Chapter 1, Page 43 Sample Solution

*New Century Health Clinic*

1. Create an organization chart of New Century’s office staff by using Microsoft Word or a similar program, or you can draw it by hand.

*A sample organization chart is shown in the following figure. The job titles are not important, but it is necessary to identify the functions. Your students will want to refer to this chart in later chapters. Systems analysts must draw critical facts from a written summary, and creating an organization chart requires students to practice their analytical skills.*



1. Identify at least three business processes that New Century performs, and explain who is responsible for the specific tasks.

*Business processes and the person responsible are:*

| Business Process | Person Responsible |
| --- | --- |
| Prepare office payroll | **Fred Brown** |
| Handle tax reporting | **Fred Brown** |
| Handle profit distribution | **Fred Brown** |
| Maintain patient records | **Susan Gifford** |
| Handle insurance reporting | **Tom Capaletti** |
| Handle accounting | **Tom Capaletti** |
| Manage appointment book | **Lisa Sung** |
| Make patient reminder calls | **Lisa Sung** |
| Prepare daily appointment list | **Lisa Sung** |
| Order office and clinic supplies | **Carla Herrera** |
| Organize office and clinic supplies | **Carla Herrera** |

1. Explain how New Century might use a transaction processing system, a business support system, and a user productivity system. For each type of system, provide a specific example, and explain how the system would benefit the clinic.

*The clinic could utilize a transaction processing system to track each charge, payment, and insurance claim. This system would reduce administrative costs, speed up insurance reimbursement, and provide controls and reports. A business support system could be used to analyze provider workloads, turnaround time for claims and payments, and forecast future staffing needs. A user productivity system would increase office efficiency and improve patient satisfaction.*

1. During the systems development process, should New Century consider any of the following: B2B, vertical and horizontal system packages, or Internet-based solutions? Explain your answers.

New Century must develop computerized information systems for all critical operations as soon as possible. The first step is to identify New Century’s current procedures, which are typical of many small- and medium-size companies. These include managing customer (patient) records, accounts receivable (patient and insurance billing), accounts payable; scheduling production or services; and handling inventory, payroll, and human resources.

Because New Century deals with many insurance companies, there probably are opportunities to exchange claim information and payment status using EDI. Also, New Century can consider vertical and horizontal packages that would support the clinic’s information management needs. The following table shows some possible systems that might be considered, along with potential benefits.

| **System** | **Type of System** | **Use** | **Benefit** |
| --- | --- | --- | --- |
| Accounts receivable | Vertical or horizontal | Track money owed the clinic for goods sold/services rendered; send monthly bills/statements to patients and insurance companies; automatically generate reminder statements | Identify overdue accounts and credit risks; provide faster, more accurate billing; improve customer service; increase cash flow by reducing the time between goods sold/services rendered and payment |
| Accounts payable | Vertical or horizontal | Send checks to suppliers; generate a purchases journal | Increase clinic’s control over purchasing; minimize manual data entry; improve cash flow; increase profitability; provide more effective management of current liabilities |
| Inventory | Vertical or horizontal | Track inventories of office and clinic supplies | Obtain real-time inventory data; better inventory management |
| Payroll | Horizontal | Generate employee checks and federal and state tax forms; manage profit distribution to partners | Monitor and control pay to individual employees; determine cost of completing jobs; allow for electronic funds transfer (direct deposit) into employee bank accounts |
| Voice mail | Horizontal | Internal and external messaging | Allow customers to contact office after hours; faster, more effective internal messaging |
| Fax | Horizontal | Transmit forms to insurance companies; order office and clinic supplies | Faster transmission and ordering speeds insurance claim processing/order fulfillment |
| Word processing | Horizontal | Create letters, memos, faxes, agendas, newsletters; do business mailings | More professional-looking documents via formatting features and templates; easier editing |
| Scheduling; automated calendars | Vertical or horizontal | Managing and tracking schedules; printing daily appointment lists | Minimize scheduling conflicts; provide efficient service, while maximizing appointment times |
| Database management | Horizontal | Managing and providing access to customer records (patients, employers, and insurance firms) | Increase access to records; provide better organization in a single repository; allow for querying and filtering of records; reduce paper flow |
| Spreadsheets | Horizontal | Plan and/or track costs, budgets, profits | Increase clinic’s control over costs, budgets, profits; improve cash flow; increase profitability; provide more effective management of assets and liabilities |
| Intranet | Horizontal | Share data across the entire clinic (e.g., forms, policies, procedures; patient data; announcements) | Increase access to corporate and customer (patient) information; reduce paper flow |
| Web-based | Internet | Order office and clinic supplies online; place prescription orders for patients; send/check status of deliveries; create Web page to market the clinic, inform prospective patients, and answer frequently asked questions | Better customer service; reduce paper; less expensive ordering; real-time tracking data for orders |
| E-mail | Internet | Send reminder e-mails to patients; communicate with employers, insurance firms | More efficient, less expensive than long-distance calls |
| EDI | Internet | Track claim data and reimbursement status | Reduce administrative costs, speed up insurance reimbursement, and provide controls and reports |