Kevin J. Black, M.D. (ORCiD 0000-0002-6921-9567)

Departments of Psychiatry, Neurology, Radiology, and Neuroscience, School of Medicine, Washington University in St. Louis.

Address correspondence to Dr. Black at Campus Box 8134, 660 S. Euclid Ave., St. Louis, Missouri, USA, or kevin@WUSTL.edu.

# BillCorrectly: A software tool to help psychiatrists bill E&M codes appropriately

#### immediate

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## 1 Introduction

Any physician who has dealt with "E&M coding" knows what I'm talking about, while anyone who hasn't won't believe it. Essentially, the Centers for Medicare & Medicaid Services (CMMS) created rules for physicians to use when deciding which of 5 levels of service a doctor should bill for a typical office visit.

"E&M" stands for Evaluation and Management Services, meaning "basically, what doctors do when no procedure is involved." A procedure means anything you do to a living human with a needle or scalpel. Or anesthesia or electricity. Or psychotherapy. Or ... well, anyway, whatever CMMS says it is. And actually there are at least a dozen codes, not just 5 ... but why complicate this introduction?

Theoretically the idea was to prevent doctors from ripping people off by billing a high price for putting on a bandaid,<sup>\*</sup> and to minimize subjectivity in assessing how much work the doctor did for a given visit. In reality, it was a bureaucratic solution to a problem, and some bureaucrat apparently believed that doctors were there to follow flowcharts, whereas doctors had the odd idea that they were there to take care of the patient.

\* Excuse me, I meant any bandage resembling a Band-Aid (R) brand bandage.

CMMS wrote a 90-page book to explain E&M billing to doctors. That right there should clue you in to the fact that E&M coding really does represent the nightmare it's starting to sound like. (Your tax dollars at work.) Apparently bureaucrats didn't realize that doctors weren't going to read a 90-page document every time they submitted a bill. Fortunately, trade organizations stepped in to summarize the key features. For instance, the two main psychiatry guilds produced a two-page guide. But honestly, I doubt that even with that 2-page summary anyone could figure out the correct billing code in less time than it would take actually to complete a Level 3 Established Patient Office Visit.

In the twenty-first century, of course, the obvious solution is to have the electronic medical record (EMR) do most of the work to figure out which code to bill, and apparently some EMR systems do just that. But there are administrators out there (read: legal counsel) who forbid this.\* It may not surprise anyone that saving expensive physician time is not the goal, but apparently even getting the charge right is not the goal. That latter point is particularly hard for me to comprehend considering that CMMS can pursue criminal charges for *underbilling* as well as for overbilling.

\* Really. I kid you not.

So I decided to save time and reduce errors by writing a program to calculate the correct charge for E&M visits. (See criterion 1 for OCPD.)

# 2 Software

The program is written in Free Pascal using Lazarus. Both are available on Windows, Mac OS X, and Linux with a goal to "write once, compile anywhere". (Besides, I wanted to try out Lazarus.)

### 2.1 Use

The user selects options to describe the visit (and its documentation) from a graphical user interface, and then clicks a button labeled "Show me what to bill." (See Fig. 1.) A pop-up window gives the code to be billed, some suggestions about documentation, and an explanation (in bureaucratese) of why the given billing level is supported. (See Fig. 2.) After closing the pop-up window, the user can enter data for the next visit to be billed.

Sill correctly v.C	Exam	Problems	Data
Vost Type New patient ● Established patient History ✓ CC / reason for visit HPI: # elements ● 1-3 elements ● 4+ elements HPI: # chronic conditions	Vital signs V ball signs V pulse P height V weight respiration temperature supine BP V General appearance Neuro	Self-limiting or minor problems          Self-limiting or minor problems         0         1         2 or more             Established problem (to me)         stable or improved         0         1         2         3         4 or more	Image: Clinical labs (review or order)         Image: Clinical labs (review order)
<ul> <li>○ 1-2</li> <li>○ 3+</li> </ul> PFSH	strength and tone gait station	worsening 0 1	Risk 1 stable chronic illness 1+ chronic illness mildly worse / SEs
PMH / PSH Family Hx Social Hx ROS 1 pertinent system	MSE v attention v orientation v speech v STM/LTM language intellect / FoK v flow of thought v associations v affect and mood v content of thought v insight and judgment	2 or more New problem (to me) 0 1+, no further workup planned 1+, additional workup planned	2+ stable chronic illnesses     new problem, no dx, ?prognosis     acute illness with systemic sx     chronic illness cevere worsening / SEs     illness poses threat to life or bodily fn     high risk of morbidity if untreated     modhigh risk of mortality if untreated     high prob. severe, prolonged disability     manage prescription drugs     lithium, clozapine, etc.     acute uncomplicated illness     needs OTC drugs     Show me what to bill.
<ul> <li>2-9 systems</li> <li>10-14 systems</li> </ul>		Time mostly counseling pt/family? mostly coord. care docs/others?	
Reset to defaults.		Attending face-to-face time: 0-9 minutes 10+ minutes 15+ minutes	

Figure 1: The BillCorrectly GUI form on which the user describes the elements of the visit.

## 2.2 Code availability

The source code is available on BitBucket under a BSD license. Users are free to submit changes for the benefit of future users (or to clone it for independent edits) using the git version control system.

A Microsoft Windows executable file is also available: go to the source page on BitBucket, click on BillCorrectly.exe, then click on the small box at upper right labeled "Raw" to download the file. This .exe file works for me on Windows 7. The current file version (as of 04 Oct 2016) is 0.2.1.1.

#### 2.3 Bugs and disclaimers

There are several missing features but I am not aware of any serious bugs. Nevertheless: \* The software's only intended purpose is to help the user bill correctly. \* I do not claim that this software works correctly. \* I don't take

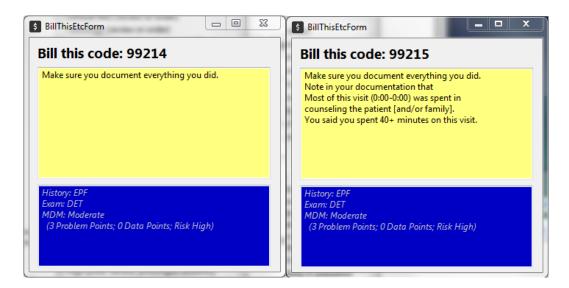


Figure 2: Two examples of the popup "Bill this" window. The one on the left is for the visit described in Fig. 1. The one on the right is for a different visit, demonstrating time-related billing for patient counseling.

responsibility if CMMS or anyone else comes after you because you rely on this software. \* This work is not endorsed by my employer. \* See also the limitations enumerated in the BSD license (LICENSE.TXT on BitBucket).