Pct	5.10	94.90	
	Col Pct	69.81	50.04	
Total	Frequency	53	1375	1428
	Percent	3.71	96.29	100.00

Statistics for Table of GROUP by IN_EDIC

Statistic	DF	Value	Prob
Chi-Square	1	7.9844	0.0047
Likelihood Ratio Chi-Square	1	8.2152	0.0042
Continuity Adj. Chi-Square	1	7.2129	0.0072
Mantel-Haenszel Chi-Square	1	7.9789	0.0047
Phi Coefficient		-0.0748	
Contingency Coefficient		0.0746	
Cramer's V		-0.0748	

Fisher's Exact Test

Cell (1,1) Frequency (F)	16
Left-sided Pr <= F	0.0033
Right-sided Pr >= F	0.9987
Table Probability (P)	0.0020
Two-sided Pr <= P	0.0049

EDIC BsIn Paper - Replicate Table 3

The FREQ Procedure

Statistics for Table of GROUP by IN_EDIC

Sample Size = 1428

Table of MAB1 by IN_EDIC

MAB1(Was patient debriefed?)	IN_EDIC(EDIC participant)		
	0: No	1: Yes	Total
1: No	13	19	32
	0.92	1.34	2.26
	40.63	59.38	
	26.00	1.39	
2: Yes	37	1346	1383
	2.61	95.12	97.74
	2.68	97.32	
	74.00	98.61	
Total	50	1365	1415
	3.53	96.47	100.00

Frequency Missing = 13

Statistics for Table of MAB1 by IN_EDIC

Statistic	DF	Value	Prob
Chi-Square	1	132.1422	<.0001
Likelihood Ratio Chi-Square	1	48.3065	<.0001
Continuity Adj. Chi-Square	1	121.2436	<.0001
Mantel-Haenszel Chi-Square	1	132.0488	<.0001
Phi Coefficient		0.3056	
Contingency Coefficient		0.2923	
Cramer's V		0.3056	

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

EDIC BsIn Paper - Replicate Table 3

The FREQ Procedure

Statistics for Table of MAB1 by IN_EDIC

Fisher's Exact Test	
Cell (1,1) Frequency (F)	13
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	5.541E-12
Table Probability (P)	5.335E-12
Two-sided Pr <= P	5.541E-12

Effective Sample Size = 1415
Frequency Missing = 13

Table of MAC1 by IN_EDIC

MAC1(Future diabetes care)	IN_EDIC(EDIC participant)		Total
	0: No	1: Yes	
DCCT staff	10	676	686
	0.74	49.74	50.48
	1.46	98.54	
	20.83	51.56	
Non-DCCT staff	38	635	673
	2.80	46.73	49.52
	5.65	94.35	
	79.17	48.44	
Total	48	1311	1359
	3.53	96.47	100.00

Frequency Missing = 69

Statistics for Table of MAC1 by IN_EDIC

Statistic	DF	Value	Prob
Chi-Square	1	17.4928	<.0001
Likelihood Ratio Chi-Square	1	18.5732	<.0001
Continuity Adj. Chi-Square	1	16.2851	<.0001
Mantel-Haenszel Chi-Square	1	17.4799	<.0001

EDIC BsIn Paper - Replicate Table 3

The FREQ Procedure

Statistics for Table of MAC1 by IN_EDIC

Statistic	DF	Value	Prob
Phi Coefficient		-0.1135	
Contingency Coefficient		0.1127	
Cramer's V		-0.1135	

Fisher's Exact Test

Cell (1,1) Frequency (F)	10
Left-sided Pr \leq F	1.727E-05
Right-sided Pr \geq F	1.0000
Table Probability (P)	1.327E-05
Two-sided Pr \leq P	2.460E-05

Effective Sample Size = 1359
Frequency Missing = 69

EDIC Bsln Paper - Replicate Table 4

The FREQ Procedure

Gender (coded M or F)				
SEX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F: Female	653	47.59	653	47.59
M: Male	719	52.41	1372	100.00

EDIC BsIn Paper - Replicate Table 4

The MEANS Procedure

Gender (coded M or F)	N Obs	Variable	Label	N	Mean	Std Dev
F: Female	653	AGE	Age at Edic Year 2 (Table 4)	652	35.4	7.2
		YRS_IDDM	Current duration of IDDM (years)	650	14.8	5.0
		BMI	Body mass index (kg/m**2)	650	26.0	4.2
		HBA1C	Last Non-Missing HbA1c During EDIC Year 1&2 (Tb4)	648	8.3	1.5
		TCHOL	Serum total cholesterol (mg/dl)	631	188.1	37.0
		TRIGLYC	Serum triglycerides (mg/dl)	631	83.1	73.3
		HDL	Serum HDL cholesterol (mg/dl)	631	59.2	14.0
		LDL	Serum LDL cholesterol (mg/dl)	627	112.1	30.3
		AER	Albumin excretion rate (mg/day)	627	41.8	226.9
		QOL	quality of life	640	75.3	8.6
M: Male	719	AGE	Age at Edic Year 2 (Table 4)	718	36.4	6.6
		YRS_IDDM	Current duration of IDDM (years)	717	14.3	4.8
		BMI	Body mass index (kg/m**2)	716	26.6	3.9
		HBA1C	Last Non-Missing HbA1c During EDIC Year 1&2 (Tb4)	715	8.2	1.3
		TCHOL	Serum total cholesterol (mg/dl)	696	185.1	35.6
		TRIGLYC	Serum triglycerides (mg/dl)	696	96.8	75.8
		HDL	Serum HDL cholesterol (mg/dl)	696	49.5	12.0
		LDL	Serum LDL cholesterol (mg/dl)	690	116.4	30.8
		AER	Albumin excretion rate (mg/day)	694	38.1	118.4
		QOL	quality of life	704	76.4	9.4

EDIC BsIn Paper - Replicate Table 4

The MEANS Procedure

Gender (coded M or F)	N Obs	Variable	Label	N	Mean	Std Dev
F: Female	653	WHR	Waist-to-hip ratio (natural waist)	648	0.77	0.07
		STD_INS	Insulin dose (units/kg/day)	651	0.70	0.24
M: Male	719	WHR	Waist-to-hip ratio (natural waist)	716	0.88	0.06
		STD_INS	Insulin dose (units/kg/day)	718	0.72	0.25

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable AGE Classified by Variable SEX					
SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	652	427074.50	446946.0	7313.31141	655.022239
M: Male	718	512060.50	492189.0	7313.31141	713.176184

Average scores were used for ties.

