

Varney's Midwifery

SEVENTH EDITION

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Dedication

For midwives, student midwives, and all those who provide person-centered, evidence-based health care. Our profession and our world are improved by your devotion.

Brief Contents

Preface	xxxi
Acknowledgments	xxxiii
Contributors	xxxv
About the Editors	xxxix

Part I Midwifery 1

Chapter 1	Context of Individuals Seeking Midwifery Care	3
Chapter 2	Professional Foundations of Midwifery	13

Part II Primary Care 79

Chapter 3	An Introduction to Sexual, Reproductive, and Primary Care	81
Chapter 4	Health Promotion Across the Lifespan	127
Chapter 5	Common Conditions in Primary Care	181
Chapter 6	Nutrition	237
Chapter 7	Mental Health Conditions	267

Part III Sexual, Gynecologic, and Reproductive Health Care 311

Chapter 8	Anatomy and Physiology of the Reproductive System	313
Chapter 9	Sexuality	343
Chapter 10	Fertility, Family Building, and Contraception	403
Chapter 11	Nonhormonal Contraception	451
Chapter 12	Hormonal Contraception	471
Chapter 13	Gender-Affirming Care	531
Chapter 14	Menopause	571

- Chapter 15** Menstrual Cycle Abnormalities **597**
Chapter 16 Malignant and Chronic Gynecologic Disorders **621**
Chapter 17 Breast and Chest Conditions **663**
Chapter 18 Reproductive Tract and Sexually Transmitted Infections **685**

Part IV Antepartum 745

- Chapter 19** Anatomy and Physiology of Pregnancy **747**
Chapter 20 Assessment for Genetic and Fetal Abnormalities **795**
Chapter 21 Prenatal Care **835**
Chapter 22 Early Pregnancy Loss and Abortion Care **883**
Chapter 23 Pregnancy-Related Conditions **907**
Chapter 24 Medical Complications in Pregnancy **963**

Part V Intrapartum 1027

- Chapter 25** Anatomy and Physiology of Labor and Birth **1029**
Chapter 26 First Stage of Labor **1051**
Chapter 27 Fetal Assessment During Labor **1097**
Chapter 28 Support During Labor **1147**
Chapter 29 Second Stage of Labor and Birth **1191**
Chapter 30 Complications During Labor and Birth **1259**
Chapter 31 Third Stage of Labor **1341**
Chapter 32 Birth in the Home and Birth Center **1389**

Part VI Postpartum 1415

- Chapter 33** Anatomy and Physiology of Postpartum **1417**
Chapter 34 Postpartum Care **1435**
Chapter 35 Postpartum Complications **1489**

Part VII Newborn 1509

- Chapter 36** Anatomy and Physiology of the Newborn **1511**
Chapter 37 Infant Feeding and Lactation **1529**
Chapter 38 Physical Assessment of the Newborn **1573**
Chapter 39 Neonatal Care **1613**
Appendix A Chapter Alignment with ACNM Core Competencies and ICM
Essential Competencies **1643**

Index 1649

Contents

Preface	xxxi
Acknowledgments	xxxiii
Contributors	xxxv
About the Editors	xxxix

Part I Midwifery 1

Chapter 1	Context of Individuals Seeking Midwifery Care	3
	<i>Lucinda Canty</i>	
	Introduction	3
	Social and Structural Determinants of Health	4
	Definitions of Race and Ethnicity	4
	Implicit Bias	6
	Health Disparities	7
	What Midwives Can Do	8
	Conclusion	9
	Resources	10
	References	10
Chapter 2	Professional Foundations of Midwifery	13
	<i>Jessica Brumley, Julia Lange-Kessler, and Amanda Boys</i>	
	Introduction	13
	The Profession of Midwifery	13
	Types of Midwives	14
	Core Competencies in the United States and Abroad	18
	Ethics	19
	Workforce Diversity in Midwifery	22
	Diversity and Inclusion in Gender and Sexual Identity	24
	Structures	25

The Business of Midwifery	27
Interprofessional Team Collaboration	36
The Midwifery Profession Globally	40
Conclusion	41
Resources	42
References	43
Appendix 2A Interpreting Published Research Data with a Clinical Midwifery Lens	49
<i>Mary K. Barger</i>	
Brief Overview of Selected Statistics	49
Study Designs	51
Meaningfulness of Results	55
Resources	57
References	57
Appendix 2B Reproductive Health Statistics	60
<i>Ira Kantrowitz-Gordon</i>	
Fetal Death and Stillbirth	60
Infant Mortality	63
Pregnancy-Related Mortality	63
Pregnancy Morbidity	65
Reproductive Health: The Global Picture	65
Conclusion	66
References	66
Appendix 2C Global Health: An Overview of Practicalities and Practice	68
<i>Pandora T. Hardtman</i>	
Common Settings for Global Health Practice	69
Common Asks of the Global Midwife in Practice	69
Historical “Should Know Abouts” That Have Shaped Global Health	69
Universal Declaration of Human Rights	69
Kinds of Global Health Organizations	69
The United Nations System	70
Essential Knowledge and Skill Upgrades for Midwives	70
Core Texts to Know Outside of <i>Varney’s Midwifery</i>	71
Safety and Security Considerations	71
The Emotional Aspects of Working in Global Health	71
Resources	71
References	72
Appendix 2D Resources on the History of Midwifery	73
<i>Lucinda Canty, Ira Kantrowitz-Gordon, and Julia C. Phillippi</i>	
Sources of Midwifery History	74
Appendix Text References	75
Midwifery History Resources	75
Competencies, Definitions, and Standards for Practice	78

Part II Primary Care 79**Chapter 3 An Introduction to Sexual, Reproductive, and Primary Care 81***Jan M. Kriebs*

Midwifery: Changing Scope, Enduring Philosophy 81

Culture, Race, Gender, and Identity 82

Communication 83

The Midwifery Management Process 85

Conclusion 89

Resources 90

References 90

Appendix 3A Standard and Airborne Precautions 92*Jan M. Kriebs*

Standard Precautions 92

References 96

Appendix 3B Collecting a Health History 97*Jan M. Kriebs*

History of the Present Illness 97

Past Health History 97

Social History 98

Sexual/Reproductive History 99

Sexual History 99

Family History 99

Review of Systems 99

References 103

Appendix 3C The Physical Examination 104*Jan M. Kriebs*

Review of General Principles 104

Appendix 3D Breast and Chest Examination 106*Stephanie Tillman*

Procedure for Breast/Chest Examination 106

References 109

Appendix 3E Pelvic Examination 110*Stephanie Tillman*

External Inspection of the Genitalia 112

Speculum Examination 115

Bimanual Examination 115

Rectovaginal Examination 119

References 120

Appendix 3F Collecting Laboratory Specimens 121*Lisa A. Spencer*

General Principles for Specimen Collection 121

Procedure for Collecting Urine Specimens 121

Procedure for Collecting Penile Meatal Specimens	122
Procedure for Collecting Pharyngeal Specimens for <i>N. Gonorrhoeae</i> and <i>C. Trachomatis</i>	122
Procedure for Collecting and Interpreting Saline and Potassium Hydroxide Specimens for Vaginal Infections	122
Procedure for Collecting Vaginal or Cervical Specimens for <i>N. Gonorrhoeae</i> , <i>C. Trachomatis</i> , and Trichomoniasis	124
Procedure for Performing a Cervical Cytology Test	125
Procedure for Performing an Anal Cytology Test or NAAT/Culture	126
References	126
Further Resources	126

