CHAPTER 2

SAMPLING METHODS

Section Page

Quality Control Sampling 7100 7-2-5

Overview of the MEQC System 7102 7-2-5

MEQC Sampling Requirements 7104 7-2-6

Types of Errors 7109 7-2-6

Validity and Reliability of Statistical Data 7110 7-2-7

Bias 7110.1 7-2-7

Precision 7110.2 7-2-8

Types of Estimators 7112 7-2-10

Stratification 7113 7-2-11

General Sampling Requirements of MEQC 7120 7-2-11

Sample Unit 7121 7-2-11

Sample Sizes 7122 7-2-12

Populations To Be Sampled 7123 7-2-12

Sampling Frames 7124 7-2-13

Sample Selection 7125 7-2-14

Claims Collection 7126 7-2-14

Requirements for Sampling Plan Documentation 7130 7-2-15

Population To Be Sampled 7130.1 7-2-16

Sample Selection Lists 7130.2 7-2-16

Sample Size 7130.3 7-2-17

Sample Selection Procedures 7130.4 7-2-17

Claims Collection Procedures 7130.5 7-2-17

Random Sample Selection Procedures 7132 7-2-18

Calculation of Sampling Interval 7133 7-2-18

Selection of Cases for the Review Month 7134 7-2-20

Procedures for Correcting the Monthly Sample for

Excessive Oversampling and Undersampling 7140 7-2-20

Correcting for Excessive Oversampling 7142 7-2-21

Correcting for Undersampling 7144 7-2-21

Alternate Method of Correcting for Undersampling

or Oversampling 7146 7-2-22

Guidelines for Expanded and Substratified Samples 7150 7-2-23

Guidelines for Expanding Sample Size 7152 7-2-23

Guidelines for Further Stratification 7154 7-2-24

Exhibits 7199 7-2-25

Exhibit 1 - Sample Sizes 7-2-27

Exhibit 2 - Table of Random Sampling Numbers 7-2-29

Glossary of Terms 7-2-35

Appendix A - MEQC Error Rate Calculation 7-2-39

Appendix B - Criteria for Adjusting Anticipated

Error Rates Pursuant to 42 CFR 431.865(d) 7-2-41

Appendix C - Retrospective Sampling 7-2-47

Rev. 48 7-2-1