

## Component II: Administrative

### Module A: Medical Office Reception

#### Topic 6: Computer Applications

##### Statement of Purpose

To prepare the learner with the basic knowledge and skills necessary to utilize a computer and computer programming appropriate for a medical office setting.

##### Student Learning Outcomes

Upon completion of this topic, the learner will be able to:

1. Spell and define key terms.
2. Identify computer equipment necessary for productive use in a medical office.
3. Explain uses of a computer in the medical office.
4. Recognize various types of programs available for the medical office.
5. List ergonomic factors necessary to avoid employee injury.

##### Terminology

- |                                  |  |
|----------------------------------|--|
| 1. Body mechanics                | 15. International Classification of Diseases (ICD) |
| 2. Central processing unit (CPU) | 16. Internet                                       |
| 3. Current procedural term (CPT) | 17. Inventory                                      |
| 4. Direct link                   | 18. Keyboard                                       |
| 5. Disk                          | 19. Laser printer                                  |
| 6. Electronic claims             | 20. Modem  |
| 7. Electronic clearinghouse      | 21. Monitor  |
| 8. Ergonomics                    | 22. Mouse  |
| 9. Financial statements          | 23. Software                                       |
| 10. Floppy disk drive            | 24. Storing records                                |
| 11. Hard disk drive              | 25. Tape backup                                    |
| 12. Hardware                     | 26. Verify records                                 |
| 13. Immediate update             |  |
| 14. Ink jet printer              |  |

##### References

1. Davis, F.A. (2013). *Taber's Cyclopedic Medical Dictionary* (22<sup>th</sup> Ed.). Philadelphia PA: F.A. Davis.
2. French, L.L., & Fordney, M.T. (2013). *Administrative Medical Assistant* (7<sup>th</sup> Ed.) Clifton Park, NY: Delmar, Cengage Learning
3. Blesi, M., Wise, B.A., & Kelley-Arney, C, (2012) *Medical Assisting Administrative and Clinical Competencies* (7<sup>th</sup> Ed.) Clifton Park, NY: Delmar, Cengage Learning
4. Kronenberger, J., Southard D. L., & Woodson, D. (2013). *Comprehensive Medical Assisting* (4<sup>th</sup> Ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
5. Larsen, W. (2011). *Computerized Medical Office Procedures: A Worktext Using Medisoft v16* (3<sup>rd</sup> Ed.). Saunders Elsevier.
6. Proctor, D. B., & Young-Adams, A. P. (2011). *Kinn's The Medical Assistant: An Applied Learning Approach* (11<sup>th</sup> Ed.). Philadelphia, PA: Saunders Elsevier
7. Dennerll, J.T., & Davis, P.E. (2010). *Medical Terminology: A Programmed Systems Approach* (10<sup>th</sup> Ed.). Clifton Park, NY: Delmar, Cengage Learning.

Content Outline/Theory Objectives	Suggested Learning Activities
<p><b>Objective 1</b>  <b>Spell and define key terms.</b></p> <ul style="list-style-type: none"> <li>A. Review the terms listed in the terminology section.</li> <li>B. Spell the listed terms accurately.</li> <li>C. Pronounce the terms correctly.</li> <li>D. Use the terms in their proper context.</li> </ul>	<ul style="list-style-type: none"> <li>A. Games: word searches, crossword puzzles, Family Feud, Jeopardy, bingo, spelling bee, hangman, and concentration.</li> <li>B. Administer vocabulary pre-test and post-test.</li> <li>C. Discuss learning gaps and plan for applying vocabulary.</li> </ul>
<p><b>Objective 2</b>  <b>Identify computer equipment necessary for productive use in a medical office.</b></p> <ul style="list-style-type: none"> <li>A. Hardware <ul style="list-style-type: none"> <li>1. Desktop computer.</li> <li>2. Laptop computer.</li> <li>3. Printers <ul style="list-style-type: none"> <li>a. Laser.</li> <li>b. Ink jet.</li> <li>c. Dot matrix.</li> </ul> </li> <li>4. Monitor.</li> <li>5. Disk drives, hard and floppy.</li> <li>6. Compact disc (CD).</li> <li>7. Keyboard.</li> <li>8. Mouse.</li> <li>9. Tape back-up system.</li> <li>10. Modem.</li> <li>11. Scanner.</li> <li>12. Zip drive.</li> <li>13. Flash drive.</li> <li>14. Touch screen.</li> </ul> </li> <li>B. Software <ul style="list-style-type: none"> <li>1. Multipurpose word processing programs.</li> <li>2. Medical specific application programs <ul style="list-style-type: none"> <li>a. Bookkeeping and accounting.</li> <li>b. Appointment scheduling and callback.</li> <li>c. Physician Desk Reference (PDR) and programs designed to check drug interactions.</li> <li>d. Medical charting and reporting programs.</li> <li>e. Internet with access to the Center for Disease Control (CDC), other hospital and health agencies and medical libraries.</li> <li>f. Billing codes International Classification of Diseases (ICD) and Current Procedural Terminology (CPT).</li> </ul> </li> <li>3. Integration of programs for the benefit of the medical facility.</li> <li>4. Spreadsheet.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Reading</li> <li>C. Have students operate a medical office software program or utilize workbook software.</li> </ul>