Chapter 4 Health Promotion Across the Lifespan 127

Victoria L. Baker

Introduction	127
Clinical Health Promotion	127
Evidence for Health Promotion Interventions	134
Decision Making in the Face of Ambiguity	136
Health Promotion Topics	139
Screening Exams	143
Social and Structural Determinants of Health	143
Population-Based Health Promotion	144
Conclusion	146
Resources	146
References	147

Appendix 4A Skillful Communication to Mitigate Clinician Bias 154

Heather Bradford, Signey Olson, Elizabeth Muñoz, and Ellen Solis

Introduction	154
Self-Reflection	155
Basics of Therapeutic Communication	156
Examples of Clinical Conversations	157
Conclusion	166
Resources	167
References	167

Appendix 4B Preconception Care 169

Amy Alspaugh

Introduction	169
Origins, Uses, and Limitations of Preconception Health and Reproductive Life Planning	169
Preconception Care	170
General Health Promotion and Preconception Care	170
Special Considerations	173
Medications	174
Preparing for Pregnancy	174
Conclusion	177

	Resources	177
	References	177
Chapter 5	Common Conditions in Primary Care	181
	<i>Jan M. Kriebs and Bunny Pounds</i>	
	Introduction	181
	Defining Primary Care	181
	Social Determinants of Health and Primary Care	182
	Hematologic Conditions	183
	Cardiovascular Conditions	189
	Respiratory Conditions	194
	Gastrointestinal Disorders and Abdominal Pain	200
	Hepatitis	204
	Conditions of the Genitourinary System	205
	Endocrine Conditions	209
	Neurologic Conditions	212
	Musculoskeletal Disorders	216
	Dermatologic Conditions	217
	Weight Management Counseling and Dietary Patterns	221
	Eating Disorders	226
	Conclusion	226
	Resources	228
	References	229
Chapter 6	Nutrition	237
	<i>Mary K. Barger</i>	
	Nutrition and Health	237
	Principles of Nutrition and Nutrient Recommendations	238
	Nomenclature for Nutritional Standards	238
	Macronutrients	240
	Physiologic Response to Food Intake	244
	Micronutrients: Vitamins and Minerals	244
	Dietary Patterns	251
	Nutrition Across the Lifespan	253
	Conclusion	261
	Resources	261
	References	262
Chapter 7	Mental Health Conditions	267
	<i>Jain Lattes and Julia S. Seng</i>	
	Introduction	267
	Etiology of Mental Health Disorders	268
	Evaluating the Patient	269
	Mood Disorders	269
	Anxiety Disorders	276
	Substance Use Disorders	279

Trauma- and Stressor-Related Disorders	280
Menstruation-Related Mood Changes	282
Borderline Personality Disorder	284
Attention-Deficit/Hyperactivity Disorder	284
Treatment of Mental Health Disorders	284
Mental Health Disorders During Perinatal and Postpartum Period	293
Pharmacotherapy for Perinatal and Postpartum Depression and Anxiety	296
Substance Use Disorders in the Perinatal Period	299
Bipolar Disorder in the Perinatal Period	301
Postpartum Psychosis	302
Conclusion	303
Resources	304
References	304

Part III Sexual, Gynecologic, and Reproductive Health Care 311

Chapter 8 Anatomy and Physiology of the Reproductive System 313

Vanessa R. Garcia

Introduction 313

The Breast 313

The Bony Pelvis 316

Urogenital Anatomy 319

External Genitalia 321

Internal Genitalia 322

The Menstrual Cycle: An Introduction 331

Steroidogenesis 331

The Hypothalamic–Pituitary–Ovarian Axis 332

The Ovarian Cycle 332

The Endometrial/Uterine Cycle 334

Reproductive Anatomy in Individuals Assigned Male at Birth 337

Sexual Response in the Female Body 338

Conclusion 339

Resources 339

References 340

Chapter 9 Sexuality 343

Melody J. Castillo and Alice R. Sattler

Introduction 343

Sexual Response Models 343

Anatomy and Physiology of Sexual Response 348

Alterations (Dysfunctions) in Sexual Response 350

Sexual Pain Dysfunction 356

Approach to Sexual Wellness and Dysfunction 360

Midwifery Management of Alterations in Sexual Function 372

Psychological and Pharmacologic Management of Sexual Dysfunctions 374

	Lifespan Considerations	386
	Resources	388
	References	393
Chapter 10	Fertility, Family Building, and Contraception	403
	<i>Melicia Escobar and Signey Olson</i>	
	Introduction	403
	Reproductive Goals Counseling and Reproductive Justice	404
	Unassisted and Assisted Reproductive Care	406
	Intrauterine Insemination	418
	Assisted Reproductive Technologies	420
	Ethical Considerations and Disparities in Fertility Treatment	424
	Pregnancy Prevention	426
	Conclusion	433
	Resources	433
	References	434
	Appendix 10A Fertility Awareness Methods	443
	<i>Melissa A. Saftner</i>	
	Introduction	443
	Assumptions	443
	Considerations for Use	443
	Contraindications	444
	Types of Fertility Awareness Methods	444
	Calendar Methods	444
	Symptoms-Based Methods	445
	References	447
	Appendix 10B Intrauterine Insemination	449
	<i>Signey Olson</i>	
	Intrauterine Insemination Counseling	449
	Choosing an Intrauterine Insemination Catheter	449
	Timing of the Intrauterine Insemination(s)	449
	Intrauterine Insemination Procedure	449
	References	450
Chapter 11	Nonhormonal Contraception	451
	<i>Melissa A. Saftner</i>	
	Introduction	451
	Effectiveness of Nonhormonal Methods in Preventing Pregnancy	451
	Behavioral Methods	452
	Spermicidal Agents	453
	pH Altering	455
	Barrier Methods	455
	Intrauterine Devices	461
	Permanent Contraception: Sterilization	464
	Conclusion	466

