Capstone 2 Project: Superior Family Medical Clinic

The Capstone Project consists of an integrated, comprehensive set of problems relating to a single scenario. Students apply concepts and skills presented in this book to create solutions to the problems using Word, PowerPoint, Excel, and Access.

Superior Family Medical Clinic (SFMC) is a small nonprofit medical center servicing Lake Forest, Minnesota. SFMC provides primary medical services, health education, screening, and assisted referrals, with emphasis on families who are medically underserved. You work for the Executive Director, Dr. Nancy Anderson, providing assistance to all clinic departments.

Word Capstone 2 Project

Problem: Dr. Anderson has asked for your help in drafting the clinic's annual report. She informs you that she still is waiting for data from the Finance office and instructs you to create headings for the various report sections.

Instructions Part 1: Prepare the annual report shown in Figure 2–1. Change the theme to Origin and the theme colors to Solstice. Change the margins to 1" top and bottom and .75" left and right. Change the paragraph line spacing to 1.5 lines. Apply a Box page border using the color Green, Accent 4, Darker 50% and a border width of 1 pt.

1-pt, Green, Accent 4, Darker 50% Box page border

Title style; centered; Gradient Fill - Indigo, Accent 6, Inner Shadow text effect

22-point Brown, Accent 5, italic Century Gothic font; centered

1.5 Line spacing

Bold, underline

Heading 2 style; 14-point font; Indigo, Accent 6 font color

Soft Edge Oval picture style; Inside Center Shadow picture effect

Superior Family Medical Clinic

2013 Annual Report

Our Mission

Superior Family Medical Clinic, a nonprofit organization, is dedicated to improving the health of the community by providing access to primary medical services, health education, screening, and assisted referrals, with emphasis on families who are medically underserved.

Programs

Clinical Care Experienced and board-certified doctors, nurse practitioners, and registered and licensed practical nurses work together to meet our patients' medical needs. Services include annual physicals, school and sports physicals, prenatal care, pediatric care, immunizations, acute illness care, chronic disease management, and assisted referrals.

Behavioral Health Services Experienced therapists provide clinical services to families and individuals for anxiety and depression, anger management, relationship and parenting concerns, and substance abuse.

Diabetic Management and Treatment We provide ongoing testing, treatment, education, and support for those with diabetes. We emphasize that taking control of diabetes is the key to improving a patient's quality of life.

Health Care Access Services Medical social work includes financial assessment, information, education, assisted referrals, language interpretation assistance, and advocacy. Help is provided in applying for Medicare, Medicaid, Minnesota Care, Badger Care, and other public and private programs.
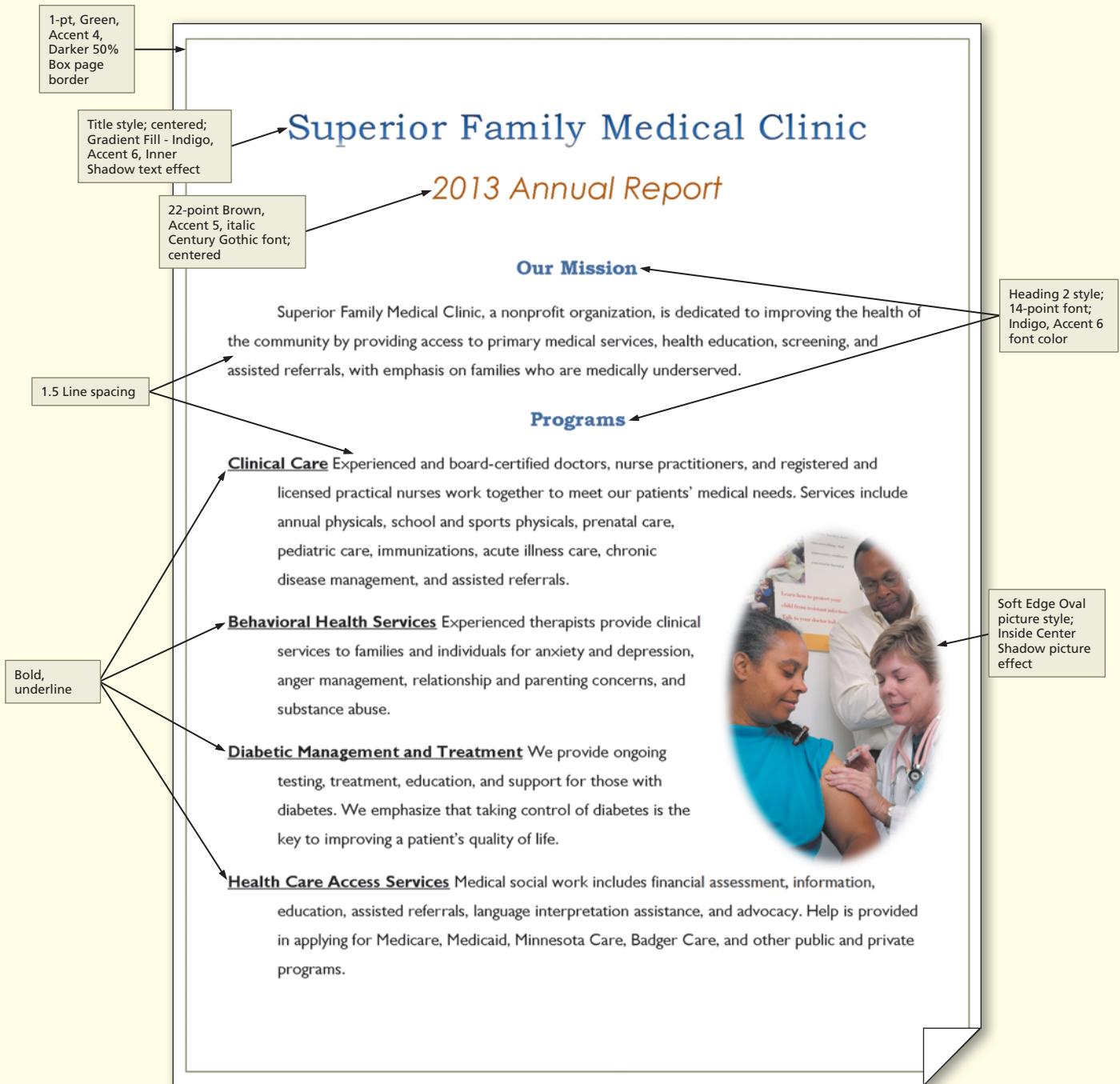
Figure 2–1

Apply the Title style to the heading, Superior Family Medical Clinic. Center the title and then apply the Gradient Fill - Indigo, Accent 6, Inner Shadow text effect. Change the font of the subtitle to 22-point italic Century Gothic with a font color of Brown, Accent 5.

