Electronic Health Record Technology And Its Potential To Increase Costs To Medicare

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I. INTRODUCTION

Healthcare providers have steadily increased the amount billed to Medicare over the past decade. While there are many lawful explanations that could support an $11 billion increase in Medicare fees, the rise in Medicare reimbursements also raises the question of fraudulent billing practices. The deliberate billing of Medicare at levels higher than warranted is a practice referred to as “upcoding.” Fred Schulte, an investigator for The Center for Public Integrity raised the question of whether the emergence of Electronic Health Record Technology was a potential cause for not only higher costs to Medicare, but also a facilitator of fraudulent billing practices, or “upcoding”. Although there is evidence of many factors to support increased costs to Medicare over the years, the Electronic Health Record Technology in its current form seems to provide health care providers with opportunities to increase revenues and simultaneously avoid audits. With the substantial funds put towards the improvement and advancement of health information technology, the Centers for Medicare and Medicaid can work to set guidelines for Electronic Health Record Technology manufacturers to limit the ability for health care providers to “upcode”.

II. BACKGROUND ON THE AMERICAN RECOVERY AND REINVESTMENT AND THE HEALTH INFORMATION TECHNOLOGY FOR ECONOMIC AND CLINICAL HEALTH ACTS

The Centers for Medicare and Medicaid, along with the Office of the National Health Coordinator for Health Information Technology, led the efforts for the use of Electronic Health Record Technology in response to the proposed goals of the American Recovery and

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1 Fred Schulte and David Donald, How doctors and hospitals have collected billions in questionable Medicare fees, The Center for Public Integrity, September 15, 2012.
2 Id.
3 Id.
4 Id.
Reinvestment Act and the Health Information Technology for Economic and Clinical Health Act. The American Recovery and Reinvestment Act was enacted on February 17, 2009 with the purposes of stimulating the United States economy in the short-term and to invest in essential public services, such as health care, to promote long-term economic growth. Specifically, the American Recovery and Reinvestment Act aims to have the health records of all Americans computerized by the year 2014. The Health Information Technology for Economic and Clinical Health Act was enacted as a subsection of The American Recovery and Reinvestment Act in order to advance the “meaningful use” of information technology in the health care industry. The purposes of the Health Information Technology for Economic and Clinical Health Act are as follows:

“b) PURPOSE.--The National Coordinator shall perform the duties under subsection (c) in a manner consistent with the development of a nationwide health information technology infrastructure that allows for the electronic use and exchange of information and that--

(1) ensures that each patient's health information is secure and protected, in accordance with applicable law;
(2) improves health care quality, reduces medical errors, reduces health disparities, and advances the delivery of patient-centered medical care;
(3) reduces health care costs resulting from inefficiency, medical errors, inappropriate care, duplicative care, and incomplete information;
(4) provides appropriate information to help guide medical decisions at the time and place of care;
(5) ensures the inclusion of meaningful public input in such development of such infrastructure;

(6) improves the coordination of care and information among hospitals, laboratories, physician offices, and other entities through an effective infrastructure for the secure and authorized exchange of health care information;
(7) improves public health activities and facilitates the early identification and rapid response to public health threats and emergencies, including bioterror events and infectious disease outbreaks;
(8) facilitates health and clinical research and health care quality;
(9) promotes early detection, prevention, and management of chronic diseases;
(10) promotes a more effective marketplace, greater competition, greater systems analysis, increased consumer choice, and improved outcomes in health care services; and
(11) improves efforts to reduce health disparities."

The American Recovery and Reinvestment Act provided for 19.2 billion dollars to be expended towards the advancement of health information technology. Currently, the government has provided 20.82 billion dollars to the Centers for Medicare and Medicaid as incentives for an Electronic Health Record Technology Incentive Program.