	Resources	466
	References	466
Chapter 12	Hormonal Contraception	471
	<i>Amy Alspaugh</i>	
	Introduction	471
	Evolution of Hormonal Contraceptive Methods	471
	Mechanism of Action of Hormonal Contraceptives	471
	General Considerations for Hormonal Contraceptives	472
	Initiation of Hormonal Contraceptives	483
	Managing Common Side Effects Associated with Hormonal Contraceptive Methods	484
	Short-Acting Reversible Contraceptives	486
	Combined Oral Contraceptives	486
	Progestin-Only Pills	489
	Transdermal Contraception (Patch)	490
	Intravaginal Contraceptive Ring	493
	Injectable Depot Medroxyprogesterone Acetate Contraceptives	494
	Long-Acting Reversible Contraceptives	496
	Subdermal Implants	496
	Hormonal Intrauterine Devices	497
	Emergency Contraception	499
	Conclusion	502
	Resources	502
	References	503
Appendix 12A	Intrauterine Device Insertion and Removal	508
	<i>Melicia Escobar</i>	
	Introduction	508
	Advancing Reproductive Justice	508
	Health Counseling for Individuals Considering an Intrauterine Device	508
	Day of Intrauterine Device Insertion	510
	Postinsertion Care	517
	Removal of an Intrauterine Device	520
	References	521
Appendix 12B	Implant Insertion and Removal	523
	<i>Amy Alspaugh</i>	
	Introduction	523
	Timing of the Implant Insertion	523
	Day of Implant Insertion	523
	Postinsertion Care	527
	Implant Removal	527
	Concurrent Removal and Reinsertion	529
	Other Types of Implants	529
	References	529

Chapter 13	Gender-Affirming Care 531
	<i>Signey Olson and Katie DePalma</i>
	Introduction: Care of Transgender and Nonbinary Individuals 531
	Providing Affirming Care 535
	Psychosocial Considerations and Mental Health 537
	Physical and Appearance Changes 538
	Gender-Affirming Hormones 539
	Surgical Care of TGNB Clients 554
	Routine Reproductive and Gynecologic Care for TGNB Individuals 556
	Fertility Considerations for TGNB Individuals 561
	References 565
Chapter 14	Menopause 571
	<i>Ruth Zielinski and Eva Fried</i>
	Introduction 571
	Terms and Definitions for Menopause 571
	Physiology of Menopause 571
	Diagnosing Menopause 573
	Stages of Reproductive Aging 573
	Symptoms of Perimenopause and Menopause 576
	Therapeutic Approaches for Menopause and Perimenopause Symptoms 578
	Hormone Therapy 581
	Bone Health, Osteopenia, and Osteoporosis 588
	Conclusion 593
	Resources 593
	References 594
Chapter 15	Menstrual Cycle Abnormalities 597
	<i>Debra M. Dole</i>
	Introduction 597
	Menstrual Health 597
	The Menstrual Cycle and Variations 597
	Amenorrhea 598
	Abnormal or Atypical Uterine Bleeding 605
	Heavy Menstrual Bleeding 610
	Dysmenorrhea 612
	Conclusion 613
	References 613
	Appendix 15A Endometrial Biopsy 616
	<i>Ami Goldstein</i>
	Indications 616
	Contraindications 616
	Relative Contraindications Requiring Consultation 616
	Potential Side Effects, Complications, and Preventive Measures 617

	Procedure	617
	Results and Management	619
	References	620
Chapter 16	Malignant and Chronic Gynecologic Disorders	621
	<i>Katie Ward</i>	
	Introduction	621
	Screening for Malignancies	621
	Cancer of the Uterine Cervix	621
	Cancer of the Uterine Endometrium	625
	Ovarian Cancer	626
	Cancer of the Vulva and the Vagina	627
	Benign Gynecologic Findings	628
	Pelvic Floor Dysfunction Disorders	636
	Uterine Cervical Variations and Disorders	640
	Adnexal Masses During the Reproductive Years	641
	Disorders of Uterine Origin	642
	Evaluation of Pelvic Pain	646
	Sexual and Gender-Based Violence	649
	Conclusion	649
	Resources	649
	References	650
	Appendix 16A Fitting a Pessary	656
	<i>Kathryn Osborne</i>	
	Types of Pessaries	656
	Fitting the Pessary	656
	Ongoing Follow-Up and Management	658
	References	659
	Appendix 16B Punch Biopsy	660
	<i>Melissa G. Davis</i>	
	Introduction	660
	Indications for Punch Biopsy	660
	Contraindications to Punch Biopsy	660
	Potential Side Effects/Complications and Preventive Measures	660
	Supplies	661
	Procedure	661
	Results and Management	661
	References	662
Chapter 17	Breast and Chest Conditions	663
	<i>Miriam E. Levi</i>	
	Introduction	663
	Breast Development	663
	Evaluation of Breast Symptoms	664
	Breast Assessment Modalities	666

Benign Breast Disorders	666
Breast and Chest Conditions During Pregnancy and Lactation	670
Considerations for Transgender Individuals	671
Breast Cancer	671
Conclusion	680
Resources	680
References	681

Chapter 18 Reproductive Tract and Sexually Transmitted Infections **685**

Bethany Sanders and Melissa Davis

Introduction	685
Incidence of Sexually Transmitted Infections	685
History and Physical Examination for Vaginal Symptoms and Sexually Transmitted Infections	686
Self-Care of the Reproductive Tract	688
Vaginitis	690
Atrophic Vaginitis	696
Epididymitis, Prostatitis, and Balanitis	697
Sexually Transmitted Infections	697
Gonorrhea	706
Other Infectious Agents Spread by Sexual Contact	735
Infections That Mimic Sexually Transmitted Infections in Genital Areas	737
Resources	737
References	738

Part IV Antepartum 745

Chapter 19 Anatomy and Physiology of Pregnancy **747**

Kathleen Danhausen and Tekoa L. King

Introduction	747
Duration of Pregnancy and Gestational Age Terminology	747
Fetal–Maternal Interface: Ontology of the Embryo and Placenta	748
The Mature Placenta	753
Fetal Programming and Epigenetics	763
Fetal Development	764
Physiologic Adaptations to Pregnancy	771
Fetopelvic Relationships During Pregnancy	781
Conclusion	790
References	790

Chapter 20 Assessment for Genetic and Fetal Abnormalities **795**

Gwen Latendresse and Julie Knutson

Introduction	795
Financial, Ethical, Legal, and Social Issues in Genetics	795
Foundations in Genetics	795

Inheritance Patterns of Genetic Mutations	801
Chromosomal Disorders	805
Mosaicism	806
Birth Defects, Incidence, and Risk Identification	807
Family History and Pedigree Evaluation as Risk Assessment Tools	810
Screening Tests Versus Diagnostic Tests	814
Factors That Influence Perinatal Decision Making	815
Tests for Genetic and Chromosomal Disorders	817
Genetic Disorder Prevention and Risk Reduction	826
When Genetic Disorders Are Identified	827
Future Trends in Genetic Testing	827
Conclusion	828
Resources	829
References	829