Apply the Heading 2 style to the heading, Our Mission. Center the heading, change the font size to 14 point, change the spacing to 12 pt before and 18 pt after, and then change the color to Indigo, Accent 6. Update the Heading 2 style with this modified style. Apply the Heading 2 style to the following headings: Programs, Patient Testimonials, Funding Sources, and Patient Demographics.

Apply a first line indent to the Mission Statement paragraph.

Bold and underline the name of each service listed below the heading, Programs. Apply a hanging indent to each paragraph.

Insert the picture, Vaccination.jpg, from the Data Files for Students. Resize the picture to approximately 3.5" × 2.31". Apply the Soft Edge Oval picture style and the Inside Center Shadow picture effect. Use Square text wrapping.

On the second page, center the Patient Testimonials section. Change the font to Arial.

Apply the Heading 3 style to the phrase, Board of Directors 2012–2013, and then right-align the text. Apply paragraph shading using the Aqua, Accent 1, Lighter 80% color. Set a custom tab stop at the 4.5" mark on the ruler and then enter all of the names of the directors.

Insert a 16-point Star shape. Apply the Intense Effect - Gold, Accent 2 shape style. Type the following text into the shape, including the quotation marks: `"I never knew such great care was available to me!" – Rosa`. Center the typed text and then bold it. Change the font to 14-point Arial with a font color of Brown - Accent 5. Use the In Front Of Text wrapping and position the shape as shown in Figure 2–2.

Apply a first-line indent to the paragraph under the Funding Sources heading. Bullet the list of funding sources. Save the document using the file name, Capstone 2 Annual Report.

Figure 2–2

Instructions Part 2:   Insert a manual page break before the Patient Demographics heading. On the new page, insert an empty table with four columns and six rows. In the first row, leave the first cell blank and then type `2010; 2011; 2012; 2013`. In the second row, type `Total Patients; 9,397; 9,581; 10,093; 10,768`. In the third row, type `Total Visits; 26,312; 30,448; 28,837; 29,915`. In the fourth row, type `Employed; 56%; 62%; 40%; 47%`. In the fifth row, type `Low Income; 93%; 90%; 88%; 90%`. In the sixth row, type `Uninsured; 67%; 56%; 53%; 40%`. Resize the table to fit the contents. Right-align the numeric content and column headings. Center the years in the first row.

Apply the Medium Grid 3, Accent 4 table style and then center the table on the page. Insert a new column to the left of the 2010 column. Type the following data in the new column: `2009; 7,982; 25,748; 55%; 92%; 71%`. Add a new row to the table above the years, merge the cells, and then type the title, `All Patients - Five Years`.

Change the case of the subtitle, 2013 Annual Report, to uppercase. Change the word, patient, to the word, client, throughout the document. Check the spelling and grammar, correcting any errors, and then count the number of words in the document.

Add a header to the report that includes the clinic initials, SFMC, the current date, and the page number. Right-align the header contents. Remove the header from the first page of the report.

Change the document properties, as specified by your instructor. Save the document and submit it as specified.

PowerPoint Capstone 2 Project

Problem: SFMC's Health Education Department has asked for your help in designing a PowerPoint presentation for Type 2 diabetes patients.

Instructions Part 1:   Using the outline in Figure 2–3, create the presentation shown in Figure 2–4. Type the title and content text for the title slide and the three text slides shown in Figures 2–4a through 2–4d. Apply the Grid document theme and then change the theme colors to Civic. Change the background style to Style 5.

Managing Type 2 Diabetes

Superior Family Medical Clinic

Know Your Diabetes ABCs

    A for the A1C test

        Shows blood glucose (blood sugar) levels for past three months

        Goal for most people with diabetes is below 7

    B for Blood pressure

        Goal for most people with diabetes is below 130/80

    C for Cholesterol

        LDL goal for most people with diabetes is less than 100

        HDL goal for most people with diabetes is above 40

Make Healthy Food Choices

    Eat variety of colorful vegetables and fruits

    Choose foods with high fiber

        Look for whole grain cereals, breads, pasta, and rice

    Reduce fat intake

        Choose lean meats and low- or non-fat dairy

    Drink water

Make Time for Exercise

    Exercise 30 to 60 minutes daily

    Fit more physical activity into your day

        Park your car farther from destination

        Walk during lunch break

        Take stairs instead of elevator
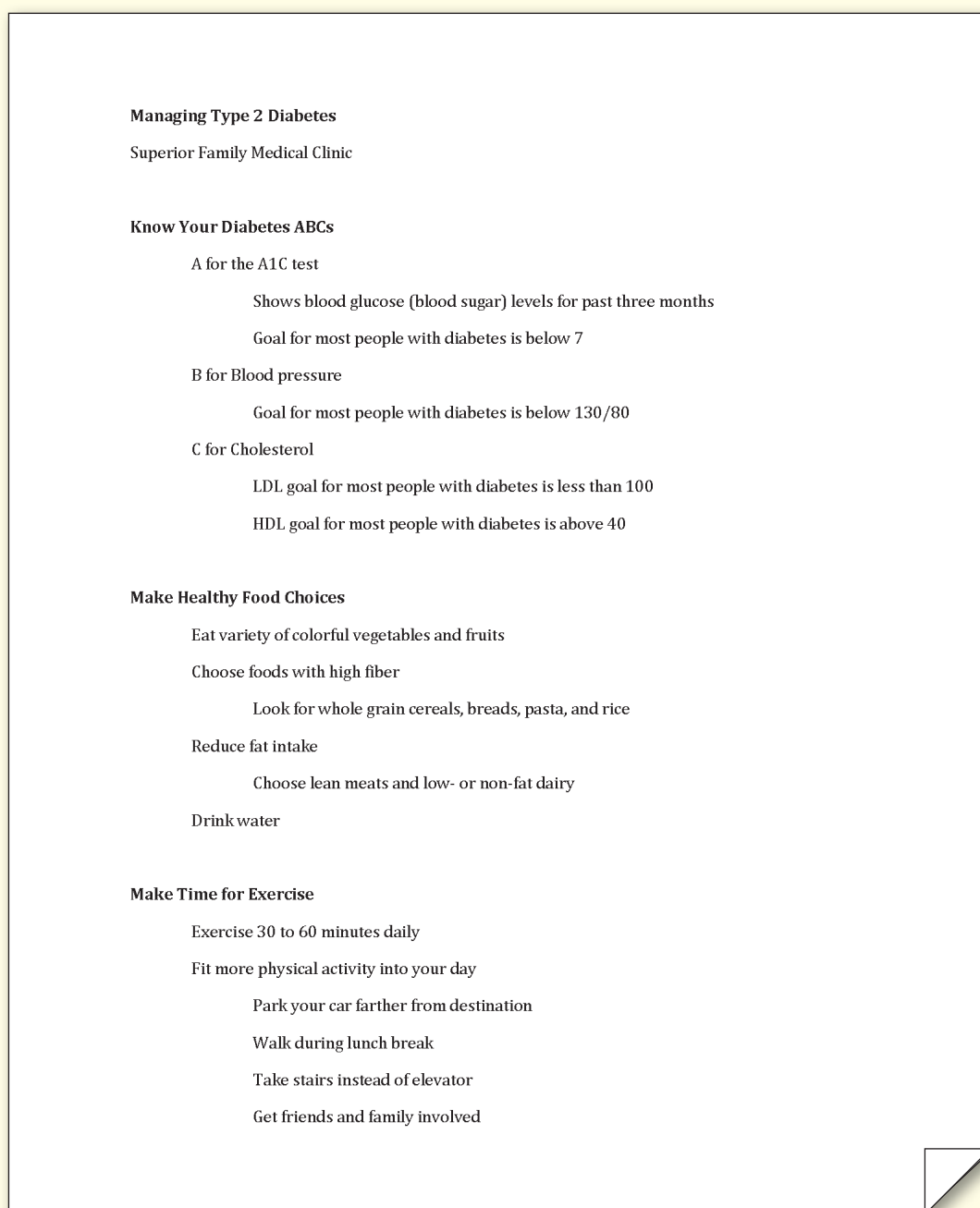
        Get friends and family involved