Wilcoxon Two-Sample Test	
Statistic	427074.5000
Normal Approximation	
Z	-2.7171
One-Sided Pr < Z	0.0033
Two-Sided Pr > Z	0.0066
t Approximation	
One-Sided Pr < Z	0.0033
Two-Sided Pr > Z	0.0067

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test	
Chi-Square	7.3830
DF	1
Pr > Chi-Square	0.0066

EDIC BslN Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable YRS_IDDM Classified by Variable SEX

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	650	456469.50	444600.0	7288.86263	702.260769
M: Male	717	478558.50	490428.0	7288.86263	667.445607

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 456469.5000

Normal Approximation

Z 1.6284

One-Sided Pr > Z 0.0517

Two-Sided Pr > |Z| 0.1034

t Approximation

One-Sided Pr > Z 0.0518

Two-Sided Pr > |Z| 0.1037

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.6518

DF 1

Pr > Chi-Square 0.1034

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable BMI
Classified by Variable SEX**

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	650	415002.50	444275.0	7281.26468	638.465385
M: Male	716	518658.50	489386.0	7281.26468	724.383380

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	415002.5000
------------------	-------------

Normal Approximation

Z	-4.0202
One-Sided Pr < Z	<.0001
Two-Sided Pr > Z 	<.0001

t Approximation

One-Sided Pr < Z	<.0001
Two-Sided Pr > Z 	<.0001

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test

Chi-Square	16.1624
DF	1
Pr > Chi-Square	<.0001

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable WHR Classified by Variable SEX					
SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	648	251234.50	442260.0	7264.73378	387.707562
M: Male	716	679695.50	488670.0	7264.73378	949.295391

Average scores were used for ties.

Wilcoxon Two-Sample Test	
Statistic	251234.5000
Normal Approximation	
Z	-26.2948
One-Sided Pr < Z	<.0001
Two-Sided Pr > Z 	<.0001
t Approximation	
One-Sided Pr < Z	<.0001
Two-Sided Pr > Z 	<.0001

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test	
Chi-Square	691.4221
DF	1
Pr > Chi-Square	<.0001

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable STD_INS
Classified by Variable SEX**

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	651	437682.0	445935.0	7305.03550	672.322581
M: Male	718	500083.0	491830.0	7305.03550	696.494429

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	437682.0000
------------------	-------------

Normal Approximation

Z	-1.1297
One-Sided Pr < Z	0.1293
Two-Sided Pr > Z 	0.2586

t Approximation

One-Sided Pr < Z	0.1294
Two-Sided Pr > Z 	0.2588

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square	1.2764
DF	1
Pr > Chi-Square	0.2586

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable HBA1C Classified by Variable SEX

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	648	440919.50	441936.0	7254.60201	680.431327
M: Male	715	488646.50	487630.0	7254.60201	683.421678

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 440919.5000

Normal Approximation

Z -0.1400

One-Sided Pr < Z 0.4443

Two-Sided Pr > |Z| 0.8886

t Approximation

One-Sided Pr < Z 0.4443

Two-Sided Pr > |Z| 0.8886

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.0196

DF 1

Pr > Chi-Square 0.8886

EDIC Bsln Paper - Replicate Table 4

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable TCHOL
Classified by Variable SEX**

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	631	428078.0	418984.0	6971.18656	678.412044
M: Male	696	453050.0	462144.0	6971.18656	650.933908

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic	428078.0000
------------------	-------------

Normal Approximation

Z	1.3044
One-Sided Pr > Z	0.0960
Two-Sided Pr > Z 	0.1921

t Approximation

One-Sided Pr > Z	0.0962
Two-Sided Pr > Z 	0.1923

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test

Chi-Square	1.7018
DF	1
Pr > Chi-Square	0.1921

EDIC Bsln Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable TRIGLYC Classified by Variable SEX

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	631	391693.0	418984.0	6971.12271	620.749604
M: Male	696	489435.0	462144.0	6971.12271	703.211207

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 391693.0000

Normal Approximation

Z -3.9148

One-Sided Pr < Z <.0001

Two-Sided Pr > |Z| <.0001

t Approximation

One-Sided Pr < Z <.0001

Two-Sided Pr > |Z| <.0001

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 15.3262

DF 1

Pr > Chi-Square <.0001

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable HDL Classified by Variable SEX

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	631	510644.0	418984.0	6969.37382	809.261490
M: Male	696	370484.0	462144.0	6969.37382	532.304598

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 510644.0000

Normal Approximation

Z 13.1518

One-Sided Pr > Z <.0001

Two-Sided Pr > |Z| <.0001

t Approximation

One-Sided Pr > Z <.0001

Two-Sided Pr > |Z| <.0001

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 172.9706

DF 1

Pr > Chi-Square <.0001

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable LDL Classified by Variable SEX

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	627	394996.0	413193.0	6892.85838	629.977671
M: Male	690	472907.0	454710.0	6892.85838	685.372464

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 394996.0000

Normal Approximation

Z -2.6399

One-Sided Pr < Z 0.0041

Two-Sided Pr > |Z| 0.0083

t Approximation

One-Sided Pr < Z 0.0042

Two-Sided Pr > |Z| 0.0084

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 6.9695

DF 1

Pr > Chi-Square 0.0083

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable AER Classified by Variable SEX

SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	627	405685.0	414447.0	6909.70218	647.025518
M: Male	694	467496.0	458734.0	6909.70218	673.625360

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 405685.0000

Normal Approximation

Z -1.2680

One-Sided Pr < Z 0.1024

Two-Sided Pr > |Z| 0.2048

t Approximation

One-Sided Pr < Z 0.1025

Two-Sided Pr > |Z| 0.2050

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.6080

DF 1

Pr > Chi-Square 0.2048

EDIC BsIn Paper - Replicate Table 4

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable QOL Classified by Variable SEX					
SEX	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
F: Female	640	413668.50	430400.0	7106.23470	646.357031
M: Male	704	490171.50	473440.0	7106.23470	696.266335

Average scores were used for ties.