Appendix 20A Steps in Constructing a Three-Generation Pedigree **833**

Gwen A. Latendresse

Chapter 21 Prenatal Care **835**

Rebecca H. Burpo, Anne Z. Cockerham, and Erin E. Sing

Introduction	835
The Content of Prenatal Care	835
Definitions and Acronyms	836
Diagnosis of Pregnancy	836
Prenatal History	842
Physical Examination	842
Physiologic Screening	845
Psychosocial Risk Screening	848
Health Promotion During Pregnancy	854
Conclusion	868
References	868

Appendix 21A Abdominal Examination During Pregnancy **875**

Melan J. Smith-Francis and Stephanie DeVane-Johnson

Equipment	875
Preparation for Abdominal Examination During Pregnancy	875
Abdominal Inspection	875
Abdominal Palpation	876
Abdominal Maneuvers to Assess Fetal Position	877
Estimation of Fetal Weight	879
Auscultation of Fetal Heart	880
Measuring Fundal Height	880
References	882

Chapter 22	Early Pregnancy Loss and Abortion Care	883
	<i>Hannah Diaz and Meghan Eagen-Torkko</i>	
	Introduction	883
	First Trimester Bleeding	883
	Early Pregnancy Loss	891
	Abortion	894
	Self-Managed Abortion	901
	Conclusion	902
	References	902
Chapter 23	Pregnancy-Related Conditions	907
	<i>Esther R. Ellsworth Bowers and Melissa E. Kitzman</i>	
	Introduction	907
	Overview of Midwifery Management for People With Pregnancy-Related Conditions	907
	Common Discomforts of Pregnancy	907
	Fetal Conditions	919
	Umbilical Cord, Placental, and Amniotic Fluid Abnormalities	925
	Uterine Abnormalities	930
	Preterm Birth	930
	Prevention of Post-Term Pregnancy: Membrane Sweeping	937
	Dermatoses of Pregnancy	938
	Peripartum Cardiomyopathy	940
	Red Blood Cell Alloimmunization	941
	Population-Specific Special Considerations During Pregnancy	942
	Techniques for Fetal Surveillance	948
	Conclusion	955
	Resources	956
	References	956
Chapter 24	Medical Complications in Pregnancy	963
	<i>Julie Knutson, Ana Sofia Barber De Brito, and Linda Hunter</i>	
	Introduction	963
	Autoimmune Disorders	963
	Cancer	965
	Cardiovascular Disease	966
	Diabetes	967
	Gastrointestinal Conditions	971
	Hematologic Disorders	974
	Hepatic Disorders	982
	Hypertension	983
	Infectious Diseases	993
	Mental/Behavioral Health Conditions	999

Obesity	1003
Respiratory Conditions	1006
Skeletal Abnormalities	1009
Substance Use in Pregnancy	1009
Thyroid Disorders	1013
Urinary Disorders	1016
Conclusion	1020
References	1020

Part V Intrapartum 1027

Chapter 25 Anatomy and Physiology of Labor and Birth 1029

Tekoa L. King and Andrea Zengion

Introduction	1029
Prelabor Changes: Cervical Remodeling and Uterine Activity	1030
Clinical Stages of Labor	1030
Physiologic Mechanisms That Influence the Onset of Labor	1031
The Four Phases of Parturition	1033
Systemic Adaptations of the Pregnant Person in Labor	1036
The Fetopelvic Relationship During Labor	1040
Cardinal Movements of Labor	1043
Conclusion	1046
References	1046

Chapter 26 First Stage of Labor 1051

Jeremy L. Neal, Heather M. Bradford, and Julia C. Phillippi

Introduction	1051
Choice of Birth Setting and Birth Attendant	1051
Person-Centered and Culturally Centered Care	1053
Prelabor	1053
Definitions of Labor	1055
Stages of Physiologic First Stage of Labor	1056
Initial Evaluation of the Person Presenting with Signs and Symptoms of Labor	1057
Assessment of Individuals Presenting with Signs and Symptoms of Labor and Developing a Plan of Care	1058
Admission to the Birth Facility	1059
Components of Midwifery Care for Laboring Individuals	1061
Conclusion	1071
Resources	1072
References	1072

Appendix 26A Assessment for Diagnosis of Labor 1076

Nicole S. Carlson, Jeremy L. Neal, Heather M. Bradford, and Julia C. Phillippi

History	1076
Laboratory Studies	1081

Assessment **1081**

Conclusion **1083**

References **1083**

Appendix 26B Assessment and Diagnosis of Rupture of Membranes **1084**

Heather M. Bradford and Jeremy L. Neal

Chart Evaluation **1084**

History **1084**

Physical Examination **1085**

Interpretation of Tests **1086**

Diagnosis of Rupture of Membranes **1088**

References **1088**

Appendix 26C Fetal–Pelvic Assessment **1089**

Kathleen Danhausen and Julia C. Phillippi

Introduction **1089**

Foundational Knowledge for Pelvimetry **1090**

Preparation of the Individual **1091**

Assessment of Fetal Presentation, Position, and Attitude **1091**

Steps of Pelvimetry **1091**

References **1096**

Chapter 27 Fetal Assessment During Labor **1097**

Jenifer O. Fahey

Introduction **1097**

Physiology of Fetal Oxygenation **1097**

Pathophysiology of Intrapartum Fetal Hypoxia, Acidosis, and Asphyxial Injury **1098**

Techniques for FHR Assessment During Labor **1103**

Fetal Heart Rate Characteristics and Patterns: Terminology, Etiology, and Clinical Significance **1107**

Classification of Fetal Heart Rate Patterns **1115**

Interpretation and Management of FHR Patterns: A Physiologic Approach **1119**

Special Populations **1123**

Conclusion **1124**

References **1124**

Appendix 27A Intermittent Auscultation During Labor **1128**

Tekoa L. King

Fetal Heart Rate Characteristics Detectable on Intermittent Auscultation **1128**

Indications and Contraindications for Intermittent Auscultation **1128**

Equipment: Doppler Fetoscopes **1129**

Technique for Performing Intermittent Auscultation **1130**

Interpretation of Auscultated Fetal Heart Rate Characteristics **1132**

Management of Category II Fetal Heart Rate Changes Detected Via Intermittent Auscultation **1132**