Figure 2–3

PowerPoint Capstone 2 Project *continued*

On the title slide, shown in Figure 2–4a, modify the title paragraph, Managing Type 2 Diabetes, to 60 point, Orange, bold text. Increase the font size of the entire subtitle paragraph to 28 point. Insert the audio clip, Time Passing 60, from Office.com. Start this clip automatically, and then set the volume to Medium.

On Slide 2, shown in Figure 2–4b, insert the Denim texture background. In the slide title, change the case of the S in ABCs to lowercase. In the content placeholder, increase the font size of the A, B, C to 44 point. Insert the Oval shape, resize it so it is approximately 1.7" × 2", change the shape fill to white, and the shape outline to Red, Accent 1. Type `KNOW YOUR TARGETS!`, change the font size to 20 point, change the color to Green, and then bold the text.

On Slide 3, shown in Figure 2–4c, change the layout to Two Content. Apply the Intense Effect – Green, Accent 5 shape style to the title text. Insert the picture, Fruit Vegetables Grain.jpg, from the Data Files for Students. Resize the picture so it covers the entire slide. Apply the Soft Edge Rectangle picture style and then adjust the brightness and contrast to -20%. Send the picture to the back until the content placeholders are visible and then delete the right content placeholder, if necessary. Apply the Ice Blue, Background 2 shape fill to the left content placeholder and then center this placeholder on the slide.

On Slide 4, shown in Figure 2–4d, change the layout to Two Content. Insert the picture, Brisk Walking.jpg, from the Data Files for Students. Adjust the clip's color by applying the Temperature: 8800K color tone. Apply the Bevel Rectangle picture style. Resize the picture so that it is approximately 3.85" × 3.06", change the border color to Orange, Accent 6, change the border weight to 3 pt., and then position the picture as shown in Figure 2–4d. Insert the Rounded Rectangle shape, resize it so that it is 1" × 3", and then position it as shown. Apply the Light 1 Outline, Colored Fill - Orange, Accent 6 shape style. Type `Brisk walking is great exercise!` in the shape, change the font to Century Gothic, change the font size to 24 point, and then bold the text. Save the presentation using the file name, Capstone 2 Diabetes Presentation.

(a) Slide 1 (Title Slide)