Wilcoxon Two-Sample Test	
Statistic	413668.5000
Normal Approximation	
Z	-2.3544
One-Sided Pr < Z	0.0093
Two-Sided Pr > Z 	0.0186
t Approximation	
One-Sided Pr < Z	0.0093
Two-Sided Pr > Z 	0.0187

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test	
Chi-Square	5.5436
DF	1
Pr > Chi-Square	0.0185

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Table of OVER_WT by SEX

OVER_WT(Overweight (BMI>=27.8 M, 27.3 F)(Table4))		SEX(Gender (coded M or F))		
Frequency		F:	M:	
Percent		Female	Male	Total
Row Pct				
Col Pct				
	0: No	443	495	938
		32.43	36.24	68.67
		47.23	52.77	
		68.15	69.13	
	1: Yes	207	221	428
		15.15	16.18	31.33
		48.36	51.64	
		31.85	30.87	
Total		650	716	1366
		47.58	52.42	100.00

Frequency Missing = 6

Statistics for Table of OVER_WT by SEX

Statistic	DF	Value	Prob
Chi-Square	1	0.1522	0.6965
Likelihood Ratio Chi-Square	1	0.1521	0.6965
Continuity Adj. Chi-Square	1	0.1100	0.7401
Mantel-Haenszel Chi-Square	1	0.1520	0.6966
Phi Coefficient		-0.0106	
Contingency Coefficient		0.0106	
Cramer's V		-0.0106	

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of OVER_WT by SEX

Fisher's Exact Test	
Cell (1,1) Frequency (F)	443
Left-sided Pr <= F	0.3700
Right-sided Pr >= F	0.6732
Table Probability (P)	0.0431
Two-sided Pr <= P	0.7261

Effective Sample Size = 1366
Frequency Missing = 6

Table of LOW_HDL by SEX

LOW_HDL(HDL < 35 SEX(Gender
mg/dl (0 = no, 1 = yes)) (coded M or F))

Frequency			
Percent			
Row Pct	F:	M:	
Col Pct	Female	Male	Total
0: No	621	639	1260
	46.80	48.15	94.95
	49.29	50.71	
	98.42	91.81	
1: Yes	10	57	67
	0.75	4.30	5.05
	14.93	85.07	
	1.58	8.19	
Total	631	696	1327
	47.55	52.45	100.00

Frequency Missing = 45

Statistics for Table of LOW_HDL by SEX

Statistic	DF	Value	Prob
Chi-Square	1	30.1157	<.0001
Likelihood Ratio Chi-Square	1	33.4845	<.0001
Continuity Adj. Chi-Square	1	28.7537	<.0001
Mantel-Haenszel Chi-Square	1	30.0930	<.0001

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of LOW_HDL by SEX

Statistic	DF	Value	Prob
Phi Coefficient		0.1506	
Contingency Coefficient		0.1490	
Cramer's V		0.1506	

Fisher's Exact Test

Cell (1,1) Frequency (F)	621
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	9.004E-09
Table Probability (P)	7.447E-09
Two-sided Pr <= P	1.143E-08

Effective Sample Size = 1327
Frequency Missing = 45

Table of HIGH_LDL by SEX

HIGH_LDL(LDL > 130 mg/dl (0 = no, 1 = yes)) **SEX(Gender (coded M or F))**

Frequency Percent Row Pct Col Pct	F: Female	M: Male	Total
0: No	464 35.23 49.20 74.00	479 36.37 50.80 69.42	943 71.60
1: Yes	163 12.38 43.58 26.00	211 16.02 56.42 30.58	374 28.40
Total	627 47.61	690 52.39	1317 100.00

Frequency Missing = 55

Statistics for Table of HIGH_LDL by SEX

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of HIGH_LDL by SEX

Statistic	DF	Value	Prob
Chi-Square	1	3.3931	0.0655
Likelihood Ratio Chi-Square	1	3.4012	0.0651
Continuity Adj. Chi-Square	1	3.1715	0.0749
Mantel-Haenszel Chi-Square	1	3.3905	0.0656
Phi Coefficient		0.0508	
Contingency Coefficient		0.0507	
Cramer's V		0.0508	

Fisher's Exact Test

Cell (1,1) Frequency (F)	464
Left-sided Pr \leq F	0.9716
Right-sided Pr \geq F	0.0374
Table Probability (P)	0.0090
Two-sided Pr \leq P	0.0668

Effective Sample Size = 1317
Frequency Missing = 55

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Table of HT by SEX			
HT(History of hypertension (1 = yes))	SEX(Gender (coded M or F))		
Frequency Percent Row Pct Col Pct	F: Female	M: Male	Total
0: No	535 38.99 50.33 81.93	528 38.48 49.67 73.44	1063 77.48
1: Yes	118 8.60 38.19 18.07	191 13.92 61.81 26.56	309 22.52
Total	653 47.59	719 52.41	1372 100.00

Statistics for Table of HT by SEX

Statistic	DF	Value	Prob
Chi-Square	1	14.1499	0.0002
Likelihood Ratio Chi-Square	1	14.2800	0.0002
Continuity Adj. Chi-Square	1	13.6673	0.0002
Mantel-Haenszel Chi-Square	1	14.1396	0.0002
Phi Coefficient		0.1016	
Contingency Coefficient		0.1010	
Cramer's V		0.1016	

Fisher's Exact Test

Cell (1,1) Frequency (F)	535
Left-sided Pr <= F	0.9999
Right-sided Pr >= F	1.027E-04
Table Probability (P)	4.198E-05
Two-sided Pr <= P	1.723E-04