III. THE ELECTRONIC HEALTH RECORD INCENTIVE PROGRAM

Congress envisioned the Electronic Health Record Technology to serve various functions, exceeding the scope of just storing health records. The technology is expected to “electronically transmit diagnostic test images and results, laboratory reports, and radiologic images and reports to physicians so that these can be quickly reviewed and shared with patients.” The Electronic Health Record Technology also provides physicians with the ability

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9 AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009, PL 111-5, February 17, 2009, 123 Stat 11.5
11 Id.
13 Id.
to input appropriate medical information in order to order necessary diagnostic and procedural services.\textsuperscript{14} The effective and appropriate use of Electronic Health Record Technology would ideally improve patient care, reduce costs and facilitate clinical research.\textsuperscript{15}

The Centers for Medicare and Medicaid Services initiated the Electronic Health Record Incentive Program for eligible health care professionals or hospitals in an effort to further the use of information technology in the context of healthcare.\textsuperscript{16} In order for a qualifying health care provider to receive incentives for participating in the Electronic Health Record Incentive Program, it must show that it has “meaningfully used” the certified Electronic Health Record Technology in a way that is set out through objectives determined by the Centers for Medicare and Medicaid Services.\textsuperscript{17} If the health care professional or hospital satisfies the requirements of the Incentive Program, he or she can receive $44,000 over five years in the Medicare Electronic Health Record Incentive Program or $63,750 over six years in the Medicare Electronic Health Record Incentive Program.\textsuperscript{18}

\begin{itemize}
  \item \textbf{Eligible Health Care Professionals and Hospitals}

  Eligible health care professionals are considered individual practitioners who may receive an incentive payment for “meaningful use” of Electronic Health Record Technology.\textsuperscript{19} If the practitioner is a part of a practice of health care professionals, each eligible practitioner may
\end{itemize}

\begin{footnotesize}
\textsuperscript{14} Id.
\textsuperscript{15} Id at 1526.
\textsuperscript{17} Id.
\textsuperscript{18} Id.
\end{footnotesize}
receive payment for “meaningful use” of Electronic Health Record Technology.\textsuperscript{20} The regulations by the Centers for Medicare and Medicaid Services provide that a health care professional is only allowed one incentive payment regardless of how many practices or locations he or she is involved with.\textsuperscript{21} The regulations also specify that “hospital-based” professionals are not eligible for incentive payments.\textsuperscript{22} The Centers for Medicare and Medicaid Services define a “hospital-based” professional as one whose services are ninety percent or more utilized for inpatient hospital services or in the emergency room.\textsuperscript{23} Eligible professionals qualify for the Medicare Electronic Health Record Incentive Program if they are one of the following: “Doctor of medicine or osteopathy, Doctor of dental surgery or dental medicine, Doctor of podiatry, Doctor of optometry, or Chiropractor.”\textsuperscript{24} Eligible professionals who qualify for the Medicaid Electronic Health Record Incentive Program include: “Physicians (primarily Doctors of medicine or osteopathy), Nurse practitioner, Certified nurse-midwife, Dentist, or Physician Assistant who furnishes services in a Federally Qualified Health Center of Rural Clinical Health that is led by a physician assistant.”\textsuperscript{25}

The Medicare and Medicaid Electronic Health Record Incentive Programs are also available to eligible hospitals and critical access hospitals.\textsuperscript{26} These eligible hospitals and critical access hospitals can usually participate in the Electronic Health Record Incentive Program provided by Medicare and Medicaid.\textsuperscript{27} Hospitals and critical access hospitals that are eligible to participate in Medicare’s Electronic Health Record Incentive Program must be one of the

\textsuperscript{20} Id.
\textsuperscript{21} Id.
\textsuperscript{22} Id.
\textsuperscript{23} Id.
\textsuperscript{24} Id.
\textsuperscript{25} Id.
\textsuperscript{26} Centers for Medicare and Medicaid Services, \textit{EHR Incentive Program: Eligible Hospital Information}, available at 
\texttt{http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Eligible_Hospital_Information.html}.
\textsuperscript{27} Id.
following: “Subsection (d) hospitals that are paid under the Inpatient Prospective Payment System, Critical Access Hospitals, or Medicare Advantage Affiliated Hospitals.”28 These eligible hospitals and critical access hospitals can receive incentive payments in any year from 2011 to 2015, which a reduction in payment for “meaningful use” of the technology after the year 2014.29 Hospitals that are eligible for payment under the Medicaid Electronic Health Record Incentive Program must be either: “Acute care hospitals with at least 10% Medicaid volume or Children’s Hospitals.”30 Eligible hospitals who have “meaningful use” of Electronic Health Record technology can receive Medicare incentive payments with no reductions from the years 2011 through 2016.