Discussion 1132

References 1133

Appendix 27B Fetal Scalp Electrode 1135

Emily S. Slocum

Mechanism of Action 1135

Contraindications to Use of Fetal Scalp Electrode 1136

Equipment 1136

Procedure for Attaching a Fetal Scalp Electrode 1136

Procedure for Removing a Fetal Scalp Electrode 1137

References 1137

Appendix 27C Intrauterine Pressure Catheter 1138

Emily S. Slocum

Contraindications to Use of Intrauterine Pressure Catheter 1139

Equipment 1139

Procedure for Attaching an Intrauterine Pressure Catheter 1139

Removing an IUPC 1140

Interpretation of Uterine Activity with IUPC 1140

Documentation 1140

References 1140

Appendix 27D Umbilical Cord Gas Technique and Interpretation 1142

Tekoa L. King

Selected Indications for Umbilical Cord Blood Gas Analysis 1142

Equipment 1142

Procedure for Obtaining Umbilical Cord Blood Gases 1142

Interpretation of Umbilical Cord Blood Gases 1143

Limitations of Umbilical Cord Blood Gas Analysis 1144

Effect of Delayed Cord Clamping 1144

References 1145

Chapter 28 Support During Labor 1147

Leissa Roberts, Julia S. Seng, and Kate Woeber

Introduction 1147

Physiology of Pain 1148

Labor Pain 1150

Nonpharmacologic Methods of Mitigating Labor Pain 1156

Pharmacologic Methods of Mitigating Labor Pain 1163

Regional Analgesia 1173

General Anesthesia 1180

Conclusion 1180

References 1180

Appendix 28A Sterile Water Injections for the Relief of Low Back Pain in Labor 1188

Lena B. Mårtensson and Nigel Lee

Method to Place Sterile Water Injections 1188

References 1189

Chapter 29 Second Stage of Labor and Birth **1191***Heather Bradford*Introduction **1191**Definition and Phases of Second-Stage Labor **1191**Assessment of Well-Being in Second Stage of Labor **1193**Midwifery Management of the Second Stage of Labor **1196**Preparing for the Birth **1199**Immediately Following the Birth **1201**Conclusion **1205**References **1205****Appendix 29A** Pudendal Nerve Block **1209***Amy Kayler*Introduction **1209**Indications **1209**Advantages **1209**Equipment for Pudendal Block **1209**Anesthetic Agent for Pudendal Block **1209**Pudendal Block **1210**Procedure for Pudendal Nerve Block: Multiple-Injection Method **1210**Variation of Pudendal Block Procedure: Single-Injection Approach **1211**Outcomes and Efficacy **1212**Complications **1212**References **1212****Appendix 29B** Hand Maneuvers for Birth **1213***Heather Bradford*Introduction **1213**Hand Maneuvers When the Fetus Is in an Occiput Anterior Positioning
While in a Semi-Sitting, Lateral, or Dorsal Position **1213**Hand Maneuvers for a Fetus in the Occiput Posterior Position **1217**Hand Maneuvers When the Birthing Person Is in a Hands-and-Knees
Position or Standing Position **1218**Hand Maneuvers When the Birthing Person Is in a Deep Squatting or
Supported Squat Position **1219****Appendix 29C** Umbilical Cord-Clamping at Birth **1221***Debra A. Erickson-Owens*Introduction **1221**Overview **1221**Key Points **1221**Management Steps **1222**Complex Clinical Situations **1223**Umbilical Cord Blood Gas Sampling **1223**Steps of Umbilical Cord-Clamping/Cutting **1224**References **1225**

Appendix 29D Genital Tract Injury: Immediate Postpartum Inspection of the Vulva, Perineum, Vagina, and Cervix **1227**

Barbara J. Reale and Nicole S. Carlson

Introduction **1227**

Key Points **1227**

Equipment **1228**

Procedure for Examination of the Vulva and Perineum **1228**

Procedure for Thorough Examination of the Vaginal Vault **1228**

Procedure for Inspection of the Cervix **1230**

Procedure for Identification of Hematomas **1231**

References **1233**

Appendix 29E Local Infiltration for Genital Tract Repair **1234**

Barbara J. Reale and Nicole S. Carlson

Introduction **1234**

Anesthetic Agent for Local Injection **1234**

Lidocaine Toxicity **1234**

Equipment for Local Infiltration **1235**

Lidocaine Dose and Pharmacokinetics **1235**

Local Infiltration Prior to Cutting an Episiotomy **1235**

Local Infiltration for Repair After Birth **1237**

References **1237**

Appendix 29F Repair of Genital Tract Lacerations and Episiotomy **1238**

Barbara J. Reale and Nicole S. Carlson

Introduction **1238**

Controversies Regarding Laceration and Episiotomy Repair **1238**

To Repair Skin Edges or Not to Repair Skin Edges **1239**

Equipment for Repair of Genital Tract Trauma **1239**

General Principles and Suture Technique **1239**

Suturing **1241**

Repair of First-Degree Lacerations **1247**

Repair of Periurethral, Clitoral, and Labial Lacerations **1247**

Repair of a Second-Degree Laceration or Midline Episiotomy **1248**

Repair of Sulcus Tears **1252**

Technique for Repair of Mediolateral Episiotomy **1253**

Repair of Third- and Fourth-Degree Lacerations **1255**

Repair of Cervical Lacerations **1257**

References **1257**

Chapter 30 Complications During Labor and Birth **1259**

Amy Marowitz and Shaughanassee Vines

Introduction **1259**

Preterm Labor/Birth **1260**

Post-Term and Late Term Pregnancy **1265**

Prelabor Rupture of Membranes **1266**

Intra-amniotic Infection **1268**

Labor Progress Abnormalities	1279
Descent Abnormalities in Second-Stage Labor	1284
Labor After Cesarean	1289
Intrapartum Care for Pregnant Individuals with Coexisting Medical Conditions	1292
Intrapartum Emergencies	1295
Special Clinical Situations	1304
Conclusion	1306
References	1306
Appendix 30A Urgent Maneuvers to Shorten Second Stage	1316
<i>Sharon L. Holley</i>	
Episiotomy	1316
Manual Fetal Head Extension (Ritgen Maneuver)	1320
References	1321
Appendix 30B Shoulder Dystocia	1323
<i>Amy Marowitz and Shaughanassee Vines</i>	
Definition of Shoulder Dystocia	1324
Incidence	1324
Risk Factors	1324
Key Points	1324
Management Steps	1324
Following Birth and Stabilization of the Infant and Birthing Person	1326
References	1327
Appendix 30C Emergency Interventions for Umbilical Cord Prolapse	1328
<i>Amy Marowitz and Shaughanassee Vines</i>	
Definitions	1328
Risk Factors	1328
Management Steps	1328
References	1330
Appendix 30D Intrapartum Management of Twin Gestation	1331
<i>Amy Marowitz and Shaughanassee Vines</i>	
Incidence	1331
Types of Twins	1331
Risks Associated with Twin Deliveries	1331
Intrapartum Care Guidelines for Twin Gestations	1331
Reference	1332
Appendix 30E Breech Birth	1333
<i>Amy Marowitz and Shaughanassee Vines</i>	
Incidence of Breech Presentation	1333
Types of Breech Presentations	1333
Predisposing Factors	1333
Factors That May Improve the Success of Vaginal Breech Birth	1334
Key Points	1334
Cardinal Movements and Techniques for a Breech Birth	1335
References	1338

