#### **PREFACE**

This Medication Technician curriculum was originally developed for implementation in 1978. Its purpose was to satisfy federal regulations requiring a "state-approved" training program in medication administration for unlicensed personnel administering medications in certified skilled nursing facilities (CFR 405.1124 [g]) and certified intermediate care facilities (CFR 442.337). In addition, this course was later mandated for like personnel in "state-licensed-only" skilled and intermediate care facilities (non-certified) beginning June 11, 1981 (Missouri Nursing Home Rule 13CSR15-14.042[46]).

The 1978 curriculum was developed in a collaborative effort between the Bureau of Nursing Home Licensure and Certification, Division of Health (now the Department of Health and Senior Services) and the Department of Elementary and Secondary Education. Primary authors were Ann Wormsley, R.N., Division of Health, and Yolanda Dolecki, R.N., Ed D., Department of Education. In 1982, the curriculum guides were revised somewhat, mostly reflecting changes in regulations.

The 1985 revision incorporated a significant reorganization of the curriculum content, updating of regulations and an all new drug information section. The updated training manual (curriculum guide) represented the collective thinking and philosophy of the ad hoc committee members, several of whom deserve special recognition for their outstanding contributions: Vada Arrowood for overall guidance and in facilitating the reorganization of the instructional analysis section; Maria Oliver for incorporating changes into the master manual; Pat Winberg for finalization of that process in addition to preparing the final document for printing; and Scott Weber for compiling the drug information section. Many individuals served on the ad hoc committee and we are most grateful for their time and assistance with the 1985 revision.

In 1993, the Missouri Division of Aging formed an ad hoc committee to review the curriculum for accuracy, relevancy, and organization. Oral metered dose inhalation medications, transdermal patches, and body substance precautions were incorporated. Several committee members deserve special recognition for their writing contributions: Donna Albrothross, Jim Bercheck, Lois Bonnot, Gwen Gevecker, Teresa Johnson, Barbara Primm, Phyllis Robichaud, Scott Weber, and Tom Whalen. The committee reviewed and commented on the revised curriculum. Also, the committee recommended that the course be taught in 60 hours. Although she did not serve on the committee, Betty Phillips, R.N., deserves special thanks for reviewing and commenting on the curriculum.

In 2004, it was determined that the text and regulations were again in need of revision. A committee consisting of representatives from a variety of public and private agencies across the state was selected by the Department of Health and Senior Services. Under the direction of Donald Scott with the Missouri Center for Career Education at Central Missouri State University, committee members utilized an on-line forum to submit recommended changes and make comments on proposed revisions. All of the committee members deserve special recognition for their time and commitment to the development of this manual. The Department of Elementary and Secondary Education has also determined that this manual will now be available online for students and instructors free of charge.

During 2008, the text and regulations were reviewed and revised to reflect best practices and the promulgation of Missouri rule 19 CSR 30-84.020 which recognized this manual as the official state manual leading to the certification of new Certified Medication Technicinans. Under the direction of Donald Scott with the Missouri Center for Career Education at Central Missouri State University, the standing 2004/2005 committee members again reviewed and recommended chages to proposed manual revisions. Once committee approval was received, the document was submitted to the Department of Health and Senior Services, Divison of Health Standards and Licensure for further review and comments. As in 2005, it has been determined that this manual will be available online for students and instructors free of charge.

#### **ACKNOWLEDGMENTS**

This revision of the Certified Medication Technician Manual is the result of the collaborative efforts of a dedicated group of professionals who reviewed the content and provided valuable suggestions and corrections. A book of this size represents an enormous investment of both time and talent. Special thanks to those who saw the project through to its completion and shared invaluable knowledge in their areas of expertise.

Thanks to Donald Scott, the staff at the Missouri Center for Career Education, Shelly Wehmeyer and Gavin Allan, Department of Elementary and Secondary Education, and Lois Bonnot, Betty Markway, Danette Beeson and Anna Long, Department of Health and Senior Services, who provided leadership and enthusiasm throughout the development of this manual.