b. MEANINGFUL USE

In order to receive incentive payments through the Medicare and Medicaid Electronic Health Record Incentive Program, eligible professionals, hospitals and critical access hospitals must demonstrate “meaningful use” of electronic health record technology.31 The Incentive Programs set forth three Stages of objectives that eligible professionals, hospitals and critical access hospitals must meet in order to continue to receive incentive payments.32 Eligible professionals, hospitals and critical access hospitals must continue to meet the standards of Stage One for ninety days in their first year of “meaningful use” and then for a full year in their second year of “meaningful use.”33 The eligible professional, hospital or critical access hospital must

28 Id.
29 Id.
30 Id.
32 Id.
33 Id.
then meet the “meaningful use” requirements of Stage Two of the Incentive Program for two full years in order to qualify for incentive payments.34

Stage one of the program focuses on the efficiency of health care providers in capturing patient information and transmitting that information to the patient or to other health care providers.35 Stage two of the program emphasizes advanced clinical processes and stage three deals with improved outcomes.36

In order to qualify for the Electronic Health Record Incentive Program in its first year, a health care provider must meet fifteen Core Objectives as well as five out of ten Menu Objectives.37 These objectives must satisfy the minimum Clinical Quality Measures assigned by the Centers for Medicare and Medicaid Services.38 By achieving these objectives at the specified quality levels, a health care provider can demonstrate that he or she has complied with the Meaningful Use standards required by the program.39

The first ten of the Core Objectives are all designed to further the objective of “improving quality, safety, efficiency, and reducing health disparities.”40 The next three objectives are designed to help “engage patients and their families in their healthcare.”41 The

34 Id.
35 Id.
36 Id.
37 Id.
38 Id.
39 Id.
41 Id.
fourteenth objective is tailored to “improve care coordination.” Finally, the fifteenth objective “ensure[s] adequate privacy and security protections for personal health information.”

After qualifying for Stage One, health care providers must meet the criteria of Stage Two, which were published in September of 2012. The objectives set forth in Stage two are tailored to create more advanced clinical processes through more Core Objectives.

While the Centers for Medicare and Medicaid Systems have set forth many requirements to ensure that health care providers are setting up efficient and useful electronic health record systems, they have not accounted for the ease with which these systems allow health care providers to inflate their Medicare bills. One area of the health care industry where there has been both a sharp increase in the use of electronic billing practices as well as an increase in the amount billed to Medicare is in established patient visits and hospital emergency rooms.

In order to become eligible for participation in the Medicare and Medicaid Electronic Health Record Incentive Program, professionals, hospitals and critical access hospitals must Register and Attest to meeting “meaningful use” requirements. Eligible professionals, hospitals, and critical access hospitals must retain the documentation necessary for attestation for the Incentive Program for a period of six years in the event of an audit. The Centers for Medicare and Medicaid Services hired Figliozzi and Company as the contractor to conduct

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42 Id.
43 Id.
44 Id.
45 Id.
audits for the Electronic Health Record Incentive Program.\textsuperscript{48} Figliozzi and Company conducts pre and post-payment audits on various professionals, hospitals, and critical access hospitals to ensure that those providers are complying with the “meaningful use” standards required by the Centers for Medicare and Medicaid Services.\textsuperscript{49}

Due to increased suspicion in the way professionals, hospitals, and critical access hospitals utilize the Electronic Health Record Technology, the audit contractors for the Centers of Medicare and Medicaid Services decided to conduct pre-payment audits for at least five percent of all claims submitted using the Electronic Health Record Technology.\textsuperscript{50} Figliozzi and Company conducts pre-payment audits on claims based on a random selection and for any “suspicious or anomalous data.”\textsuperscript{51} Eligible professionals, hospitals, and critical access hospitals must provide documentation to support the attestation for the Electronic Health Record Incentive Program in order to receive payment for submitted claims.\textsuperscript{52} The first step of the audit is to review submitted documentation at the audit contractor’s place of business; if additional material needs to be reviewed, the audit could then take place on-site or may even include a demonstration of the Electronic Health Record Technology that the provider uses.\textsuperscript{53} Documentation that might be required to support attestations, would be summaries of the data for supporting documentation or reports from the certified Electronic Health Record System.\textsuperscript{54}

If Figliozzi and Company determines that a professional, hospital, or critical access hospital has engaged in Medicare Fraud or Abuse, consequences could include imprisonment,
fines, loss of licenses, or even exclusion from participation in Medicare programs. Fraud in the Medicare context would be knowingly making false statements of material fact in order to derive some benefit that otherwise would not have been available. Various examples of Medicare fraud would include: “Billing for services that are not rendered, billing for services that were not medically necessary, billing for services that were performed by an improperly or unsupervised employee, billing for services that were performed by an employee who has been excluded from participation in Federal Health Care programs, billing for services of such low quality that they are virtually worthless, or billing separately for services already included in a global fee.”