Chapter 31 Third Stage of Labor **1341***Mavis N. Schorn*Introduction **1341**Definitions **1341**Physiology of the Third Stage of Labor **1341**Management of the Third Stage of Labor **1342**Midwifery Management of the Third Stage of Labor **1347**Complications of the Third Stage of Labor **1350**Conclusion **1359**Resources **1359**References **1359****Appendix 31A** Management of the Third Stage of Labor **1364***Mavis N. Schorn*History **1364**Physical Examination **1364**Management Steps **1364****Appendix 31B** Inspection of the Umbilical Cord, Placenta, and Membranes **1367***Mavis N. Schorn*Inspection of the Umbilical Cord **1367**Inspection of the Placenta **1368**Inspection of the Membranes **1369****Appendix 31C** Postplacental Intrauterine Device Insertion and Removal **1370***Melicia Escobar and Signey Olson*Introduction **1370**Advancing Reproductive Justice **1370**Counseling About Postplacental IUD Insertion **1370**Postplacental IUD Insertion **1372**References **1376****Appendix 31D** Manual Removal of the Placenta **1378***Mavis N. Schorn*History **1378**Physical Examination **1378**Management Steps **1378**References **1380****Appendix 31E** Initial Management of Uterine Inversion **1381***Mavis N. Schorn***Appendix 31F** Management of Immediate Postpartum Hemorrhage **1383***Mavis N. Schorn*Introduction **1383**Management Steps **1383**References **1385****Appendix 31G** Intrauterine Exploration **1386***Mavis N. Schorn*

Appendix 31H	Sudden Postpartum Cardiovascular or Neurologic Emergencies	1387
	<i>Mavis N. Schorn</i>	
	Physical Examination	1387
	Management	1387
	References	1388

Chapter 32	Birth in the Home and Birth Center	1389
	<i>Alexis Dunn Amore and Nikia D. Grayson</i>	
	Introduction	1389
	Background	1389
	Comparison of Home and Birth Center Services	1390
	Safety During Birth in Home and Birth Center Settings	1391
	Outcomes of Birth in Home and Birth Centers	1391
	Essential Elements of Birth Center and Home Birth	1393
	Prenatal Care	1395
	The Intrapartum Period at Home or in the Birth Center	1400
	The Early Postpartum Period and Follow-Up	1402
	Framework for Clinical Management	1403
	Business Aspects of Home and Birth Center Settings	1408
	Conclusion	1409
	References	1410
Appendix 32A	Supplies for Birth in the Home and Birth Center	1413
	<i>Alexis Dunn Amore and Nikia D. Grayson</i>	
	Family Supplies for a Birth Center Birth	1413
	Midwife Equipment for Birth at Home or in the Birth Center	1414

Part VI Postpartum 1415

Chapter 33	Anatomy and Physiology of Postpartum	1417
	<i>Tekoa L. King</i>	
	Introduction	1417
	Physiologic Changes Immediately Following Placental Expulsion	1417
	Postpartum Changes in Reproductive Organs	1418
	Wound Healing	1420
	Postpartum Physiology of Nonreproductive Organs	1421
	Anatomy and Physiology of Lactation	1427
	Conclusion	1431
	References	1431
Chapter 34	Postpartum Care	1435
	<i>Abigail Howe-Heyman</i>	
	Introduction	1435
	Cultural Perspectives of the Postpartum Period	1436

The First Hour Postpartum: The Fourth Stage of Labor **1437**

Initial Postpartum Period **1441**

Mid-Postpartum Period **1455**

Special Considerations **1461**

Conclusion **1464**

References **1464**

Appendix 34A Management of the Fourth Stage of Labor Following Vaginal Birth **1471**

Abigail Howe-Heyman

Physical Examination and Management **1471**

Additional Assessments and Care Practices **1472**

Appendix 34B History and Physical Examination During the Postpartum Period **1473**

Abigail Howe-Heyman

Early Postpartum Care (0 to 3 Days) **1473**

Care in the Mid-Postpartum Period (72 Hours to 4 Weeks) **1480**

The Comprehensive Postpartum Visit (4 to 12 Weeks) **1483**

References **1487**

Chapter 35 Postpartum Complications **1489**

Deborah Karsnitz and Linda McDaniel

Introduction **1489**

Urinary Retention **1490**

Puerperal Fever and Puerperal Infection **1492**

Endometritis **1492**

Wound Complications **1494**

Urinary Tract Infection: Pyelonephritis **1494**

COVID-19 During Postpartum **1495**

Postpartum Bleeding Complications **1495**

Preeclampsia and Eclampsia **1498**

Hemorrhagic Stroke **1498**

Peripartum Cardiomyopathy **1499**

Postpartum Thrombophlebitis and Thromboembolism **1499**

Thyroiditis and Thyroid Storm **1502**

Postdural Puncture Headache (Spinal Headache/Wet Tap) **1503**

Substance Use Disorder **1503**

Conclusion **1504**

Resources **1504**

References **1504**

Part VII Newborn **1509**

Chapter 36 Anatomy and Physiology of the Newborn **1511**

Tracey Bell and Pamela J. Reis

Introduction **1511**

Respiratory Changes **1512**

Circulatory Changes	1515
Thermoregulation	1516
Metabolic Regulation	1518
Hematologic Changes	1519
The Newborn Immune System	1521
The Newborn Gastrointestinal Tract	1523
The Newborn Microbiome	1524
The Renal System	1524
The Integumentary System	1524
Sensory Development	1525
Conclusion	1525
References	1525

Chapter 37 Infant Feeding and Lactation 1529

*Robyn Schafer, Stephanie DeVane-Johnson, Melissa G. Davis,
and Julia C. Phillippi*

Introduction	1529
Terminology	1529
Overview of Infant Feeding Practices	1530
Efforts to Increase Rates of Lactation and Breastfeeding	1532
Composition of Human Milk	1533
Peripartum Factors Affecting Lactation and Breastfeeding	1534
Health Assessment for Lactation and Breastfeeding	1537
Anticipatory Guidance for Human Milk Feeding	1545
Medications, Herbs, and Substances in Lactation	1547
Nutrition During Lactation	1549
Human Milk Expression and Storage	1550
Continuation or Cessation of Lactation	1553
Human Milk Substitutes	1554
Diverse Human Milk Feeding Situations	1557
Assessment and Management of Common Lactation Concerns	1558
Conclusion	1566
References	1567