Many thanks to the families, friends and colleagues of all those who worked on the project for their understanding, patience and encouragement during the process.

#### **DEDICATION**

This book is dedicated to Lois, Gail, Mary, Jean, Tory, Esther, Danette, and Anna at the Missouri Department of Health and Senior Services, Section for Long Term Care Health Education Unit and Division of Regulation and Licensure. Your knowledge, patience, and support year after year are appreciated.

## **COMMITTEE** (1985)

Vada Arrowood, R.N.; M.S., Supervisor, Health Occupations Education, Department of Elementary and Secondary Education

Florina Carlstrom, Consumer advocate, Governor's Advisory Council on Aging, Malden, Missouri

Cindy Cravens, R.N. Instructor, Nichols Career Center, Jefferson City, Missouri

Fredrick Doerhoff, Representing Missouri Health Care Association, St. Elizabeth Manor, St. Elizabeth, Missouri

Gwen Gevecker, R.N., Coordinator, Practical Nursing Program, Nichols Career Center, Jefferson City, Missouri

Florence McGuire, R.N., M.S.N., Executive Director, Missouri State Board of Nursing, Jefferson City, Missouri

Maria Oliver, R.N., Rolla Manor Care Center, representing Missouri League of Nursing Home Administrators

Pauline Oliver, R.N., Instructor, Kansas City Technical Center, Kansas City, Missouri

Barbara Pinney, Training Coordinator, Division of Aging, Jefferson City, Missouri

Joanne Polowy, Program Planning Consultant, Division of Aging, Jefferson City, Missouri

Phyllis Robichaud, R.N., Jewish Center for Aged, representing Missouri Association Homes for the Aged

Jeanne Rutledge, R.N., Institutional Advisory Nurse, Division of Aging, Jefferson City, Missouri

Ruth Shook, R.N., Instructor, Nichols Career Center, Jefferson City, Missouri

Scott Weber, R.Ph., Pharmacy Department, St. Louis Developmental Disabilities Treatment Center, St. Louis, Missouri

Pat Winberg, R.N., B.S.N., Instructor, Kansas City Technical Center, Kansas City, Missouri

Wanda Workman, CNA/CMT Coordinator, Division of Aging, Jefferson City, Missouri

### **COMMITTEE (1994)**

Donna Albrothross, R.N., C., B.S.N., Loch Haven, Macon, Missouri

Marlene Anderson, Director of Operations, Missouri Health Care Association, Jefferson City, Missouri

Charlotte Barnes, R.N., B.A., LTCA, Baptist Medical Center, Stillwell, Kansas

Jim Berchek, R.Ph., D & H Prescription Drug Store, Columbia, Missouri

Lois Bonnot, R.N., C., B.S., Missouri Division of Aging, Jefferson City, Missouri

Don Brown, R.Ph., FASCP, Springfield, Missouri

Clare Eisenbach, R.N., Sikeston Public Schools, Sikeston, Missouri

Gwen Gevecker, R.N., Jefferson City, Missouri

Teresa Johnson, R.N., Sikeston Public Schools, Sikeston, Missouri

Sandy Kombrink, R.N., Price Memorial and St. Joseph's Hills Infirmary, Inc., Eureka, Missouri

Jeanne Komo, R.N., B.S.N., Foster Care Group, Springfield, Missouri

Barbara Primm, R.N., C., B.S.N., Loch Haven, Macon, Missouri

Phyllis Robichaud, R.N., B.S.N., M.A.ed., Chesterfield, Missouri

Gail Sandbothe, Missouri Division of Aging, Jefferson City, Missouri

Jane Scott, R.N., B.S.N., Department of Elementary and Secondary Education, Jefferson City, Missouri

Gayle Steiger, Executive Director, Missouri League of Nursing Home Administrators, Jefferson City, Missouri