Medicare abuse results from activities that unnecessarily increase costs to Medicare and involve practices that are not in the best interest of patient care or that are not medically necessary. Examples of Medicare fraud would include: “misusing codes on a claim, charging excessively for services or supplies, or billing for services that were not medically necessary.”

The False Claims Act is one of the regulations that imposes liability on a professional, hospital, or critical access hospital that knowingly submits or allows to be submitted a fraudulent claim. The relevant portions of the False Claims Act are as follows:

“(a) Liability for certain acts
   (1) In general - subject to paragraph (2), any person who
       (A) Knowingly presents, or causes to be presented, a false or fraudulent claim for payment or approval;
       (B) Knowingly makes, uses, or causes to be made or used, a false record or statement material to a false or fraudulent claim;
   (b) Definitions.--For purposes of this section

56 Id.
57 Id.
58 Id.
59 Id.
(1) the terms “knowing” and “knowingly” –
   (A) mean that a person, with respect to information
       (i) has actual knowledge of the information
       (ii) acts in deliberate ignorance of the truth or falsity of
            the information; or
       (iii) acts in reckless disregard of the truth or falsity of
            the information; and
   (B) require no proof of specific intent to defraud.”

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C. CERTIFIED ELECTRONIC HEALTH RECORD TECHNOLOGY

The final requirement for an eligible professional, hospital, or critical access hospital to
receive incentive payments from the Medicare and Medicaid Electronic Health Record Incentive
Program is the “meaningful use” of certified Electronic Health Record Technology.61 For
effective use of the Electronic Health Record Technology, the Centers for Medicare and
Medicaid Services require that providers use technology that stores data in a structured format.62
The structured format of the data is to ensure that the information stored in the Electronic Health
Record System can easily be accessed or transferred.63 The Centers for Medicare and Medicaid
Services along with the Office of the National Coordinator for Health Information Technology
set forth standards for certifying Electronic Health Record Technology.64 These requirements
ensure that the Electronic Health Record Technology employed by eligible professionals,

61 Centers for Medicare and Medicaid Services, EHR Incentive Programs: Certified EHR Technology, available at
62 Id.
63 Id.
64 Id.
hospitals, and critical access hospitals have the necessary “technological capability, functionality and security” to be used in a meaningful way.\(^65\)

IV. INCREASED COSTS TO MEDICARE OVER THE PAST DECADE

The Center for Public Integrity conducted a study starting in 2001 to project how much Medicare costs would increase over the years due to doctors choosing to bill at higher codes. The Center for Public Integrity found that there were added costs of over $11 billion, over half of which were billed for doctor’s visits.\(^66\) Research has also showed that billing for emergency room visits has increased fees to Medicare by over $1 billion over the past decade.\(^67\)

a. CHANGES IN BILLING FOR ESTABLISHED PATIENT VISITS FROM 2001-2010

Medicare has allocated five Evaluation and Management Codes for established patient visits.\(^68\) The coding is largely dependent on how much face-to-face time that a physician spends with his or her patient.\(^69\) The Evaluation and Management Codes for established patient visits range from code 99211 through 99215.\(^70\) The code 99211 is for minimal problems that take five minutes or less of the doctor’s time; 99212 translates to a minor medical problem that typically requires ten minutes of face-to-face time; the code 99213 is for medical problems of low to moderate severity that typically require fifteen minutes of face-to-face time; the code 99214 is used for medical problems of moderate to high severity that typically require twenty-five

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\(^{65}\) Id.

\(^{66}\) Fred Schulte and David Donald, How doctors and hospitals have collected billions in questionable Medicare fees, The Center for Public Integrity, September 15, 2012.

\(^{67}\) Joe Eaton and David Donald, Hospitals grab at least $1 billion in extra fees for emergency room visits, The Center for Public Integrity, September 20, 2012.

\(^{68}\) Fred Schulte and David Donald, How doctors and hospitals have collected billions in questionable Medicare fees, The Center for Public Integrity, September 15, 2012.

\(^{69}\) Id.