Chapter 38 Physical Assessment of the Newborn 1573

Pamela J. Reis and Tracey Bell

Introduction	1573
Perinatal History	1574
Initial Rapid Physical Assessment and Apgar Scoring	1577
Gestational Age Assessment	1578
Physical Examination of the Newborn	1580
Routine Newborn Screening	1589
Conclusion	1590
Resources	1591
References	1591

Appendix 38A Physical Examination Findings of Healthy Newborn
Infants **1594**

Tracey Bell

Supplies **1594**

Gestational Age Assessment **1594**

Comprehensive Physical Assessment of The Newborn **1596**

References **1612**

Chapter 39 Neonatal Care **1613**

Pamela J. Reis and Tracey Bell

Introduction **1613**

The First Golden Hour **1613**

Newborn Assessment and Care in the First Hours After Birth **1614**

The First Hours: The Newborn with a Health Condition **1617**

The First Days: Common Newborn Behavior **1623**

The First Days of Life: Care of the Well Neonate **1626**

Conditions That Influence Newborn Care **1628**

Discharging the Newborn from Early Newborn Care **1633**

The First Month: Primary Care of the Newborn **1633**

Conclusion **1637**

Resources **1638**

References **1638**

Appendix A Chapter Alignment with ACNM Core Competencies and ICM
Essential Competencies **1643**

Index 1649

Preface

In this edition, the lead editors, Julia Phillippi and Ira Kantrowitz-Gordon, worked closely with a team of section editors—Mary Barger (primary care), Melissa Avery (sexual, gynecologic, and reproductive health), Nicole Carlson (intrapartum), Pam Reis (newborn), and Tekoa King (anatomy and physiology)—to engage with new and established authors and update this foundational text to meet the needs of current midwifery learners.

The Hallmarks of Midwifery and the current needs of those persons seeking midwifery care have been forefront in our minds in preparing this edition. We have attempted to weave information about how structural and social determinants of health affect health outcomes. We have strived to incorporate an antiracism approach to promote health equity. Many of our examples focus on the experiences of Black women in the United States, as they have been subjected to widespread inequities across history, and immediate action is needed to improve health equity. More broadly, a thorough understanding of how structural and social forces affect the well-being and health of individuals is essential for providing midwifery care that is appropriately tailored to all clients. This framing is useful for recognizing and acting on health inequities locally and across the globe. Because of historical and current inequities, midwives need to listen and act on the health concerns of racialized and marginalized individuals.

In this edition, we provide learners with a wide variety of sources to explore the rich histories and contexts of midwifery. While we provide suggestions for starting sources to ground the learner, we

want readers to be able to see the diversity of midwifery and find histories that resonate with their own identities and planned practice locations and populations.

Throughout this text, we have also moved toward gender-neutral language in this edition to be inclusive of all individuals receiving midwifery care. We have also infused content about care to individuals across the spectrum of gender expression and physical anatomy throughout the chapters and appendices. When reporting results from the literature, we have strived to accurately represent the populations studied. If a study included only women, it would be inaccurate to generalize the findings to all adults. Similarly, we have moved toward descriptive terms for anatomy and skills rather nomenclature focused on the names of individuals who first described the body part or skill in Western literature (e.g., *oviducts* or *uterine tubes* instead of *fallopian tubes*).

We have added a chapter on sexuality to this edition to better prepare learners to provide holistic midwifery care. This content is essential for providing comprehensive sexual and reproductive health care, as learners need information about the relationships between sexuality, sexual behaviors, and well-being. In addition, sexuality is often a component of family building and important in person-centered care, especially for fertility care and in supporting family and interpersonal relationships.

Clinical practice is rapidly evolving. Midwifery has always focused on person-centered care within the context of the individual, family, and community. We have worked to be more inclusive in supporting the health and self-identified needs of individuals

across the lifespan. As midwifery has expanded, we have expanded the text's content on methods for mitigating clinician bias, fertility treatments, pregnancy loss, and abortion, among others. The knowledge, skills, and abilities needed by midwives have changed to meet the needs of individuals seeking midwifery care. In this new edition, we have attempted to demonstrate the great potential for midwifery to

be inclusive and welcoming. We also recognize that midwifery and this text, despite their imperfections, continue to evolve. It is our hope that this text will give learners the knowledge and skills needed to enhance and enrich the lives of those whom they serve and the midwifery profession as a whole.

—*Julia C. Phillippi and
Ira Kantrowitz-Gordon*

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—*Julia C. Phillippi*

My midwifery career has taken me in unexpected and exciting directions, yet I never imagined that I would one day help develop the next edition of *Varney's Midwifery*. I am fortunate to have worked with so many supportive, hard-working, and dedicated midwives and nurses over the course of my career and most recently during the long labor to birth this new edition. I am grateful to the midwives who shared their wisdom and patience when I was a student and throughout my career as a midwife. Among the many, a few deserve special mention: Marjorie Smith, who showed me how to provide quiet and gentle support while keeping the patient at the center; Aileen MacLaren, who believed in me as a student and as a colleague; and Tekoa King and Francie Likis, who mentored me as an author and editor. I am especially grateful to Sharona, who has been my support every step of the way, and to my children, Maayan, Moshe, Raquel, and Yael, who make

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—*Ira Kantrowitz-Gordon*

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About the Editors

Julia C. Phillippi, PhD, CNM, FACNM, FAAN, earned a bachelor of arts degree from Maryville College, a master of science degree from Vanderbilt University, and a PhD in nursing from University of Tennessee Knoxville. She has been active in midwifery practice, teaching, and research; over the course of her career, she has provided midwifery services in homes, birth centers, and hospitals in both rural and urban areas. She has been a midwifery educator for 18 years and currently serves as professor of nursing at Vanderbilt University School of Nursing. Her research has been funded by the Agency for Healthcare Research and Quality, the National Institute of Child Health and Human Development, and the National Institute of Nursing Research, among others. She has publications in a variety of perinatal journals and has made numerous presentations at midwifery and health services-related conferences. Her awards include the American College of Nurse-Midwives Foundation Excellence in Teaching and Kitty Ernst Awards, March of Dimes of Middle Tennessee Nurse Researcher of the Year, and Outstanding Peer Reviewer and Best Review Article from the *Journal of Midwifery & Women's Health*. She has been an associate editor for the *Journal of Midwifery & Women's Health* since 2019. She is a fellow of the American College of Nurse-Midwives and American Academy of Nursing.