DIC Bsln Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of HT by SEX

Sample Size = 1372

Table of SMOKING by SEX

SMOKING(Smoking (1=never, 2=former, 3=current))	SEX(Gender (coded M or F))		Total
	F: Female	M: Male	
Frequency			
Percent			
Row Pct			
Col Pct			
1: Never smokers: Never or quit 1yr+	484	518	1002
	35.28	37.76	73.03
	48.30	51.70	
	74.12	72.04	
2: Former smokers: 3 mnth <quit <= 1yr	39	38	77
	2.84	2.77	5.61
	50.65	49.35	
	5.97	5.29	
3: Current smokers: Curr or quit <= 3mnth	130	163	293
	9.48	11.88	21.36
	44.37	55.63	
	19.91	22.67	
Total	653	719	1372
	47.59	52.41	100.00

Statistics for Table of SMOKING by SEX

Statistic	DF	Value	Prob
Chi-Square	2	1.7124	0.4248
Likelihood Ratio Chi-Square	2	1.7154	0.4241
Mantel-Haenszel Chi-Square	1	1.1822	0.2769
Phi Coefficient		0.0353	
Contingency Coefficient		0.0353	
Cramer's V		0.0353	

Fisher's Exact Test

Table Probability (P) 0.0021

Pr <= P 0.4243

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of SMOKING by SEX

Sample Size = 1372

Table of currsmok by SEX				
		SEX(Gender (coded M or F))		
currsmok		F:	M:	
Frequency		Female	Male	Total
Percent				
Row Pct				
Col Pct				
0		523	556	1079
		38.12	40.52	78.64
		48.47	51.53	
		80.09	77.33	
1		130	163	293
		9.48	11.88	21.36
		44.37	55.63	
		19.91	22.67	
Total		653	719	1372
		47.59	52.41	100.00

Statistics for Table of currsmok by SEX

Statistic	DF	Value	Prob
Chi-Square	1	1.5547	0.2124
Likelihood Ratio Chi-Square	1	1.5579	0.2120
Continuity Adj. Chi-Square	1	1.3945	0.2376
Mantel-Haenszel Chi-Square	1	1.5535	0.2126
Phi Coefficient		0.0337	
Contingency Coefficient		0.0336	
Cramer's V		0.0337	

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of currsmok by SEX

Fisher's Exact Test	
Cell (1,1) Frequency (F)	523
Left-sided Pr <= F	0.9055
Right-sided Pr >= F	0.1188
Table Probability (P)	0.0242
Two-sided Pr <= P	0.2351

Sample Size = 1372

Table of EXERCISE by SEX

EXERCISE(Current exercise level)	SEX(Gender (coded M or F))		
Frequency	F:	M:	
Percent	Female	Male	Total
Row Pct			
Col Pct			
1: Very Hard	19	74	93
	1.39	5.42	6.81
	20.43	79.57	
	2.92	10.35	
2: Hard	22	42	64
	1.61	3.08	4.69
	34.38	65.63	
	3.38	5.87	
3: Moderate	379	354	733
	27.77	25.93	53.70
	51.71	48.29	
	58.31	49.51	
4: Mild	230	245	475
	16.85	17.95	34.80
	48.42	51.58	
	35.38	34.27	
Total	650	715	1365
	47.62	52.38	100.00

Frequency Missing = 7

Statistics for Table of EXERCISE by SEX

EDIC BsIn Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of EXERCISE by SEX

Statistic	DF	Value	Prob
Chi-Square	3	37.0921	<.0001
Likelihood Ratio Chi-Square	3	39.3383	<.0001
Mantel-Haenszel Chi-Square	1	18.1121	<.0001
Phi Coefficient		0.1648	
Contingency Coefficient		0.1626	
Cramer's V		0.1648	

Fisher's Exact Test

Table Probability (P)	1.529E-12
Pr <= P	1.738E-08

Effective Sample Size = 1365
Frequency Missing = 7

Table of OBDRINK1 by SEX

OBDRINK1(Drinks 1+ alcoholic beverage/week (2=y))	SEX(Gender (coded M or F))		
	F: Female	M: Male	Total
1: No	442	378	820
	32.29	27.61	59.90
	53.90	46.10	
	67.90	52.65	
2: Yes	209	340	549
	15.27	24.84	40.10
	38.07	61.93	
	32.10	47.35	
Total	651	718	1369
	47.55	52.45	100.00

Frequency Missing = 3

Statistics for Table of OBDRINK1 by SEX

EDIC Bsln Paper - Replicate Table 4

The FREQ Procedure

Statistics for Table of OBDRINK1 by SEX

Statistic	DF	Value	Prob
Chi-Square	1	33.0539	<.0001
Likelihood Ratio Chi-Square	1	33.2821	<.0001
Continuity Adj. Chi-Square	1	32.4221	<.0001
Mantel-Haenszel Chi-Square	1	33.0298	<.0001
Phi Coefficient		0.1554	
Contingency Coefficient		0.1535	
Cramer's V		0.1554	

Fisher's Exact Test

Cell (1,1) Frequency (F)	442
Left-sided Pr \leq F	1.0000
Right-sided Pr \geq F	5.558E-09
Table Probability (P)	2.689E-09
Two-sided Pr \leq P	8.922E-09

Effective Sample Size = 1369
Frequency Missing = 3

EDIC BsIn Paper - Replicate Table 5

The MEANS Procedure

Gender (coded M or F)	Age Decade at EDIC Year 2 (Table 5)	N Obs	Variable	Label	N	Mean	Std Dev
F: Female	20 - 29	154	LDP_MEAN	Left Ankle Arm ratio	154	1.08	0.10
			RDP_MEAN	Right Ankle Arm ratio	154	1.08	0.10
	30 - 39	289	LDP_MEAN	Left Ankle Arm ratio	287	1.09	0.13
			RDP_MEAN	Right Ankle Arm ratio	288	1.11	0.12
	40 - 49	202	LDP_MEAN	Left Ankle Arm ratio	202	1.08	0.12
			RDP_MEAN	Right Ankle Arm ratio	202	1.10	0.13
M: Male	20 - 29	117	LDP_MEAN	Left Ankle Arm ratio	116	1.08	0.10
			RDP_MEAN	Right Ankle Arm ratio	116	1.07	0.12
	30 - 39	351	LDP_MEAN	Left Ankle Arm ratio	351	1.10	0.13
			RDP_MEAN	Right Ankle Arm ratio	351	1.12	0.13
	40 - 49	242	LDP_MEAN	Left Ankle Arm ratio	241	1.11	0.14
			RDP_MEAN	Right Ankle Arm ratio	241	1.13	0.13