\(^{70}\) Id.
minutes of face-to-face time; finally, 99215 is coded for a medical problem of moderate to high severity that requires medical decision making of high complexity and typically takes forty minutes of face-to-face time with patients. ¹⁷¹ A claim for the code 99211 would typically earn a provider twenty dollars, while a claim for the highest paying code, 99215, would give providers revenue of one hundred and forty dollars. ¹⁷² The study showed that the number of health practitioners who billed for the two highest codes doubled to about 17,000 in 2008. ¹⁷³ The same study showed that the number claims for the two lowest paying codes decreased by sixty-three percent. ¹⁷⁴

The following graph depicts the codes that involved increases in billing Medicare for established patient visits from 2001 through 2010 ¹⁷⁵:

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¹⁷¹ Id.
¹⁷² Id.
¹⁷³ Id.
¹⁷⁴ Id.
¹⁷⁵ Id.
The percentage of all claims for established patient visits involving the second highest paying code, where there is a medical problem of moderate to high severity that requires twenty-five minutes of face-to-face time, was 20.26% in 2001. This number increased by 15.99 percentage points to 36.25% in 2010. The percentage of claims for the highest code, involving a medical problem of moderate to high severity that requires medical decision making of high complexity and typically takes forty minutes of face-to-face time with the patient, was 2.91% in 2001. This percentage increased by 1.7 percentage points to 4.61% in 2010.

The following graph depicts decreases in billing to Medicare for established patient visits from the years of 2001 through 2010:\textsuperscript{76}

The third lowest billing code, 99213, decreased from 53.31% in 2001 to 46.48% in 2010. This was a decrease of use for claims for established patient visits of 6.83 percentage points over \textsuperscript{76} Id.
the past decade. The second lowest billing code, involving minor medical problems that require ten minutes of face-to-face time, was used for 17.21% of established patient visits in 2001. The use of the second lowest billing code decreased by 8.41 percentage points to only 8.80% of all established patient visits in 2010. The lowest paying billing code, used for minor problems that take five minutes of face-to-face time or less, was used for 6.30% of all established patient visits in 2001; this number decreased to 3.86% in 2010.

b. **Changes in Billing for Emergency Room Visits from 2001-2010**

There are also five Evaluation and Management codes that Medicare has designated for emergency room visits.\(^77\) Unlike the Evaluation and Management codes for established patient visits, Evaluation and Management codes for emergency room visits are not governed by regulations set forth by Medicare.\(^78\) The American Hospital Association and the American Health Information Management Association have attempted to develop guidelines for hospitals to follow for billing for emergency room visits.\(^79\) However, the Centers for Medicare and Medicaid Services has not required hospitals to follow the guidelines that were drafted.\(^80\) Billing codes for emergency rooms are 99281, 99282, 99283, 99284, and 99285.\(^81\) Emergency room physicians are given discretion to code at various levels depending on the levels of hospital

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\(^77\) Joe Eaton and David Donald, *Hospitals grab at least $1 billion in extra fees for emergency room visits*, The Center for Public Integrity, September 20, 2012.

\(^78\) *Id.*

\(^79\) *Id.*

\(^80\) *Id.*

\(^81\) *Id.*
resources used for patient care.\textsuperscript{82} The lowest code, 99281, provides emergency rooms with revenues of fifty dollars per claim while the highest code, 99285, earns emergency rooms with revenues of three hundred and twenty-four dollars per claim.\textsuperscript{83} Over the past decade, emergency room codes have experienced trends in increasing and decreasing levels of coding similar to that of established patient visits. The amount billed for the top Evaluation and Management code rose by 1.6 billion dollars, or 21\%, from 2001 to 2008.\textsuperscript{84}

The following graph depicts increases in Medicare billing for emergency room visits from 2001 through 2008\textsuperscript{85}:

\begin{center}
\begin{tikzpicture}
\begin{axis}[
    title={Billing Increases for Emergency Room Visits from 2001-2008},
    xlabel={Year},
    ylabel={Billing Increase},
    xmin=2001, xmax=2008,
    ymin=0, ymax=35,
    ytick={0,5,10,15,20,25,30,35},
    yticklabels={0.00\%, 5.00\%, 10.00\%, 15.00\%, 20.00\%, 25.00\%, 30.00\%, 35.00\%},
    legend style={at={(1.1,0.5)},anchor=north east},
    legend entries={99284,99285},
]

