PUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

UNITED STATES OF AMERICA,
Plaintiff-Appellee,
v.
JOHN R. MCLEAN,
Defendant-Appellant.

No. 11-5130

Appeal from the United States District Court
for the District of Maryland, at Baltimore.
William D. Quarles, Jr., District Judge.
(1:10-cr-00531-WDQ-1)

Argued: February 1, 2013

Decided: April 23, 2013

Before GREGORY and KEENAN, Circuit Judges, and
Robert E. PAYNE, Senior United States District Judge for
the Eastern District of Virginia, sitting by designation.

Affirmed by published opinion. Judge Gregory wrote the opinion, in which Judge Keenan and Senior Judge Payne joined.

COUNSEL

ARGUED: Richard W. Westling, WALLER, LANSDEN, DORTCH & DAVIS, Nashville, Tennessee, for Appellant. Sandra Wilkinson, OFFICE OF THE UNITED STATES ATTORNEY, Baltimore, Maryland, for Appellee. **ON BRIEF:** Mark M. Bell, Jessica R. Sievert, WALLER, LANSDEN, DORTCH & DAVIS, Nashville, Tennessee; Carol M. McCarthy, OBER, KALER, GRIMES & SHRIVER, PC, Baltimore, Maryland, for Appellant. Rod J. Rosenstein, United States Attorney, Mark W. Crooks, Assistant United States Attorney, Thomas F. Corcoran, Assistant United States Attorney, Michelle Purdy, Law Clerk, OFFICE OF THE UNITED STATES ATTORNEY, Baltimore, Maryland, for Appellee.

OPINION

GREGORY, Circuit Judge:

John McLean, an interventional cardiologist, appeals his convictions and sentence for health care fraud and making false statements in connection with the delivery of or payment for health care services. The convictions arise from a scheme to defraud insurers by submitting claims for medically unnecessary stent procedures. Among other arguments, McLean contends that there is insufficient evidence to support his convictions. Although proof of a physician's failure to meet medical standards, by itself, could not sustain a conviction for the federal offense of health care fraud, we find that here the evidence supports the jury's verdict. Finding no reversible error, we affirm.

I.

During the relevant time period, McLean was in private practice in Salisbury, Maryland, and held privileges at Penin-

sula Regional Medical Center ("PRMC"), where he performed cardiac catheterizations and coronary stent procedures. In the summer of 2006, PRMC began investigating McLean's stenting practices after a quality control review revealed he had placed a stent in a coronary artery with no significant blockage, or "stenosis." An initial review showed that McLean had performed inappropriate stent procedures in 13 cases. After an outside contractor confirmed those findings, the hospital asked McLean to submit to a concurrent review procedure pending further investigation. McLean agreed, but subsequently violated the procedure in three cases. Near the end of 2006, the outside contractor confirmed that McLean had performed inappropriate stents in approximately half of 25 randomly selected cases. Shortly thereafter, McLean resigned his hospital privileges after informing PRMC that he had developed an eye condition causing vision loss in one eye. In the ensuing months, McLean continued to see patients and review diagnostic test results in his office.

In the spring of 2007, the United States subpoenaed 117 patient files from McLean's practice. After receiving information that the files were in peril, the government obtained a warrant to secure the records. When the FBI agents arrived at McLean's office, they found subpoenaed files stacked on McLean's desk and a shred bin nearby. McLean admitted that he was removing documents from the files for shredding.

Following the conclusion of the government's investigation, McLean was indicted on one count of health care fraud in violation of 18 U.S.C. § 1347 (Count 1), and six counts of knowingly and willfully making false statements in connection with the delivery of and payment for health care services in violation of 18 U.S.C. § 1035(a)(2) (Counts 2-7).[1] In the health care fraud charge, the government alleged that McLean executed a scheme to defraud Medicare, Medicaid, and private insurers by submitting claims for medically unnecessary

[1]Count 6 was dismissed on the government's motion.

procedures and testing. The false statement charges related to specific records in which McLean was alleged to have willfully misrepresented the level of stenosis in patient arteries.

At trial, the government supported its allegations with testimony from two expert cardiologists, PRMC staff who worked with McLean, and several of his former employees and patients. Both experts testified that during the relevant time period it was generally accepted in the medical community that coronary stents were not medically necessary absent a diagnosis of at least 70% stenosis and symptoms of blockage such as chest pain or a positive stress test. One of the experts, Dr. Ian Gilchrist, explained that although coronary artery disease is considered significant when an artery is blocked by 50%, stents are not medically necessary until the 70% threshold because that is the point when the body can no longer compensate for reduced blood flow to the heart.[2] Gilchrist testified that McLean had grossly overstated the level of blockage in the patient files he reviewed. A summary of 59 cases prepared by Gilchrist showed McLean often recorded stenosis of 80% to 95% for lesions of no more than 10% to 30%. Gilchrist testified specifically about 15 cases, explaining in detail how the stenosis shown in the angiograms was overstated in McLean's records. Gilchrist further testified that in at least one case, McLean placed an appropriate stent, showing reasonable technique and "the ability to distinguish what should be done."

The other expert, Dr. Joseph Cinderella, Director of the PRMC Cardiac Catheterization Laboratory, testified that he had reviewed the stent procedures McLean performed between 2003 and 2006 and ranked each procedure on a scale of one to five, where one meant medically appropriate and five meant inappropriate. Cinderella testified that the fours

[2]The exception to that rule, Gilchrist testified, is the left main coronary artery, for which stenosis of 50% could justify a stent. None of the stent procedures at issue in this case involved the left main coronary artery.

and fives were "pretty black and white"; four meant "most physicians would not proceed," and five meant "the consensus for pretty much anyone would be not . . . [to] proceed." Out of the 707 procedures he reviewed, Cinderella categorized 101 procedures as fives and 108 as fours. Nonetheless, the evidence showed that McLean certified to insurers that these procedures were reasonable and medically necessary in order to obtain reimbursement.