(b) Slide 2
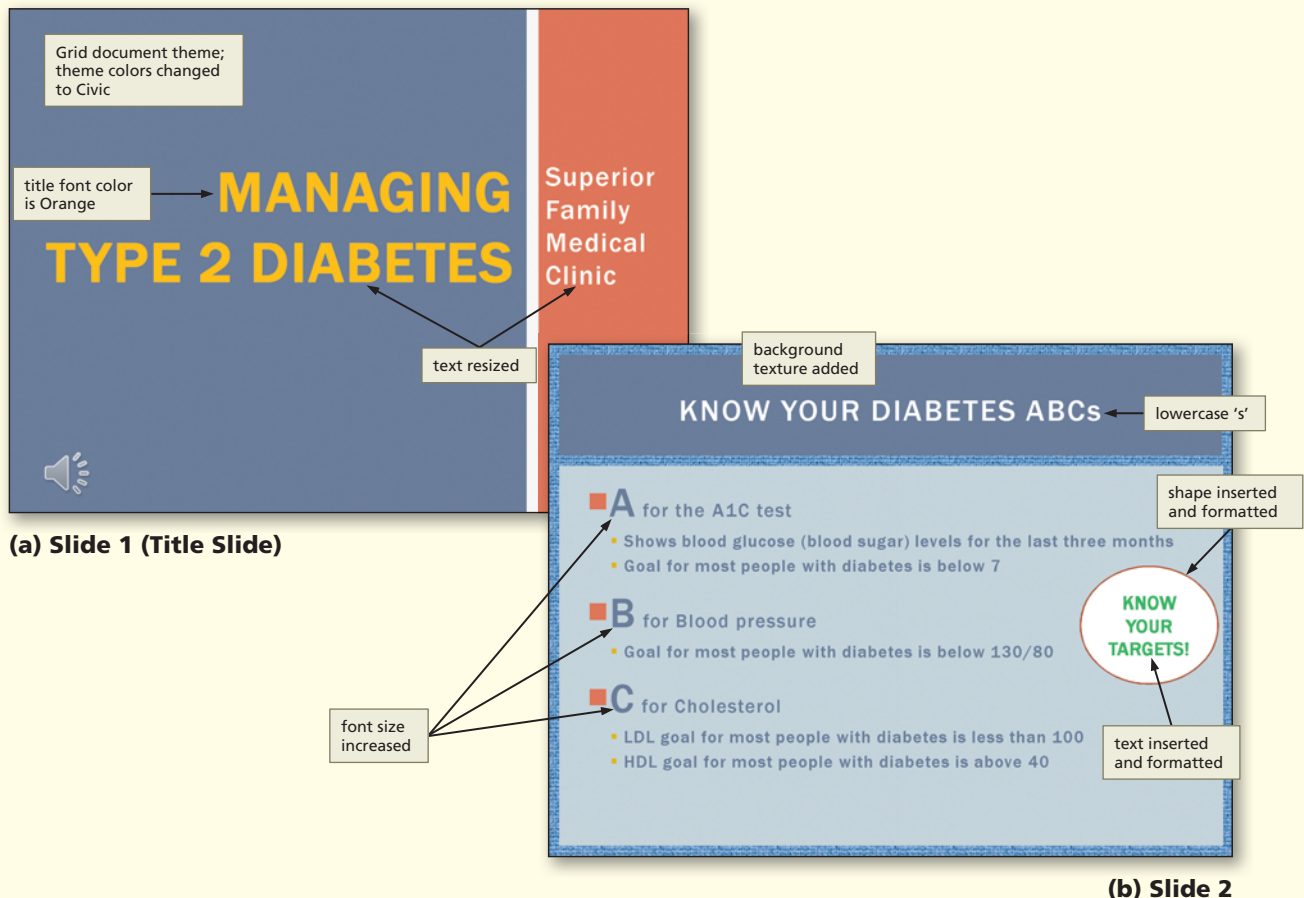
Figure 2–4 Continued

(c) Slide 3

(d) Slide 4
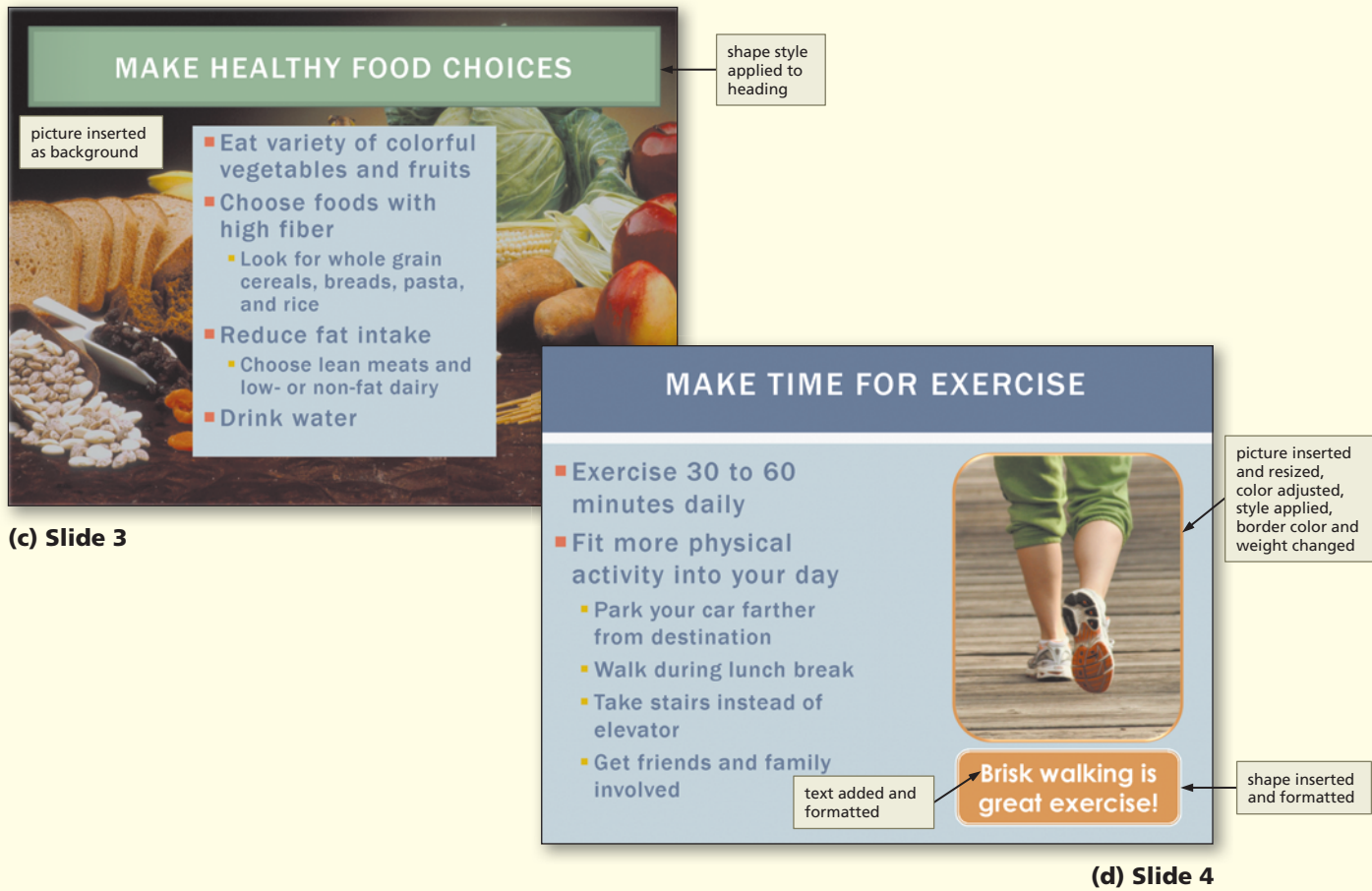
Figure 2–4

Instructions Part 2: Add a new slide to the presentation. On Slide 5 (Figure 2–5), type **Take Control** as the slide title. Insert the video clip, Take Control, from the Data Files for Students. Resize this clip to approximately 4" × 5.33". Apply the Reflected Perspective Left video style (Intense area). Add a border with the Red, Accent 1 color and 6 pt. weight. Trim the video from the end so that the End Time is 00:22:90. Change the playback options so that the video will play automatically.
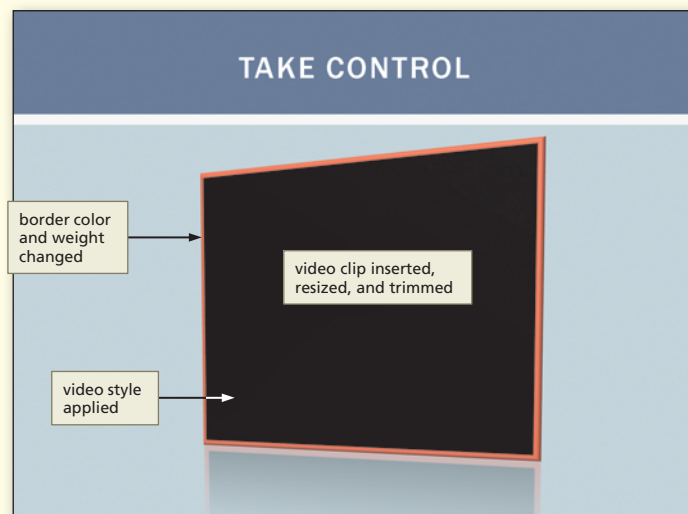
Figure 2–5 Slide 5

Apply the Wipe transition (Subtle area) to all slides and increase the duration to 3.00 seconds. On Slide 2, type **Recommended targets from the National Diabetes Education Program** in the Notes pane. On Slide 5, type **PSA, National Diabetes Education Program** in the Notes pane.

Change the document properties, as specified by your instructor. Save the presentation and submit it as specified.

Excel Capstone 2 Project

Problem: SFMC's executive director, Dr. Nancy Anderson, has asked you to create a revenue analysis statement for her upcoming board meeting.