\addplot[draw=blue,fill=blue!20] table[row sep=crcr] {2001 20.0\% \\
2002 21.5\% \\
2003 23.0\% \\
2004 24.5\% \\
2005 26.0\% \\
2006 27.5\% \\
2007 29.0\% \\
2008 30.5\% 
};

\addplot[draw=orange,fill=orange!20] table[row sep=crcr] {2001 5.0\% \\
2002 6.5\% \\
2003 8.0\% \\
2004 9.5\% \\
2005 11.0\% \\
2006 12.5\% \\
2007 14.0\% \\
2008 15.5\% 
};

\end{axis}
\end{tikzpicture}
\end{center}

\textsuperscript{82} Id.
\textsuperscript{83} Id.
\textsuperscript{84} Id.
\textsuperscript{85} Id.
The emergency room Evaluation and Management codes with increases in use from 2001 through 2008 were the two highest paying codes. The second highest paying code, 99284, increased from 18.72% in 2001 to 29.69% in 2008. The highest paying code, which provides emergency rooms with three hundred and twenty-four dollars per claim, rose from 6.24% in 2001 to 15.62% in 2008.

The following graph depicts decreases in billing for emergency room visits from 2001 through 2008:

The three billing codes for emergency room Evaluation and Management that decreased from 2001 through 2008 were the three lowest paying codes. The third lowest paying code, 99283, decreased from 36.04% in 2001 to 33.21% in 2008. The second lowest paying code,

\[\text{Id.}\]

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99282, lowered from 28.61% in 2001 to 15.54% in 2008. The lowest paying code, 99281, that pays only fifty dollars per claim for emergency room visits, decreased from 10.39% in 2001 to 5.94% in 2008.

V. POSSIBLE LAWFUL REASONS FOR INCREASED BILLING

While increased costs to Medicare may raise questions of fraud and abuse to the Medicare system, there are also many possible lawful explanations for increases in billing behavior. Over the past decade, Medicare fees have risen, but so have Medicare enrollees, average life expectancy, average Medicare beneficiaries with chronic conditions, average Medicare beneficiaries with more than one chronic condition, and finally increased efficiency and accuracy in billing due to Electronic Health Record Technology.  

Enrollment in Medicare over the past decade has increased from average monthly enrollment in 2000 of 39.7 million people to average monthly enrollment in 2012 of 52.7 million people. A possible explanation for this could be that the average life expectancy for people over the age of sixty-five has been steadily increasing. Regardless, as enrollment in Medicare increases, so will the number of patients that see the eligible professionals, hospitals, and critical access hospitals that are participants in the Electronic Health Record Incentive Program. An increase in patients would explain increased costs to Medicare. This factor alone might not explain the increase in billing of higher codes, but it does contribute to overall rising costs to Medicare.

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88 Id.
The following graph depicts average monthly Medicare enrollment trends from 2000 through 2012:\(^89\):

\[\text{Average Monthly Enrollment in Medicare}\]

In addition to increased enrollment in Medicare, a possible explanation for increases in Medicare costs over the past decade is that the average life expectancy of people at the age of sixty-five has increased. In the year 2000, the average life expectancy for a person at the age of sixty-five was 17.6 years.\(^90\) In 2010, the average life expectancy for people at the age of sixty-five increased to 19.2 years.\(^91\) As life expectancy increases, Medicare beneficiaries will be presenting to hospitals and physicians for more years and for potentially more complicated medical conditions. These factors could explain the increase in costs to Medicare over the past decade as well as account for the need to bill at higher coding levels.

\(^{89}\) Id.
\(^{91}\) Id.
The following graph depicts the increase in average life expectancy for people who are at the age of sixty-five:\footnote{Id.}

![Average Life Expectancy at the Age of 65](image)

Due to either increases in the average life expectancy of people at the age of sixty-five or increasing amounts of obesity in Americans over the years, the number of Medicare beneficiaries who suffer from chronic conditions has also risen.\footnote{American Hospital Association, Trend Watch, \textit{Are Medicare Patients Getting Sicker?}, (December 2012).}

The following graph shows the increasing rates of chronic conditions among Medicare beneficiaries from 2000 through 2009:\footnote{Id.}
The American Hospital Association reported that approximately four out of every five Medicare beneficiary suffers from a chronic condition.\textsuperscript{95} Further, the report states that two-thirds of Medicare beneficiaries suffer from two or more chronic conditions.\textsuperscript{96} Despite the increase in the prevalence of chronic conditions, Americans are ultimately living longer due to advances in medical technology. These advances in technology and in medical procedures increase costs as the technology develops.