Jo Walker, R.N., CNHA, Webco Manor, Marshfield, Missouri

Scott Weber, R.Ph., St. Louis Development Disabilities Treatment Center, St. Louis, Missouri

Tom Whalen, R.Ph., Missouri Division of Aging, Jefferson City, Missouri

INSTRUCTIONAL MATERIALS LABORATORY STAFF:

Harley Schlichting, Director Phyllis Miller, Assistant Director

### **COMMITTEE (2005)**

Clara Boland, Ph.D., RN, Clinical Consultant/Educator, Quality Improvement Program of Missouri (QIPMO), University of Missouri Sinclair School of Nursing, Columbia, Missouri.

Lois Bonnot, RN, Department of Health and Senior Services, Health Education Unit, Jefferson City, Missouri.

Susan Gallagher, RN, MSN Research Nurse-AHRQ, Patient Safety Grant, University of Missouri-Columbia, Sinclair School of Nursing, Columbia, Missouri.

Gwen Gevecker, Jefferson City Missouri.

Linda Hollifield, RN, Department of Health and Senior Services, Jefferson City, Missouri.

Dorise Hughes, RN, St. Charles Community College, St Peters, Missouri.

Katherine J. Kuster, RN,C, Nurse consultant educator for MHCA, Education Liason for CommuniCare, and member of Long Term Care Educators Association.

Betty Markway, RN, Department of Health and Senior Services, Jefferson City, Missouri

Becca Marsh, Interlock Pharmacy Systems, Florissant, Missouri

Bert McClary, RPh, Department of Health and Senior Services, Jefferson City, Missouri

Marilyn Nelson, RN, MO State Board of Nursing, Jefferson City, Missouri.

Betty Phillips, RN,C, Department of Health and Senior Services Section for Long Term Care, Kansas City, Missouri.

Terrie Pike, RN,C, Nazareth Living Center, Long Term Care Educators Association, Affton, Missouri.

Mary Stassi, RN,C, Health Occupations Coordinator, St. Charles County Community College, St. Peters, Missouri.

Rhona Stanek, Ozark Technical Community College, Springfield, Missouri.

Shelly Wehmeyer, Supervisor; Department of Elementary and Secondary Education, Jefferson City, Missouri.

Penny Worthley, RN,C, LNHA, Education/Training Coordinator. Missouri Association of Nursing Home Administrators, Jefferson City, Missouri.

Phil King, RPh, PharmD, Clinical Pharmacy Director, Managed Care Pharmacy, Springfield, Missouri.

### **COMMITTEE (2008)**

Clara Boland, Ph.D., RN, Clinical Consultant/Educator, Quality Improvement Program of Missouri (QIPMO), University of Missouri Sinclair School of Nursing, Columbia, Missouri.

Danette Beeson, Program Manager, Department of Health and Senior Services, Jefferson City, Missouri.

Dorise Hughes, RN, St. Charles Community College, St Peters, Missouri.

Katherine J. Kuster, RN,C, Nurse consultant educator for MHCA, Education Liason for CommuniCare, and member of Long Term Care Educators Association.

Anna Long, Health Program Representative, Department of Health and Senior Services, Jefferson City, Missouri.

Becca Marsh, Interlock Pharmacy Systems, Florissant, Missouri

Terrie Pike, RN,C, Nazareth Living Center, Long Term Care Educators Association, Affton, Missouri.

Mary Stassi, RN,C, Health Occupations Coordinator, St. Charles County Community College, St. Peters, Missouri.

Penny Worthley, RN,C, LNHA, Education/Training Coordinator. Missouri Association of Nursing Home Administrators, Jefferson City, Missouri.

# MISSOURI CENTER FOR CAREER EDUCATION STAFF (2005-2008)

Donald Scott, Ed.D – Project Director Mary Stassi, RN, C – Primary Writer/Editor Nathan Wittmaier – Communications Coordinator Judy King – Graphics Editor