Instructions Part 1: Type the worksheet title, **Superior Family Medical Clinic**, in cell A1. Type the worksheet subtitle, **Annual Revenue Analysis**, in cell A2. Beginning in row 3, enter the column headings, sources of revenue, and revenue shown in Table 2–1.

| Table 2–1				
Source	**1st Qtr**	**2nd Qtr**	**3rd Qtr**	**4th Qtr**
Patient Fees	671443	724686	647628	709100
Fund Raising	73142	103486	99342	64743
United Way	20732	18650	18290	17371
City of Lake Forest	80626	130067	80304	120931
City of Edgecombe	53982	52584	51652	48389
Forest County	25660	27151	20880	30134
Federal Grants	345818	543751	690072	276287
Other Grants	225000	120500	143500	68000

Create a total row for each quarter, a total column for each source of revenue, and the grand total for all clinic revenue.

Format the worksheet title using the Title cell style. Merge and center the title across columns A through F. Format the worksheet subtitle with 14-point Century, Dark Blue, Text 2, Darker 25%, bold font. Merge and center the subtitle across columns A through F.

Use cell styles to format the range A3:F3 with the Heading 3 cell style. Type **Total Revenue** in cell F3 and wrap the text if necessary. Center the column headers in row 3. Apply the Accounting Number Format to the range B4:F4. Apply the Comma Style numeric format to the range B5:F11. Type **Total** in cell A12 and apply the Total cell style to the range A12:F12. Apply the Accounting Number Format to the range A12:F12. Remove the decimal point for the range B4:F12. Adjust the width of Column A to best fit. Set the column width of columns B through F to 14 points.

Use conditional formatting to change the formatting to red font on a red background for any cell in the range B4:E4 that contains a value less than $25,000.

Select the range A3:E11 and then insert a 3-D Clustered Column chart. Apply the Style 34 chart style. Move the chart to a new sheet with the name, Revenue Distribution. Add the chart title, Annual Revenue Distribution, above the chart.

Rename the Sheet1 tab as Annual Revenue and then apply the Green standard color to the sheet tab.

Preview the worksheet. Change the worksheet margins to wide and change the orientation to landscape, as shown in Figure 2–6.

Save the workbook using the file name, Capstone 2 Revenue Analysis.

Superior Family Medical Clinic
Annual Revenue Analysis

Source	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total Revenue
Patient Fees	$ 671,443	$ 724,686	$ 647,628	$ 709,100	$ 2,752,857
Fund Raising	73,142	103,486	99,342	64,743	340,713
United Way	20,732	18,650	18,290	17,371	75,043
City of Lake Forest	80,626	130,067	80,304	120,931	411,928
City of Edgecombe	53,982	52,584	51,652	48,389	206,607
Forest County	25,660	27,151	20,880	30,134	103,825
Federal Grants	345,818	543,751	690,072	276,287	1,855,928
Other Grants	225,000	120,500	143,500	68,000	557,000
Total	$ 1,496,403	$ 1,720,875	$ 1,751,668	$ 1,334,955	$ 6,303,901

Figure 2–6

Instructions Part 2:   Dr. Anderson has given you the following corrections to the data: Other Grants in Q2 (cell C11) should be $180,500 and the United Way in Q4 (cell E6) should be $27,371.

Change the theme of the Annual Revenue worksheet to Concourse. Change the font size in cell A1 to 20. Change the font color of cell A2 to bold Dark Red, Accent 6, Darker 50%. Remove the merge of cells A1 and A2, and then merge and center the range A1:H1 and the range A2:H2. Change the background color of the range A1:A2 to Orange, Accent 3, Lighter 40%. Draw a thick box border around the range A1:A2.

Change the height of row 12 to 25 points.

In the range A14:A15, enter the row labels, Highest and Lowest. Change the font color to bold Orange, Accent 3, Darker 50%. In cells B14:B15, determine the maximum and minimum values for the values in the range B4:B11 and then copy the range B14:B15 to C14:E15.

In cell H3, type the phrase, `Percent of Total`, and wrap the text. Use the Format Painter to apply the formatting from cell F3 to cell H3. Use a formula to determine what percentage each revenue source is of the annual revenue total. In cell H4, the Patient Fees Percent of Total Revenue equals the Total Patient Fees Revenue (cell F4) divided by the Total Revenue (cell F12), or = F4 / F12. Copy the formula from cell H4 to the range H5:H11. Be sure to use absolute cell reference as needed. Format the range H4:H11 as Percentage number format with one decimal place. Set the width of column G to 4 points and the width of column H to 10 points.

Select the ranges A4:A11 and H4:H11 and then insert a 3-D Pie chart, as shown in Figure 2–7. Move the chart to a new sheet with the name, Revenue by Source. Change the tab color to the Blue standard color and drag the tab to the right of Annual Revenue. Insert the chart title, Revenue by Source, above the chart, change the font size to 24 points, and change the font color to Dark Red, Accent 6. Turn off the legend. Add custom data labels to the chart that include the category name and leader lines, and position the labels with best fit. Change the font size of the data labels to 14 points. Rotate the chart so that the Y rotation is 30°. Select the data series and then apply the Cool Slant Bevel shape effect.

Compare your chart to Figure 2–7, make any necessary corrections, and then save your workbook.
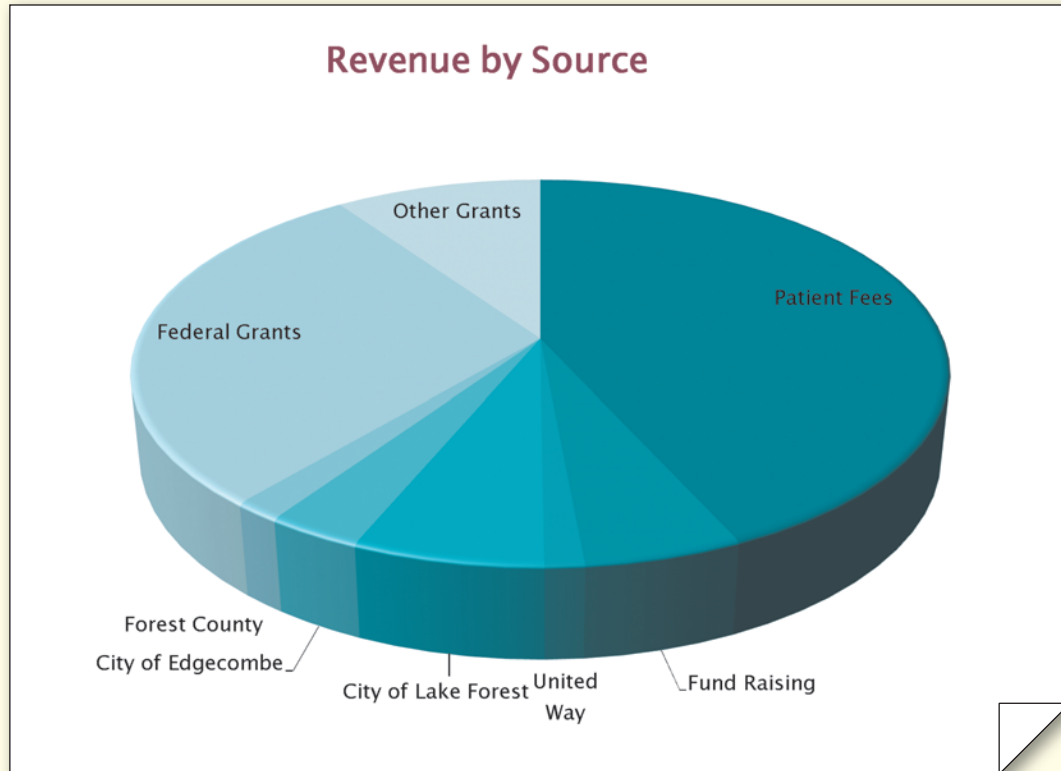
Excel Capstone 2 Project *continued*

