

# Calculating Weekdays in Excel

## USE THIS FEATURE TO ASSIST YOUR CLIENTS

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M edical billing companies store a wide variety of data that can really help the practices they support. In this article, we will look at how dates of service or other dates in a billing system can be converted to weekdays so that medical practices can analyze things like weekend call premiums or productivity by day of the week. Here are two ways to show whether or not a given date is a weekday or a weekend.

#### **The WEEKDAY Function**

The WEEKDAY function takes a date and returns a number that symbolizes the day of the week that the given date falls on. The structure of the WEEKDAY function is **=WEEKDAY(date, return type)**. The date needs to be a serial number stored as a date in Excel for the WEEKDAY function to work. Excel stores all dates and times as numbers. For example, November 1, 2013 is stored as 41,579. November 1, 2013 at 9:15 am is stored as 41,579.3854166667.

Return type is an optional argument based on a list of choices you can use to tell Excel what day the week starts on. For example, the default is 1, which treats Sunday as 1 through Saturday as 7. I like to use return type 2, which treats Monday as 1 through Sunday as 7. Using a return type of 2 makes it easy to write a formula that says if the WEEKDAY value is greater than 5, it must be a weekend since Saturdays are treated as 6 and Sundays as 7.

For example, the formula **=IF(WEEKDAY(A10,2)>5,"Premium","**) looks at the date stored in cell A10. If the WEEKDAY function returns a number greater than 5, it must be a weekend. The IF formula displays the word "Premium" in the cell if it's a weekend, otherwise the empty double quotes leave the cell blank.

#### **Custom Formatting**

If you do not need to make any calculations based on the day of the week but want to show a date as text (i.e., instead of 12/2/2013, display "Monday"), use custom formatting. Cells B26 through B28 in Figure 1 all contain the date 11/18/2013. The difference is the way the date is displayed. Cell B26 is displayed using the "Short Date" format from the number format box on the Home tab, as shown in Exhibit 2. To get Excel to show "Mon" or "Monday," you need to create a custom format.

Start by selecting the cell you want to format. In our example, select cell B27. Go to the Home tab on the ribbon, select the number format box, and choose "More Number Formats," as shown in Figure 3. Figure 4 shows the "Format Cells" window that should appear. Make sure the Number tab is selected, choose "Custom" from the Category section, and enter the code "ddd" in the Type box. The "ddd" code prompts Excel to display a three letter abbreviation like "Mon" for the day of the week instead of the entire date. To get Excel to use the full name of the day, such as the word "Monday" shown in cell B28, use code "ddd" in the Type box instead.

Excel offers a wide variety of custom ways to format dates and other numbers. Scan through the list of existing date codes underneath the Type box to see formatting code examples. The formatting code "m" displays the month in digits. Single digits months are shown with a single digit. The code "mm" displays the month with two digits. For example, a September date formatted as "m" would be 9 while an "mm" format would be 09. An "mmm" custom format would show "Sep" for a September." There are custom formats for times as well.

The WEEKDAY function may be best to use in formulas like IF statements, while custom date formats might be a little quicker to use once the custom format has been created. You can choose either tool to make your life a little easier as you figure out call and other day of the week related questions. Excel Video 165 at www.mooresolutionsinc.com is a great review of the WEEKDAY function. Excel Video 218 discusses custom date formats.

Nate Moore, CPA, MBA, FACMPE writes custom SQL Server code to mine practice management data for practices throughout the country. Nate's first book, Better Data, Better Decisions: Using Business Intelligence in the Medical Practice was just published by MGMA. His free Excel Videos have been viewed over 500,000 times and are available at mooresolutionsinc.com.

SOFTWARE



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	GU	151		61
		1.1		

В	А	
		25
11/18/2013	Formatted as short date	26
Mor	Custom formatting ddd	27
Monday	Custom formatting dddd	28

IGURE 2		FIGURE 3
ABC 123	General A No specific format	ABC General 123 No specific format
12	Number 41596.00	12 Number 41596.00
	Currency \$41,596.00	Currency \$41,596.00
129	Accounting \$41,596.00	Accounting \$41,596.00
	Short Date 11/18/2013	Short Date 11/18/2013
	Kong Bale Monday, November 18, 2013	Long Date Monday, November 18, 2013
	Time 12:00:00 AM	Time 12:00:00 AM
%	Percentage 4159600.00%	<b>Percentage</b> 4159600.00%
1/2	Fraction 41596	1/2 Fraction 41596
10 <sup>2</sup>	Scientific 4.16E+04	10 <sup>2</sup> Scientific 4.16E+04
M	ore Number Formats	More Number Formats

### FIGURE 4