For example, studies among patients with cardiac conditions have shown that there is a seventy percent improvement in survival for people with heart attacks.\textsuperscript{97} This improvement is largely due to advancement in less invasive cardiac procedures such as cardiac catheterizations, coronary artery bypasses, and angioplasties with stents.\textsuperscript{98} These less invasive procedures also raised the costs to Medicare per heart attack from $10,336 in the year 1999 to $14,009 in 2006.\textsuperscript{99}

\textsuperscript{95} Id.
\textsuperscript{96} Id.
\textsuperscript{97} Id.
\textsuperscript{98} Id.
\textsuperscript{99} Id.
A patient with a chronic condition costs health care approximately three times more than a patient without a chronic condition.\textsuperscript{100} This amount only rises exponentially as the number of chronic conditions a patient suffers with increases.\textsuperscript{101} If the age of a Medicare beneficiary is positively correlated with the number of chronic conditions he or she suffers from and the average life expectancy of people at the age of sixty-five is rising, an inference can be drawn that the number of chronic conditions each Medicare beneficiary is suffering with has increased. An increase in the number of chronic conditions would in turn raise the costs to Medicare.

In addition to trends involving increased Medicare enrollment and a higher number of chronic conditions that Medicare beneficiaries suffer with, the efficiency and accuracy that Electronic Health Record Technology affords physicians can also be a contributing factor to increased costs to Medicare. Many physicians contend that before the emergence of Electronic Health Record Technology, there was “undercoding” due to the inaccuracy of paper health records and coding.\textsuperscript{102} Electronic Health Record Technology allows doctors to collect what money they argue was not billed for previously.\textsuperscript{103}

VI. POSSIBLE FRAUDULENT REASONS FOR INCREASED BILLING

While there are many lawful explanations for why Medicare costs of increased over the past decade, the emergence of Electronic Health Record Technology could be a potential source for “upcoding.” Statistics have shown that hospitals who received incentive payments to adopt and implement Electronic Health Record Technology had a forty-seven percent rise in Medicare

\begin{itemize}
\item \textsuperscript{100} Id.
\item \textsuperscript{101} Id.
\item \textsuperscript{102} Zina Moukheiber, Forbes, \textit{Blame Technology for the Rise in Medicare Billing, Not Doctors}, September 26, 2012.
\item \textsuperscript{103} Id.
\end{itemize}
payments from 2006 to 2010. However, hospitals that did not receive incentive payments to use Electronic Health Record Technology only enjoyed a thirty-two percent increase in Medicare payments from 2006 through 2010.

The Electronic Health Record Technology was created to make patient care more efficient and accurate, but it also allows for an unlawful practice called “cloning.” “Cloning” involves the copy and paste of patient health records in the Electronic Health Record Technology to support a claim for a higher Evaluation and Management code. This capability of the technology automatically creates the supporting documentation for “upcoding” and facilitates fraud and abuse to the Medicare system. A concerning issue with the Electronic Health Record Technology is that distributors of the technology even advertise to physicians and hospitals that it will increase revenue.

Despite the potential flaws in the capabilities of the Electronic Health Record Technology itself, the subjective nature of the Evaluation and Management codes makes it difficult to detect and prosecute fraud. An example of a successfully prosecuted case for fraud is Dr. Angel Martin, a general surgeon in Newton, Iowa. Records were found that Dr. Martin billed the government for services that would have taken over twenty-four hours on fifty-three different occasions. Contractors for the Centers for Medicare and Medicaid Services also found that Dr. Martin’s patients described face-to-face visits with Dr. Martin as brief, in contrast to the high

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105 Id.
106 Id.
107 Id.
108 Id.
109 Id.
110 Fred Schulte, The Center for Public Integrity, Judgment calls on billing make “upcoding” prosecutions rare, September 15, 2012.
111 Id.
112 Id.
level of coding that Dr. Martin routinely billed the government for.\textsuperscript{113} In the absence of concrete red flags for fraud, such as billing for more hours than there are in a day, whistleblowers are the most effective means for discovering “upcoding.” Even experts who review the codes that were billed for tend to disagree upon when something appears to be suspicious or just a mere judgment call by a physician.\textsuperscript{114}