Figure 2–7

Instructions Part 3: Dr. Anderson wants you to project revenue for next year using the Annual Revenue worksheet. In cells A1 and A2, remove the merge and center and border formatting. Use the Format Painter to apply the formatting from the range H1:H3 to the range I1:J3. Apply the Orange, Accent 3, Lighter 40% background color to the range I1:J2.

Insert a Sparkline Line chart for the range B4:E4 in cell I4. Copy the cell I4 to the cell range I5:I12. Set the width of column I to 14 points, add the column label, Revenue Trend, in cell I3, and then use the Format Painter to apply the formatting in cell H3 to cell I3.

Set the width of column J to 14 points. In cell J1, enter the phrase, Percent Change, and wrap the text if necessary. Enter the number 0.025 in cell J2, and then format the cell as a percentage with one decimal place. Apply a Thick Box Border to the range J1:J2.

In cell J3, enter the phrase, Next Year Revenue, and wrap the text if necessary. Use a formula to determine next year's revenue. In cell J4, the Next Year Patient Fees Revenue equals the Total Patient Fees Revenue (cell F4) plus the Total Patient Fees Revenue (cell F4) multiplied by the Percent Change value (cell J2), or = F4+(F4*J2). Copy the formula from cell J4 to the range J5:J11 using absolute cell referencing as needed, and then total the results in cell J12. Use the Format Painter to apply the formatting of the range F3:F12 to the range J3:J12.

After reviewing the revenue trends, Dr. Anderson thinks that a 2.5 percent increase in revenue is unrealistic. She is concerned that the next year's total revenue might be less than this year's total revenue. A loss of revenue next year would result in having to make cutbacks in all departments. Dr. Anderson would like to establish a percentage that she could use as a baseline when making cutbacks. Use what-if analysis to determine what the percent change would be if the clinic showed a revenue loss next year resulting in a Next Year Revenue total of $6,250,000.

Use the Replace command to replace all instances of the word, Revenue, with Operating Funds. Review the worksheet and wrap text if necessary.

Change the document properties, as specified by your instructor. Save the workbook and submit it as specified.

Access Capstone 2 Project

Problem: Dr. Anderson has asked you to design an Access database to track patients and the nurse practitioner they see at the clinic. You want to make sure that you follow standard database guidelines so that the database can be imported into an electronic medical record system at a later date.

Dr. Anderson keeps patient and nurse practitioner addresses in Word tables, while maintaining financial information in Excel spreadsheets. She also has a list of which patients see which nurse practitioners as their primary care provider. Patients Aalya, Caleb, Emily, James Palmer, and Nasir all see Mariana Silva, the pediatric nurse practitioner (PNP). Nurse Practitioner ID 12 has patients Craig Childs, Denise Hixson, James and Sabrina Rodriguez, Aamera Siddiqui, Susan Winn, and Sunja Yun. Mr. Blanchard, Mr. Dikeos, and Mr. and Mrs. Varga all visit NP Williams. Tricia Ferrando is the Family Nurse Practitioner (FNP) for the following patients: L125, P245, P246, S341, and W385. NP Grace Upton does not have any assigned patients.

Instructions Part 1: Using the data shown in Figure 2–8 and the information in the previous paragraph, design and create the SFMC database. The data shown in Figure 2–8 is included in the Data Files for Students in the following files: Capstone 2-8a.docx, Capstone 2-8b.xlsx, Capstone 2-8c .docx, and Capstone 2-8d.xlsx. Use the database design guidelines provided in Chapter 1 to assist you in the design process.

Patient ID	First Name	Last Name	Street	City	State	Postal Code
W385	Michael	Winn	8 Peachwood Cir.	Lake Forest	MN	55817
W376	Susan	Winn	8 Peachwood Cir.	Lake Forest	MN	55817
W371	Emily	Winn	8 Peachwood Cir.	Lake Forest	MN	55817
S341	Rick	Sullivan	14 Avon St.	Rivers	WI	54881
Y102	Caleb	Yun	23 Huron St.	Edgecombe	MN	55818
R224	Sabrina	Rodriguez	111 24th Ave. NE	Huron	MN	55819
R226	James	Rodriguez	111 24th Ave. NE	Huron	MN	55819
H245	Denise	Hixson	38 Sycamore Ln.	Rivers	WI	54881
M278	Aayla	Moon	3 Cougar Ct.	Lake Forest	MN	55817
V027	Erik	Varga	576 W Fulton St.	Rivers	WI	54881
V034	Delia	Varga	576 W Fulton St.	Rivers	WI	54881
B362	Vincent	Blanchard	110 Judith Ave. #401	Huron	MN	55819
L125	Jon	Lehman	231 Windbrook Grove	Edgecombe	MN	55818
P245	Ana	Parsaeian	76 Woodlynn Ave.	Rivers	WI	54881
C387	Craig	Childs	190 Jefferson St. NE	Lake Forest	MN	55817
S349	Nasir	Siddiqui	73 Shelter Bay Rd.	Edgecombe	MN	55818
S347	Aamera	Siddiqui	73 Shelter Bay Rd.	Edgecombe	MN	55818
Y101	Sunja	Yun	23 Huron St.	Edgecombe	MN	55818
P213	James	Palmer	31 Aspen Lake Dr.	Huron	MN	55819
P246	Marika	Palmer	31 Aspen Lake Dr.	Huron	MN	55819
D173	Peter	Dikeos	316 N 18th St.	Lake Forest	MN	55817

(a) Patient Address Information (Word Table)