EDIC Bsln Paper - Replicate Table 5

The FREQ Procedure

Table 1 of LOW_AAR by DECADE

Controlling for SEX=F: Female

LOW_AAR(Ankle/arm < 0.8)	DECADE(Age Decade at EDIC Year 2 (Table 5))			
	20 - 29	30 - 39	40 - 49	Total
0: No	150	281	195	626
	23.26	43.57	30.23	97.05
	23.96	44.89	31.15	
	97.40	97.23	96.53	
1: Yes	4	8	7	19
	0.62	1.24	1.09	2.95
	21.05	42.11	36.84	
	2.60	2.77	3.47	
Total	154	289	202	645
	23.88	44.81	31.32	100.00

Table 2 of LOW_AAR by DECADE

Controlling for SEX=M: Male

LOW_AAR(Ankle/arm < 0.8)	DECADE(Age Decade at EDIC Year 2 (Table 5))			
	20 - 29	30 - 39	40 - 49	Total
0: No	114	347	231	692
	16.08	48.94	32.58	97.60
	16.47	50.14	33.38	
	97.44	98.86	95.85	
1: Yes	3	4	10	17
	0.42	0.56	1.41	2.40
	17.65	23.53	58.82	
	2.56	1.14	4.15	
Total	117	351	241	709
	16.50	49.51	33.99	100.00

Frequency Missing = 1

EDIC Bsln Paper - Replicate Table 5

The FREQ Procedure

Table 1 of HIGH_AAR by DECADE

Controlling for SEX=F: Female

HIGH_AAR(Ankle/arm > 1.4)	DECADE(Age Decade at EDIC Year 2 (Table 5))			
	20 - 29	30 - 39	40 - 49	Total
0: No	154	272	199	625
	23.88	42.17	30.85	96.90
	24.64	43.52	31.84	
	100.00	94.12	98.51	
1: Yes	0	17	3	20
	0.00	2.64	0.47	3.10
	0.00	85.00	15.00	
	0.00	5.88	1.49	
Total	154	289	202	645
	23.88	44.81	31.32	100.00

Table 2 of HIGH_AAR by DECADE

Controlling for SEX=M: Male

HIGH_AAR(Ankle/arm > 1.4)	DECADE(Age Decade at EDIC Year 2 (Table 5))			
	20 - 29	30 - 39	40 - 49	Total
0: No	114	338	232	684
	16.08	47.67	32.72	96.47
	16.67	49.42	33.92	
	97.44	96.30	96.27	
1: Yes	3	13	9	25
	0.42	1.83	1.27	3.53
	12.00	52.00	36.00	
	2.56	3.70	3.73	
Total	117	351	241	709
	16.50	49.51	33.99	100.00

Frequency Missing = 1

EDIC Bsln Paper - Replicate Table 5

The FREQ Procedure

Table 1 of lowhigh_aar by DECADE

Controlling for SEX=F: Female

lowhigh_aar	DECADE(Age Decade at EDIC Year 2 (Table 5))			
	20 - 29	30 - 39	40 - 49	Total
0	150	265	192	607
	23.26	41.09	29.77	94.11
	24.71	43.66	31.63	
	97.40	91.70	95.05	
1	4	24	10	38
	0.62	3.72	1.55	5.89
	10.53	63.16	26.32	
	2.60	8.30	4.95	
Total	154	289	202	645
	23.88	44.81	31.32	100.00

Table 2 of lowhigh_aar by DECADE

Controlling for SEX=M: Male

lowhigh_aar	DECADE(Age Decade at EDIC Year 2 (Table 5))			
	20 - 29	30 - 39	40 - 49	Total
0	111	334	222	667
	15.66	47.11	31.31	94.08
	16.64	50.07	33.28	
	94.87	95.16	92.12	
1	6	17	19	42
	0.85	2.40	2.68	5.92
	14.29	40.48	45.24	
	5.13	4.84	7.88	
Total	117	351	241	709
	16.50	49.51	33.99	100.00

Frequency Missing = 1

EDIC BsIn Paper - Replicate Table 5

The FREQ Procedure

Age Decade at EDIC Year 2 (Table 5)=20 - 29

Table of SEX by LOW_AAR			
SEX(Gender (coded M or F))	LOW_AAR(Ankle/arm < 0.8)		
Frequency Percent Row Pct Col Pct	0: No	1: Yes	Total
F: Female	150	4	154
	55.35	1.48	56.83
	97.40	2.60	
	56.82	57.14	
M: Male	114	3	117
	42.07	1.11	43.17
	97.44	2.56	
	43.18	42.86	
Total	264	7	271
	97.42	2.58	100.00

Statistics for Table of SEX by LOW_AAR

Statistic	DF	Value	Prob
Chi-Square	1	0.0003	0.9863
Likelihood Ratio Chi-Square	1	0.0003	0.9863
Continuity Adj. Chi-Square	1	0.0000	1.0000
Mantel-Haenszel Chi-Square	1	0.0003	0.9864
Phi Coefficient		-0.0010	
Contingency Coefficient		0.0010	
Cramer's V		-0.0010	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

EDIC BsIn Paper - Replicate Table 5

The FREQ Procedure

Statistics for Table of SEX by LOW_AAR

Age Decade at EDIC Year 2 (Table 5)=20 - 29

Fisher's Exact Test	
Cell (1,1) Frequency (F)	150
Left-sided Pr \leq F	0.6482
Right-sided Pr \geq F	0.6494
Table Probability (P)	0.2976
Two-sided Pr \leq P	1.0000

Sample Size = 271

EDIC BsIn Paper - Replicate Table 5

The FREQ Procedure

Age Decade at EDIC Year 2 (Table 5)=30 - 39

Table of SEX by LOW_AAR			
SEX(Gender (coded M or F))	LOW_AAR(Ankle/arm < 0.8)		
Frequency Percent Row Pct Col Pct	0: No	1: Yes	Total
F: Female	281	8	289
	43.91	1.25	45.16
	97.23	2.77	
	44.75	66.67	
M: Male	347	4	351
	54.22	0.63	54.84
	98.86	1.14	
	55.25	33.33	
Total	628	12	640
	98.13	1.88	100.00