Another area for concern and where there might be room for “upcoding” is in the emergency room context where Medicare does not govern how the Evaluation and Management codes are used. Given that there has been an increase in the highest billing code for emergency room visits, guidelines on how to use the Evaluation and Management codes might limit the potential for “upcoding.” The American Hospital Association was one of the proponents for a set of guidelines to be used, however, the government was eager to get Electronic Health Record Technology off the ground and did not think that these guidelines were necessary to complete at the time of launch of the Electronic Health Record Incentive Program.\textsuperscript{115}

The capabilities of the Electronic Health Record Technology along with difficulty in prosecuting fraud and lack of guidelines for emergency room visits all increase the potential for physicians and hospitals to “upcode.” The introduction of the Electronic Health Record Incentive Program created opportunities for physicians and hospitals to increase revenues in a way that would not be detected as fraudulent.

VII. WAYS TO DETECT AND LIMIT OPPORTUNITIES FOR FRAUD

With advancements in technology, data mining has become an increasingly popular and effective way of detecting health care fraud. Recovery Audit Contractors and Zone Program

\textsuperscript{113} \textit{Id.}
\textsuperscript{114} \textit{Id.}
Integrity Contractors can use data mining as a way to navigate the Centers for Medicare and Medicaid Services’ database of billing from health care providers. A potential way for these audit contractors to detect fraud from this data would be to create model physician profiles from the information available about different types of physicians in various regions of the country. Based on the average physician in a certain area, these audit contractors could compare what an individual physician in a region is billing for against the model and pursue additional, more in depth audits, if there are major discrepancies. While this would be an effective way to administratively conduct an audit for fraud, there are many possibilities for why one physician may bill for higher codes than the average physician. This data mining process would not take into account individual physicians’ methods of treating patients or for example, the number of patients with chronic illnesses who are treated.

Another potential area for helping the government detect and combat Medicare fraud would be in the Electronic Health Record Technology itself. Although it is understandable that the government would not want to put too much strain on a health care provider as to deter him or her from using the Electronic Health Record Technology or even from treating Medicare patients, this is an area where the potential for “upcoding” could be limited. The Centers for Medicare and Medicaid Services could promulgate higher standards for certified Electronic Health Record Technology. Instead of only focusing on meaningful ways to structure data, the Centers for Medicare and Medicaid Services should also be concerned with limiting the capabilities of the Electronic Health Record Technology. Because “cloning” is an easy way for physicians to support claims for higher coding, the technology should be designed in a way that
all of the patient’s health information is to be entered into the system for higher coding. Although the focus of the use of the Electronic Health Record Technology is to improve patient care and make health care less expensive and more efficient, the inability to copy and paste patient information into a health record seems to be a small inconvenience relative to the potential costs that fraudulent billing could increase to Medicare.

Another capability of the Electronic Health Record Technology might be to require physicians to clock in when they begin their face-to-face time visit with an established patient. This way, a physician would not even be able to bill for a code that is designated for more time than the actual visit was.

The government should also allow for experts of health organizations, such as the American Hospital Association, to develop guidelines for the use of Evaluation and Management codes in emergency rooms. Although the environment is different than a physician’s office and one cannot determine what resources are needed, if hospitals are allowed to create internal guidelines, it will result in difficulty in auditing emergency room billing. The guidelines should cover average medical conditions that patients present to emergency rooms with and then allow for hospitals to use discretion in extraordinary circumstances. Although this may not deter fraud and still allow for “upcoding”, it could potentially limit the number of billing for higher codes simply due to differences in internal emergency room guidelines across the country.

VIII. CONCLUSION

The American Recovery and Reinvestment Act established the need for increased developments in health information technology in order to become more efficient and stimulate
the long term economy. While the use of Electronic Health Record Technology can achieve these goals, it also introduces the possibility for Medicare fraud and abuse. Costs to Medicare have undoubtedly increased over the past decade and Electronic Health Record Technology can contribute to that rise. Because the technology is new and the consequences are uncertain, the Centers for Medicare and Medicaid Services should explore the possibilities for fraud. As these possibilities become more exposed, the Centers for Medicare and Medicaid Services can take the steps to limit the opportunities that Electronic Health Record Technology creates for fraud and use it to detect and combat fraud instead.