Figure 2–8 Continued

Access Capstone 2 Project *continued*

	A	B	C	D	E	F	G
1	Patient ID	First Name	Last Name	Current Charges	Previous Balance		
2	W385	Michael	Winn	0.00	15.48		
3	W376	Susan	Winn	276.00	135.00		
4	W371	Emily	Winn	85.00	0.00		
5	S341	Rick	Sullivan	335.00	175.00		
6	Y102	Caleb	Yun	125.00	0.00		
7	R224	Sabrina	Rodriguez	20.00	87.23		
8	R226	James	Rodriguez	85.00	0.00		
9	H245	Denise	Hixson	85.00	237.00		
10	M278	Aayla	Moon	230.00	423.67		
11	V027	Erik	Varga	235.00	468.00		
12	V034	Delia	Varga	125.00	176.00		
13	B362	Vincent	Blanchard	18.39	335.00		
14	L125	Jon	Lehman	20.00	0.00		
15	P245	Ana	Parsaeian	350.00	125.00		
16	C387	Craig	Childs	20.00	498.17		
17	S349	Nasir	Siddiqui	0.00	0.00		
18	S347	Aamera	Siddiqui	125.00	85.00		
19	Y101	Sunja	Yun	85.00	0.00		
20	P213	James	Palmer	20.00	378.89		
21	P246	Marika	Palmer	279.46	125.00		
22	D173	Peter	Dikeos	21.97	56.13		
23							

(b) Patient Financial Information (Excel Workbook)

Nurse Practitioner ID	First Name	Last Name	Street	City	State	Postal Code
12	Krissa	Swenson	403 Brookline St.	Lake Forest	MN	55817
25	Tricia	Ferrando	64 South Cedar Lake Rd.	Lake Forest	MN	55817
28	Anthony	Williams	447 W Oxford St.	Lake Forest	MN	55817
33	Mariana	Silva	212 Washington Rd.	Rivers	WI	54881
47	Grace	Upton	27 N 13th Rd. #2	Edgecombe	MN	55818

(c) Nurse Practitioner Address Information (Word Table)

	A	B	C	D	E	F	G
1	Nurse Practitioner ID	First Name	Last Name	Salary YTD	Hourly Billing Rate		
2	12	Krissa	Swenson	18,375.00	43.00		
3	25	Tricia	Ferrando	15,937.50	37.00		
4	28	Anthony	Williams	17,062.50	40.00		
5	33	Mariana	Silva	17,500.00	43.00		
6	47	Grace	Upton	15,500.00	37.00		
7							
8							
9							

(d) Nurse Practitioner Financial Information (Excel Workbook)

Figure 2–8

When you have completed the database design, create the database, create the tables, and then add the data to the appropriate tables. (*Hint:* You can type the data into the tables from the figures or modify the data files and import the data.) Be sure to determine the correct data types and field sizes. Change the caption of the Nurse Practitioner ID to NP ID. After adding the records, resize the columns in the datasheets to best fit the data.

Use the Simple Query wizard to create the query shown in Figure 2–9 and save it as Patient Address Query. Modify the Patient Address Query by only showing those patients who live in Minnesota (MN). Do not save the modified query.
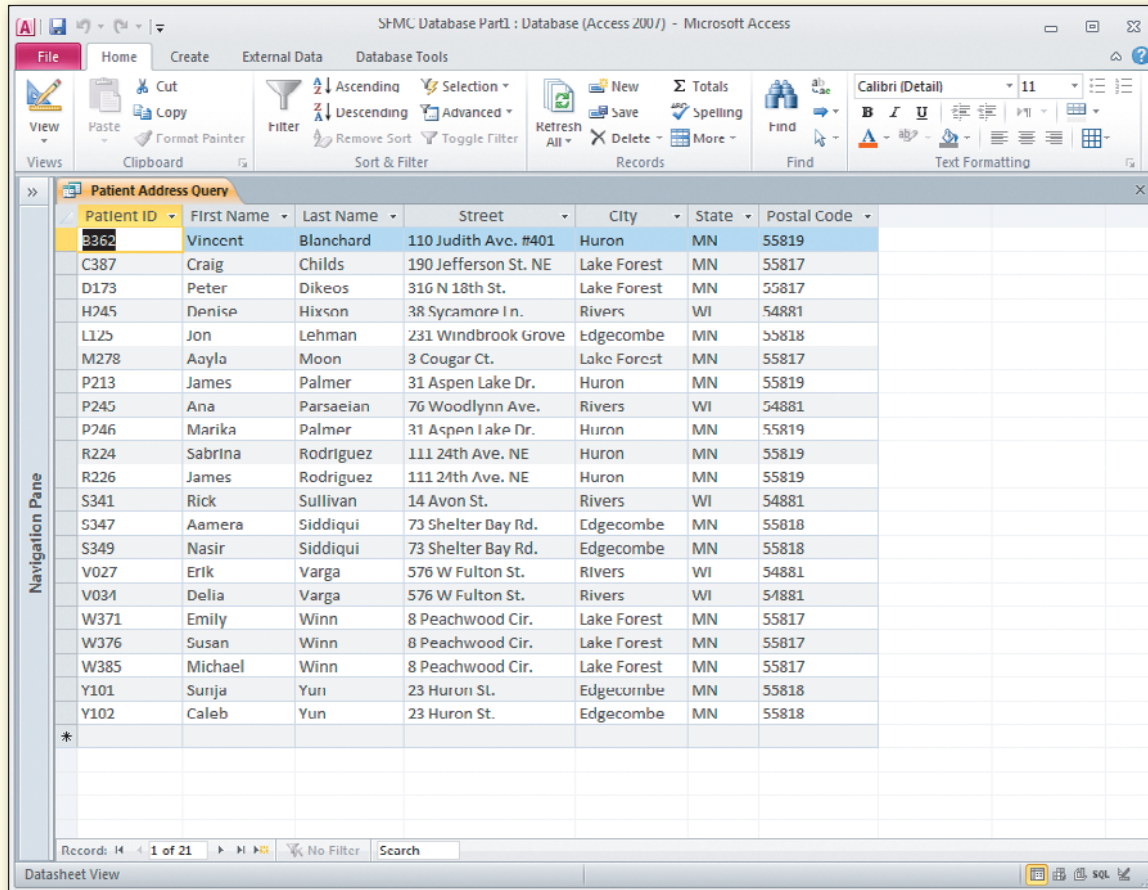

Figure 2–9

Create a simple form for the Patient table and save it as Patient Form.

Use the Report button to create a report for the Patient table shown in Figure 2–10. Use Layout view to change the report title and delete the address-related columns (Street, City, State, and Postal Code). Modify the column headings to match those shown in Figure 2–10. Add totals for the Current Charges and Previous Balance fields to the report. Save the report as Patient Financial Report.