Statistics for Table of SEX by LOW_AAR

Statistic	DF	Value	Prob
Chi-Square	1	2.2848	0.1306
Likelihood Ratio Chi-Square	1	2.2926	0.1300
Continuity Adj. Chi-Square	1	1.4854	0.2229
Mantel-Haenszel Chi-Square	1	2.2813	0.1309
Phi Coefficient		-0.0597	
Contingency Coefficient		0.0596	
Cramer's V		-0.0597	

EDIC BsIn Paper - Replicate Table 5

The FREQ Procedure

Statistics for Table of SEX by LOW_AAR

Age Decade at EDIC Year 2 (Table 5)=30 - 39

Fisher's Exact Test	
Cell (1,1) Frequency (F)	281
Left-sided Pr \leq F	0.1117
Right-sided Pr \geq F	0.9649
Table Probability (P)	0.0766
Two-sided Pr \leq P	0.1515

Sample Size = 640

EDIC BsIn Paper - Replicate Table 5

The FREQ Procedure

Age Decade at EDIC Year 2 (Table 5)=40 - 49

Table of SEX by LOW_AAR

SEX(Gender (coded M or F))	LOW_AAR(Ankle/arm < 0.8)		
Frequency Percent Row Pct Col Pct	0: No	1: Yes	Total
F: Female	195 44.02 96.53 45.77	7 1.58 3.47 41.18	202 45.60
M: Male	231 52.14 95.85 54.23	10 2.26 4.15 58.82	241 54.40
Total	426 96.16	17 3.84	443 100.00

Frequency Missing = 1

Statistics for Table of SEX by LOW_AAR

Statistic	DF	Value	Prob
Chi-Square	1	0.1393	0.7089
Likelihood Ratio Chi-Square	1	0.1402	0.7081
Continuity Adj. Chi-Square	1	0.0156	0.9005
Mantel-Haenszel Chi-Square	1	0.1390	0.7093
Phi Coefficient		0.0177	
Contingency Coefficient		0.0177	
Cramer's V		0.0177	

EDIC BsIn Paper - Replicate Table 5

The FREQ Procedure

Statistics for Table of SEX by LOW_AAR

Age Decade at EDIC Year 2 (Table 5)=40 - 49

Fisher's Exact Test	
Cell (1,1) Frequency (F)	195
Left-sided Pr \leq F	0.7308
Right-sided Pr \geq F	0.4532
Table Probability (P)	0.1840
Two-sided Pr \leq P	0.8067

Effective Sample Size = 443
Frequency Missing = 1

EDIC BsIn Paper - Replicate Table 5

The MEANS Procedure

Gender (coded M or F)	Age Decade When IMT Was Taken (Table 5)	N Obs	Variable	Label	N	Mean	Std Dev
F: Female	20 - 29	172	COMMON	Average maximum thickness: Common	172	0.616	0.073
			INTERNAL	Average maximum thickness: Internal	172	0.583	0.092
	30 - 39	278	COMMON	Average maximum thickness: Common	278	0.657	0.081
			INTERNAL	Average maximum thickness: Internal	278	0.632	0.147
	40 - 49	178	COMMON	Average maximum thickness: Common	178	0.696	0.079
			INTERNAL	Average maximum thickness: Internal	178	0.719	0.226
M: Male	20 - 29	125	COMMON	Average maximum thickness: Common	125	0.636	0.059
			INTERNAL	Average maximum thickness: Internal	125	0.629	0.083
	30 - 39	350	COMMON	Average maximum thickness: Common	350	0.684	0.083
			INTERNAL	Average maximum thickness: Internal	350	0.684	0.114
	40 - 49	211	COMMON	Average maximum thickness: Common	211	0.745	0.104
			INTERNAL	Average maximum thickness: Internal	211	0.806	0.261

EDIC Bsln Paper - Replicate Table 6

The FREQ Procedure

TREATMENT GROUP				
GROUP	Frequency	Percent	Cumulative Frequency	Cumulative Percent
EXPERIMENTAL: Intensive Treatment	687	49.96	687	49.96
STANDARD: Conventional Treatment	688	50.04	1375	100.00

EDIC BsIn Paper - Replicate Table 6

The FREQ Procedure

Table of OBINSREG by GROUP				
OBINSREG(Current insulin regimen)	GROUP(TREATMENT GROUP)			
Frequency Percent Row Pct Col Pct	EXPERIMENTAL: Intensive Treatment	STANDARD: Conventional Treatment	Total	
CSII	253	86	339	
	18.49	6.29	24.78	
	74.63	25.37		
	36.99	12.57		
MDI	394	389	783	
	28.80	28.44	57.24	
	50.32	49.68		
	57.60	56.87		
1-2 injections	36	207	243	
	2.63	15.13	17.76	
	14.81	85.19		
	5.26	30.26		
Other	1	2	3	
	0.07	0.15	0.22	
	33.33	66.67		
	0.15	0.29		
Total	684	684	1368	
	50.00	50.00	100.00	

Frequency Missing = 7

Statistics for Table of OBINSREG by GROUP

Statistic	DF	Value	Prob
Chi-Square	3	202.9670	<.0001
Likelihood Ratio Chi-Square	3	219.3409	<.0001
Mantel-Haenszel Chi-Square	1	196.4286	<.0001
Phi Coefficient		0.3852	
Contingency Coefficient		0.3594	
Cramer's V		0.3852	

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

EDIC BsIn Paper - Replicate Table 6

The FREQ Procedure

Statistics for Table of OBINSREG by GROUP

Fisher's Exact Test	
Table Probability (P)	4.931E-51
Pr <= P	5.771E-48

Effective Sample Size = 1368
Frequency Missing = 7

Table of HUM_INS by GROUP

HUM_INS(Reports using human insulin)		GROUP(TREATMENT GROUP)		
Frequency		EXPERIMENTAL: Intensive Treatment	STANDARD: Conventional Treatment	Total
Percent				
Row Pct				
Col Pct				
0: No		61	63	124
		4.46	4.60	9.06
		49.19	50.81	
		8.91	9.21	
1: Yes		624	621	1245
		45.58	45.36	90.94
		50.12	49.88	
		91.09	90.79	
Total		685	684	1369
		50.04	49.96	100.00