Ira Kantrowitz-Gordon, PhD, CNM, FACNM, FAAN, earned a bachelor of science degree in biology from Brown University, a bachelor of science degree in nursing and a master's degree in nursing from University of Washington, and a PhD in nursing from Washington State University. He has been active in midwifery practice, teaching, and research

for many years. He has been a midwifery educator for 14 years and is currently an associate professor of nursing at University of Washington School of Nursing. His research focuses on mindfulness interventions during pregnancy and early parenting, reducing the stigma of perinatal opioid disorder, and increasing workforce diversity in midwifery and biomedical science. He has published in midwifery, nursing, and multidisciplinary journals. His awards include the American College of Nurse-Midwives Foundation Excellence in Teaching and Outstanding Peer Reviewer from the *Journal of Midwifery & Women's Health*. He has been a deputy editor for the *Journal of Midwifery & Women's Health* since 2021 and is a member of the Maternal Mortality Review Panel for Washington State. He is a fellow of the American College of Nurse-Midwives and American Academy of Nursing.

Section Editors

Newborn

Pamela J. Reis, PhD, CNM, NNP-BC, FACNM, earned a bachelor of science degree in nursing from Duke University, a master of science degree in nursing and post-master's certificate in nurse-midwifery from East Carolina University, and a PhD in nursing from East Carolina University in Greenville, North Carolina. She was a neonatal nurse practitioner for 10 years and has been active in midwifery practice, teaching, and research for more than 30 years. Her research focuses on advanced practice nursing workforce issues, and she is the project director of a grant funded by the Health Resources Services Administration for a primary care training program for

advanced practice registered nurses. She serves as an associate editor and peer reviewer for the *Journal of Midwifery & Women's Health*. Her awards include the American College of Nurse-Midwives Foundation Excellence in Teaching Award and the Dorothea Lang Pioneer Award. She is a fellow of the American College of Nurse-Midwives.

Anatomy and Physiology

Tekoa L. King, CNM, MPH, FACNM, earned a bachelor of science degree from the University of California at San Francisco (UCSF), a master of public health degree from the University of California, Berkeley, and midwifery certification from Georgetown University. She was a member of an interprofessional collaborative practice with maternal–fetal medicine physicians at UCSF, where she practiced clinically and participated in teaching medical students and obstetric residents for many years. From 1985 to 2021, she was the co-chair of UCSF's annual Antepartum and Intrapartum Management continuing education conference. During her tenure at UCSF, she participated in the National Institute of Child Health and Human Development expert panels and subsequent publications on fetal heart rate monitoring and vaginal birth after cesarean section, and was a member of the Centers for Disease Control and Prevention working group that published national guidelines for group B *Streptococcus* prophylaxis from 1996 to 2010. She was the editor-in-chief of the *Journal of Midwifery & Women's Health* from 2001 to 2006, then deputy editor until 2021. She was also the senior editor of the fifth and sixth editions of *Varney's Midwifery* and co-editor of the first and second editions of *Pharmacology for Women's Health*. She has multiple publications, both peer-reviewed journals and book chapters, and has represented the American College of Nurse-Midwives as liaison to the American College of Obstetricians and Gynecologists (ACOG) Committee on Obstetric Practice, wherein she contributed to the development of several ACOG Committee Opinions. Her awards include the American College of Nurse-Midwives Lifetime Achievement Award, the *American Journal of Nursing* Book of the Year award, and Best Review Article from the *Journal of Midwifery & Women's Health*. She is a fellow of the American College of Nurse-Midwives.

Intrapartum

Nicole S. Carlson, PhD, CNM, FACNM, FAAN, earned a bachelor of science degree in biology, anthropology and nursing from Emory University, a

master of science degree from Oregon Health and Science University, and a PhD in nursing from University of Colorado Denver. She conducts research on the biological mechanisms of labor, and strategies for achieving optimal perinatal outcomes and decreasing racial disparities, including midwife-led care. She has received support for her research from the National Institutes of Health, the March of Dimes, and the American College of Nurse-Midwives (ACNM), and was awarded Best Research and Review article and Best Research Podium awards by ACNM and the *Journal of Midwifery & Women's Health*. She led a team of nurse-midwife scholars to produce the first ACNM Clinical Bulletin on labor induction and was the sole nurse and nurse-midwife technical expert for a systematic review on outpatient cervical ripening conducted by the Agency for Healthcare Research and Quality's Effective Health Care workgroup. Her work with large national data sets to reveal strategies for decreasing cesarean birth and postpartum maternal morbidity was recognized by awards from the Eunice Kennedy Shriver National Institute of Child Health and Human Development and citation in the Centers for Medicare and Medicaid Service's Recommendations for Maternal Health. She has practiced clinically for more than 20 years, serving birthing people in both hospital and birth center settings, and contributed to the education of many nurse-midwives over the past decade. She is a fellow of the ACNM and the American Academy of Nursing.

Primary Care

Mary K. Barger, PhD, MPH, CNM, FACNM, earned a bachelor's degree in nursing from Stanford University, a master of public health in maternal–child health/nurse-midwifery from Johns Hopkins School of Public Health, and a doctorate in epidemiology from Boston University. Although recently retired, she practiced full-scope midwifery for more than 30 years, caring for a wide spectrum of patients. She has taught for 40 years in schools of public health, medicine, and nursing. Her research interests center on maternal morbidity and mortality and issues related to sleep and women's health. She has more than 40 peer-reviewed publications and published chapters in several textbooks. She has served on the American Midwifery Certification Board and the American College of Nurse-Midwives Fellows Board of Governors. Her awards include the American College of Nurse-Midwives Foundation's Excellence in Teaching and the Dorothea Lang Pioneer Awards, California Nurse-Midwives Association Pioneer and Research Awards, Outstanding Peer

Reviewer Award, and the Association of Teachers of Maternal and Child Health Loretta Lacey Award for Maternal and Child Health Academic Leadership.

Antepartum

Melissa D. Avery, PhD, CNM, FACNM, FAAN, earned her bachelor of science degree from Northern Illinois University, her master of science degree from the University of Kentucky, and her PhD in nursing at the University of Minnesota (UMN). She practiced full-scope midwifery for 25 years and directed the UMN nurse-midwifery education program for 24 years, leading funded projects to develop quality hybrid-distance education programs and simulation experiences. Her research has been funded by multiple agencies and examined exercise in pregnancy, breastfeeding, and confidence for physiological labor and birth. In addition to published articles, she

has published two edited/co-edited books. Most recently, Dr. Avery was co-principal investigator of a nationally funded, multisite project launched by the American College of Nurse-Midwives (ACNM) and the American College of Obstetricians and Gynecologists, which aimed to develop resources and examine interprofessional education among midwifery students and obstetrics and gynecology residents. Her awards include the *American Journal of Nursing* Book of the Year Award, Maternal–Child Health Category (with co-author Linda Cole, DNP, CNM), and induction into the UMN Academic Health Center Academy of Excellence in the Scholarship of Teaching and Learning. Dr. Avery is currently Professor Emeritus at the UMN School of Nursing and editor-in-chief of the *Journal of Midwifery & Women's Health*. She is a fellow in ACNM and the American Academy of Nursing, and a past president of ACNM.