Access Capstone 2 Project *continued*

Patient ID Number	First Name	Last Name	Current Charges	Previous Balance
B362	Vincent	Blanchard	$18.39	$335.00
C387	Craig	Childs	$20.00	$498.17
D173	Peter	Dikeos	$21.97	$56.13
H245	Denise	Hixson	$85.00	$237.00
L125	Jon	Lehman	$20.00	$0.00
M278	Aayla	Moon	$230.00	$423.67
P213	James	Palmer	$20.00	$378.89
P245	Ana	Parsaeian	$350.00	$125.00
P246	Marika	Palmer	$279.46	$125.00
R224	Sabrina	Rodriguez	$20.00	$87.23
R226	James	Rodriguez	$85.00	$0.00
S341	Rick	Sullivan	$335.00	$175.00
S347	Aamera	Siddiqui	$125.00	$85.00
S349	Nasir	Siddiqui	$0.00	$0.00
V027	Erik	Varga	$235.00	$468.00
V034	Delia	Varga	$125.00	$176.00
W371	Emily	Winn	$85.00	$0.00
W376	Susan	Winn	$276.00	$135.00
W385	Michael	Winn	$0.00	$15.48
Y101	Sunja	Yun	$85.00	$0.00
Y102	Caleb	Yun	$125.00	$0.00
			$2,540.82	$3,320.57

Patient Financial Report — Tuesday, October 01, 2013 1:50:30 PM — Page 1 of 1

Figure 2–10

Instructions Part 2: Answer the following questions using the Patient table and including the Patients' first and last names, City, State, Previous Balance, and Current Balance fields. Save each query.

(a) Which patients are located in Edgecombe? Save the query as 2-A Query.

(b) Which patients have last names beginning with the letter 'S'? Save the query as 2-B Query.

(c) Which patients have a postal code of 55817? (The Postal Code field should not appear in the results.) Save the query as 2-C Query.

(d) Which patients have current charges of $125? Save the query as 2-D Query.

(e) Which patients have a previous balance greater than $250? Save the query as 2-E Query.

(f) Which patients have current charges of less than $150 and have a previous balance greater than $150? Save the query as 2-F Query.

(g) Which patients live in Huron or have a previous balance greater than $300? Save the query as 2-G Query.

(h) Sort the patients so that those with the greatest previous balance appear at the top and then display only the top 25 percent in the query results. Save the query as 2-H Query.

Sort the Patient table by city and omit duplicates. Save the query as Patient City Query.

Join the Patient table and the Nurse Practitioner table. Include the NP ID from the Nurse Practitioner table and the Patient ID, patient first and last names, current charges, and previous balance from the Patient table. Sort the records in ascending order by patient last name within the NP ID. Make sure that all nurse practitioners are included, regardless of whether they have any patients. Save the query as NP-Patient Query. Export the NP-Patient Query to Excel and save the export steps.

Use the NP-Patient Query and the Report Wizard to create a report. Format the report to fit on one page. Save the report as NP-Patient Report.

Create a query using the Patient table and include the Patient ID, patient first and last names, current charges, and previous balance fields. Create a calculated field that adds the current charges to the previous balance. Add the caption, Total Due, to the field. Save the query as Patient Total Due Query.

Create a query to calculate the average current charges and average previous balance for all patients and save the query as Patient Average Query.

Calculate the minimum and maximum current charges for all patients who live in Wisconsin and save the query as Patient MinMaxWI Query.

Calculate the average current charges and average previous balance by city and save the Patient Average City Query.

Create a simple form using the Patient Address Query. Save the form as Patient Address Form.

Using the Patient table, create a crosstab query where NP ID appears as the row header and City appears as the column header. Count the number of patients using the Patient ID field. Save the query as NP-City Crosstab.

Instructions Part 3:   You have been asked to update some patient and nurse practitioner information. Create a split form using the Patient table. Filter the form to locate Patient ID S341 and change the address to 1348 W Mountain Rd. Save the form as Patient Split Form.

Using the split form, add the following records to the Patient table: Stig Anderson (ID A247) lives at 72 Riverway Blvd. #2, Lake Forest, MN 55817. His current charges are $175 and he has no previous balance. He sees the nurse practitioner with the NP ID 47. Use a Delete query to delete Patient ID L125 from the database. Save the query as Delete Patient Query.

Using the Patient table, filter the table to display all the patients who live in WI. Clear the filter and then filter the table to display all postal codes that begin with 55. Use Filter by Form to display all patients who have Current Charges of $125 and live in postal code 55818. Finally, display in ascending order by last name all patients who live in postal code 54881 and who have a previous balance greater than $100.

Dr. Anderson would like to add more details about the patients to the patient table. Add a calculated field, named Total Due, to sum the Current Charges and the Previous Balance fields. (Insert the new field to the right of the Previous Balance field.) Add the multivalued lookup field, Services, to the Patient table with the following values: ANL (annual physical), SCH (school physical), SPT (sport physical), VAC (vaccination), LAB (lab work), DOC (doctor visit), FLW (follow-up), and MGT (ongoing disease management). Add services to the following patients as shown in Table 2–2.

Table 2–2	
Patient ID	**Services**
A247	LAB, DOC, FLW
P213, R226, S347	SPT
B362, M278, W385	ANL
W371, Y102	SCH, VAC
H245	LAB, MGT
D173	DOC

Access Capstone 2 Project *continued*

Dr. Anderson would also like to add certification details to the Nurse Practitioner table. Add the lookup field, Certification, with the following values: CNP (certified nurse practitioner), CFNP (certified family nurse practitioner), and CPNP (certified pediatric nurse practitioner). Limit the lookup field to these three choices. Use an Update query to assign CNP to all nurse practitioners and then save the query. Change those nurse practitioners with NP IDs 12 and 25 to CFNP and the nurse practitioner with NP ID 33 to CPNP.

In the Patient table, specify the following: Patient ID field displays uppercase letters automatically; Last Name is a required field; and MN is the default value for the State field. Add a rule that specifies that the Previous Balance must be greater than or equal to $0 and less than $1000. Test the validation rules.

Update the Patient Form to reflect the changes in the Patient table. Update the Patient Financial Report to include the new Total Due field. If necessary, modify the report layout so that it will print on one page.

Using the Patient table, add a total row that sums the Current Charges, Previous Balance, and Total Due fields. Using the Nurse Practitioner table, add a total row that sums the Salary YTD field and averages the Hourly Billing Rate field. In the Nurse Practitioner table, display only the horizontal gridlines; change the colors to Olive Green, Accent 3, Lighter 40%; and then change the font to Arial. Save the changes to the Nurse Practitioner table. Return to the Patient table and remove the total row.

After reviewing the database, Dr. Anderson would like to make sure that the data follows clinic guidelines. Make sure that no patient is assigned a nurse practitioner who is not in the database. Additionally, make sure any NP ID changes in the Nurse Practitioner table are applied to the Patient table.

Submit the database in the format specified by your instructor.

Photo Credits