Frequency Missing = 6

Statistics for Table of HUM_INS by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	0.0388	0.8439
Likelihood Ratio Chi-Square	1	0.0388	0.8439
Continuity Adj. Chi-Square	1	0.0105	0.9182
Mantel-Haenszel Chi-Square	1	0.0387	0.8440
Phi Coefficient		-0.0053	
Contingency Coefficient		0.0053	
Cramer's V		-0.0053	

EDIC Bsln Paper - Replicate Table 6

The FREQ Procedure

Statistics for Table of HUM_INS by GROUP

Fisher's Exact Test	
Cell (1,1) Frequency (F)	61
Left-sided Pr <= F	0.4591
Right-sided Pr >= F	0.6144
Table Probability (P)	0.0736
Two-sided Pr <= P	0.8512

Effective Sample Size = 1369
Frequency Missing = 6

Table of SBGM_4 by GROUP

SBGM_4(SBGM => 4 times/day)		GROUP(TREATMENT GROUP)		
Frequency Percent Row Pct Col Pct	EXPERIMENTAL: Intensive Treatment	STANDARD: Conventional Treatment	Total	
0: No	367 26.81 45.76 53.58	435 31.78 54.24 63.60	802 58.58	
1: Yes	318 23.23 56.08 46.42	249 18.19 43.92 36.40	567 41.42	
Total	685 50.04	684 49.96	1369 100.00	

Frequency Missing = 6

Statistics for Table of SBGM_4 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	14.1617	0.0002
Likelihood Ratio Chi-Square	1	14.1895	0.0002
Continuity Adj. Chi-Square	1	13.7517	0.0002
Mantel-Haenszel Chi-Square	1	14.1513	0.0002

EDIC BsIn Paper - Replicate Table 6

The FREQ Procedure

Statistics for Table of SBGM_4 by GROUP

Statistic	DF	Value	Prob
Phi Coefficient		-0.1017	
Contingency Coefficient		0.1012	
Cramer's V		-0.1017	

Fisher's Exact Test

Cell (1,1) Frequency (F)	367
Left-sided Pr \leq F	1.030E-04
Right-sided Pr \geq F	0.9999
Table Probability (P)	3.670E-05
Two-sided Pr \leq P	1.889E-04

Effective Sample Size = 1369
Frequency Missing = 6

EDIC Bsln Paper - Replicate Table 6

The MEANS Procedure

Analysis Variable : STD_INS Insulin dose (units/kg/day)

TREATMENT GROUP	N		Mean	Std Dev
	Obs	N		
EXPERIMENTAL: Intensive Treatment	687	685	0.75	0.28
STANDARD: Conventional Treatment	688	684	0.67	0.20

EDIC Bsln Paper - Replicate Table 6

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable STD_INS
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL: Intensive Treatment	685	507914.50	469225.0	7313.79782	741.481022
STANDARD: Conventional Treatment	684	429850.50	468540.0	7313.79782	628.436404

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 429850.5000

Normal Approximation

Z -5.2899

One-Sided Pr < Z <.0001

Two-Sided Pr > |Z| <.0001

t Approximation

One-Sided Pr < Z <.0001

Two-Sided Pr > |Z| <.0001

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 27.9834

DF 1

Pr > Chi-Square <.0001

EDIC Bsln Paper - Replicate Table 6
mean rates per year

The MEANS Procedure

TREATMENT GROUP	N		Mean
	Obs	Variable	
EXPERIMENTAL: Intensive Treatment	687	pt_cs_b	6.20
		pt_ra_b	24.87
		pt_dka_b	2.76
STANDARD: Conventional Treatment	688	pt_cs_b	7.16
		pt_ra_b	26.32
		pt_dka_b	2.36

**EDIC Bsln Paper - Replicate Table 6
mean rates per year**

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable pt_cs_b
Classified by Variable GROUP**

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL: Intensive Treatment	685	467944.0	468882.50	3717.01596	683.129927
STANDARD: Conventional Treatment	683	468452.0	467513.50	3717.01596	685.874085

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 468452.0000

Normal Approximation

Z 0.2524

One-Sided Pr > Z 0.4004

Two-Sided Pr > |Z| 0.8008

t Approximation

One-Sided Pr > Z 0.4004

Two-Sided Pr > |Z| 0.8008

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test

Chi-Square 0.0637

DF 1

Pr > Chi-Square 0.8007

**EDIC Bsln Paper - Replicate Table 6
mean rates per year**

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable pt_ra_b
Classified by Variable GROUP**

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL: Intensive Treatment	685	468745.50	468882.50	5506.92950	684.300000
STANDARD: Conventional Treatment	683	467650.50	467513.50	5506.92950	684.700586

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 467650.5000

Normal Approximation

Z 0.0248

One-Sided Pr > Z 0.4901

Two-Sided Pr > |Z| 0.9802

t Approximation

One-Sided Pr > Z 0.4901

Two-Sided Pr > |Z| 0.9802

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test

Chi-Square 0.0006

DF 1

Pr > Chi-Square 0.9802

**EDIC Bsln Paper - Replicate Table 6
mean rates per year**

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable pt_dka_b
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL: Intensive Treatment	685	468891.50	468882.50	2550.50866	684.513139
STANDARD: Conventional Treatment	683	467504.50	467513.50	2550.50866	684.486823

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 467504.5000

Normal Approximation

Z -0.0033

One-Sided Pr < Z 0.4987

Two-Sided Pr > |Z| 0.9973

t Approximation

One-Sided Pr < Z 0.4987

Two-Sided Pr > |Z| 0.9973

**Z includes a continuity correction of
0.5.**

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 0.9972

The FREQ Procedure

Table 1 of OW by GROUP

Controlling for SEX=F: Female

OW(Overweight (BMI>=27.8 M, 27.3 F)(Table6))	GROUP(TREATMENT GROUP)		
Frequency Percent Row Pct Col Pct	EXPERIMENTAL: Intensive Treatment	STANDARD: Conventional Treatment	Total
0: No	207	237	444
	31.80	36.41	68.20
	46.62	53.38	
	61.98	74.76	
1: Yes	127	80	207
	19.51	12.29	31.80
	61.35	38.65	
	38.02	25.24	
Total	334	317	651
	51.31	48.69	100.00