5. Database management.	
<p><b>Objective 3</b>  <b>State the uses of a computer in the medical office.</b></p> <ul style="list-style-type: none"> <li>A. Scheduling appointments.</li> <li>B. Call backs and patient notification.</li> <li>C. Medical record documentation.</li> <li>D. Storing and accessing patient records.</li> <li>E. Office and patient bookkeeping and accounting               <ul style="list-style-type: none"> <li>1. Patient billing.</li> <li>2. Balance or reconcile bank accounts.</li> <li>3. Pay bills and produce checks.</li> <li>4. Generate financial statements for physicians, managers and accountants.</li> </ul> </li> <li>F. Immediate update for patient receipts.</li> <li>G. Input medical billing and insurance information.</li> <li>H. Ability to check drug interactions.</li> <li>I. Monitor patient medication and their use or abuse.</li> <li>J. Assist in diagnosis and treatment plans.</li> <li>K. Verify patient's insurance information               <ul style="list-style-type: none"> <li>1. Eligibility.</li> <li>2. Coverage.</li> <li>3. Benefits.</li> <li>4. Co-payment amounts.</li> <li>5. Deductible                   <ul style="list-style-type: none"> <li>a. Verify deductible amount.</li> <li>b. Verify if deductible has been met.</li> </ul> </li> </ul> </li> <li>L. Produce insurance claims               <ul style="list-style-type: none"> <li>1. Print paper formats.</li> <li>2. Submit electronic claims directly to companies.</li> <li>3. Submit electronic claims to clearinghouse serving many companies.</li> </ul> </li> <li>M. Other uses               <ul style="list-style-type: none"> <li>1. Inventory of office medication and supplies.</li> <li>2. Comparing and contrasting similar medical information.</li> <li>3. Direct link to laboratories and hospital information.</li> <li>4. Report generation per physician request                   <ul style="list-style-type: none"> <li>a. Number of patients seen per insurance.</li> <li>b. Number of patients or patient names related to a specific diagnosis.</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Reading</li> </ul>
<p><b>Objective 4</b>  <b>Recognize various types of programs available for the medical office.</b></p> <ul style="list-style-type: none"> <li>A. Identify reputable software companies               <ul style="list-style-type: none"> <li>1. User-friendly programs needed.</li> <li>2. Installation of new software by provider.</li> <li>3. Provide initial and as needed instruction.</li> <li>4. Company continues to provide support.</li> </ul> </li> <li>B. Locate medical compatible programs and equipment to observe and compare               <ul style="list-style-type: none"> <li>1. In house programs run in the independent offices.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Reading</li> <li>C. Have guest speaker from a software company demonstrate use of a specialized program.</li> <li>D. Have students participate actively with patient input and printout of patient information</li> </ul>

<ol style="list-style-type: none"> <li>2. Multi-office programs shared (networks) between offices or physicians.</li> <li>3. Special programs link medical offices to: <ol style="list-style-type: none"> <li>a. Laboratories.</li> <li>b. Hospitals.</li> <li>c. Other medical facilities.</li> </ol> </li> <li>4. Link to clearinghouse or insurance billing companies or services.</li> </ol>	<p>including appointments, basic patient information and reports.</p> <p>E. Also use textbook computer application programs.</p>
<p><b>Objective 5</b>  <b>List ergonomic factors necessary to avoid employee injury.</b></p> <ol style="list-style-type: none"> <li>A. Proper placement of computer equipment <ol style="list-style-type: none"> <li>1. Computer screen at eye level.</li> <li>2. Keyboard at 90 degree angle with arm and body.</li> <li>3. Chair with adjustable height and supportive back.</li> <li>4. Foot rest or foot placement at correct angle with toes elevated above heels.</li> </ol> </li> <li>B. Proper training of employees and students to comply with Occupational Safety and Health Administration (OSHA) standards and assist in avoiding injury <ol style="list-style-type: none"> <li>1. Correct body mechanics.</li> <li>2. Periodic breaks with range of motion exercises.</li> <li>3. Use of proper lighting.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Reading</li> <li>C. Have students demonstrate setting up equipment, body mechanics, and range of motion exercises.</li> </ol>