Frequency Missing = 4

**Statistics for Table 1 of OW by GROUP
Controlling for SEX=F: Female**

Statistic	DF	Value	Prob
Chi-Square	1	12.2630	0.0005
Likelihood Ratio Chi-Square	1	12.3497	0.0004
Continuity Adj. Chi-Square	1	11.6804	0.0006
Mantel-Haenszel Chi-Square	1	12.2441	0.0005
Phi Coefficient		-0.1372	
Contingency Coefficient		0.1360	
Cramer's V		-0.1372	

The FREQ Procedure

Statistics for Table 1 of OW by GROUP Controlling for SEX=F: Female

Fisher's Exact Test	
Cell (1,1) Frequency (F)	207
Left-sided Pr <= F	3.038E-04
Right-sided Pr >= F	0.9998
Table Probability (P)	1.436E-04
Two-sided Pr <= P	5.443E-04

Statistic	Value	ASE
Gamma	-0.2902	0.0785
Kendall's Tau-b	-0.1372	0.0385
Stuart's Tau-c	-0.1278	0.0360
Somers' D C R	-0.1473	0.0413
Somers' D R C	-0.1279	0.0361
Pearson Correlation	-0.1372	0.0385
Spearman Correlation	-0.1372	0.0385
Lambda Asymmetric C R	0.0946	0.0632
Lambda Asymmetric R C	0.0000	0.0000
Lambda Symmetric	0.0573	0.0391
Uncertainty Coefficient C R	0.0137	0.0077
Uncertainty Coefficient R C	0.0152	0.0086
Uncertainty Coefficient Symmetric	0.0144	0.0081

Estimates of the Relative Risk (Row1/Row2)

Type of Study	Value	95% Confidence Limits	
Case-Control (Odds Ratio)	0.5502	0.3931	0.7701
Cohort (Col1 Risk)	0.7599	0.6560	0.8802
Cohort (Col2 Risk)	1.3812	1.1394	1.6742

Effective Sample Size = 651
Frequency Missing = 4

The FREQ Procedure

Table 2 of OW by GROUP

Controlling for SEX=M: Male

OW(Overweight (BMI>=27.8 M, 27.3 F)(Table6))		GROUP(TREATMENT GROUP)		
Frequency		EXPERIMENTAL:	STANDARD:	
Percent		Intensive Treatment	Conventional Treatment	Total
Row Pct				
Col Pct				
	0: No	237	258	495
		33.01	35.93	68.94
		47.88	52.12	
		67.52	70.30	
	1: Yes	114	109	223
		15.88	15.18	31.06
		51.12	48.88	
		32.48	29.70	
Total		351	367	718
		48.89	51.11	100.00

Frequency Missing = 2

**Statistics for Table 2 of OW by GROUP
Controlling for SEX=M: Male**

Statistic	DF	Value	Prob
Chi-Square	1	0.6468	0.4213
Likelihood Ratio Chi-Square	1	0.6467	0.4213
Continuity Adj. Chi-Square	1	0.5235	0.4693
Mantel-Haenszel Chi-Square	1	0.6459	0.4216
Phi Coefficient		-0.0300	
Contingency Coefficient		0.0300	
Cramer's V		-0.0300	

The FREQ Procedure

Statistics for Table 2 of OW by GROUP Controlling for SEX=M: Male

Fisher's Exact Test	
Cell (1,1) Frequency (F)	237
Left-sided Pr <= F	0.2347
Right-sided Pr >= F	0.8119
Table Probability (P)	0.0466
Two-sided Pr <= P	0.4679

Statistic	Value	ASE
Gamma	-0.0648	0.0803
Kendall's Tau-b	-0.0300	0.0373
Stuart's Tau-c	-0.0278	0.0345
<hr/>		
Somers' D C R	-0.0324	0.0403
Somers' D R C	-0.0278	0.0346
<hr/>		
Pearson Correlation	-0.0300	0.0373
Spearman Correlation	-0.0300	0.0373
<hr/>		
Lambda Asymmetric C R	0.0142	0.0422
Lambda Asymmetric R C	0.0000	0.0000
Lambda Symmetric	0.0087	0.0259
<hr/>		
Uncertainty Coefficient C R	0.0006	0.0016
Uncertainty Coefficient R C	0.0007	0.0018
Uncertainty Coefficient Symmetric	0.0007	0.0017

Estimates of the Relative Risk (Row1/Row2)

Type of Study	Value	95% Confidence Limits	
Case-Control (Odds Ratio)	0.8783	0.6402	1.2051
Cohort (Col1 Risk)	0.9366	0.7998	1.0967
Cohort (Col2 Risk)	1.0663	0.9100	1.2496

Effective Sample Size = 718
Frequency Missing = 2

The FREQ Procedure

Summary Statistics for OW by GROUP Controlling for SEX

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)				
Statistic	Alternative Hypothesis	DF	Value	Prob
1	Nonzero Correlation	1	9.0075	0.0027
2	Row Mean Scores Differ	1	9.0075	0.0027
3	General Association	1	9.0075	0.0027

Estimates of the Common Relative Risk (Row1/Row2)				
Type of Study	Method	Value	95% Confidence Limits	
Case-Control (Odds Ratio)	Mantel-Haenszel	0.7043	0.5600	0.8859
	Logit	0.7051	0.5600	0.8878
Cohort (Col1 Risk)	Mantel-Haenszel	0.8439	0.7578	0.9399
	Logit	0.8373	0.7520	0.9324
Cohort (Col2 Risk)	Mantel-Haenszel	1.1988	1.0603	1.3553
	Logit	1.1840	1.0476	1.3381

Breslow-Day Test for Homogeneity of the Odds Ratios	
Chi-Square	3.9513
DF	1
Pr > ChiSq	0.0468

Effective Sample Size = 1369
Frequency Missing = 6