In addition, the jury heard testimony from PRMC staff who had seen McLean overstate the stenosis shown in angiograms. Nurse Paul Kenlon testified that on multiple occasions he disagreed with the percentage McLean recorded and that he remembered a couple of times when McLean said there were 90% blockages and Kenlon "just simply could not see a lesion in the vessel." According to Kenlon, hospital staff used to sarcastically refer to healthy lesions that did not need intervention as "McLean 90 percenter[s]." Another nurse, Charlene Shellenberger, testified that McLean had placed stents in patients she had "a very difficult time being able to say . . . [had] a lesion that needed to be stented." In one case, after McLean stated that an artery had 99% stenosis, Shellenberger turned to his assistant and asked, "How can you ethically write that when you and I both know that is not a 99% lesion?"

The jury also heard testimony from patients who had received medically unnecessary stents from McLean. Patient F.M. testified that he never experienced the chest discomfort McLean recorded in his medical records. Another patient, L.H., testified that McLean gave her a before-and-after picture of her artery, which purported to show 97% blockage cleared by the stent. L.H. later learned that she never had any blockage. Her angiogram, which Gilchrist played for the jury, showed that the apparent blockage was actually a spasm of the artery, which subsided after McLean injected nitroglycerin.

Witnesses also testified about McLean's reaction to the investigation. In an early letter to PRMC, McLean acknowledged that although "[t]here is subjectivity reading the degree of stenosis, . . . standard practice is a lesion above 70% is felt to be significant and does receive intervention," but objected to the hospital's review, quoting another doctor's comment that "you do not second-guess the cardiologist who makes a decision in the cath lab at the time of the procedure." According to Dr. Thomas Lawrence, Vice President of Medical Affairs at PRMC, McLean later called the investigation a "joke" and a "witch hunt." Carol Hales, a former employee of McLean, testified that McLean had blamed the investigation on other cardiologists at the hospital who were "[o]ut to get him." Another former employee, Candace Klopp, testified that McLean told his employees the hospital "held a gun to [his] head" to force him to resign his privileges. Patient C.L. testified that when she confronted McLean and asked him why he placed a stent in an artery with no blockage, McLean responded, "[B]ecause it was easy, why not?" And an FBI agent who executed the warrant at McLean's office provided detail about his attempt to shred subpoenaed records.

In addition, Dr. Jeffrey Weiland, Chief of the Division of Cardiology at PRMC, testified that prior to resigning from PRMC, McLean told him that the issues he was having may have been caused by his vision problems. However, Dr. Neil Miller, an expert neuro-ophthalmologist, testified that McLean's vision loss in one eye was caused by a stroke of the optic nerve that occurred in October 2006 and would not have affected his vision prior to that time. Miller also testified that although McLean had another condition called drusen, which caused a minimal defect in his field vision, it was highly unlikely to have significantly impacted his ability to see because his central vision was normal. At the same time, numerous witnesses testified that McLean had claimed to have no trouble seeing. For instance, patient C.L. testified that McLean told her his eye condition didn't affect what he did to her, and he could see "just fine," and Klopp testified that

in spring 2007 McLean said to another employee, "I sit and watch and look at the cardio scans with you . . . have [I] ever read a scan wrong?"

The government also offered peer comparison data, which showed that although a smaller proportion of McLean's Medicare patients received stents as compared to his peers, the patients McLean chose to stent received nearly twice as many stents on average as the patients of his peers.[3] The evidence also showed that the number of stent reimbursement claims McLean submitted to Medicare increased dramatically in 2004, around the same time he purchased a $1.7 million condominium.[4] In addition, the government introduced a document from McLean's office showing that patients generally were scheduled for stress tests every four to six weeks, three months, six months, and 12-18 months after stent interventions, a pattern confirmed by McLean's billing data and testimony from his former employees and patients. Dr. Gilchrist testified that regular diagnostic testing of this kind is not medically necessary after a stent and that stress tests should only be ordered when a patient has symptoms such as chest pain.

In his defense, McLean argued that the medical standard for coronary stents alleged by the government was incorrect, that the process of evaluating angiograms is highly subjective,

[3]Specifically, between 2004 and 2006, 16 out of every 100 Medicare patients in McLean's practice received a stent, a rate 67% below the average in his peer group (defined as the top 25% of physicians billing for coronary stents in Maryland during that time period). However, while on average McLean's peers placed 1.15 stents in each patient, McLean's average per patient was 2.03.

[4]According to the government's data, McLean submitted Medicare claims for 92 stents placed in 63 patients in 2000; 85 stents placed in 57 patients in 2003; 304 stents placed in 184 patients in 2004; 351 stents placed in 171 patients in 2005; and 175 stents placed in 97 patients in 2006. On cross-examination, the government's witness admitted that she did no work to determine whether the increase in 2004 was attributable to an increase in McLean's patient load after two doctors left his practice.

that McLean's alleged error rate was not much higher than the rate shown in a recent study, and that McLean's attempt to shred documents was not inculpatory because the documents in the shred bin—including records from other physicians, fax cover sheets, prescription refills, and test results—were not material to the investigation. The defense's expert witness, Dr. Jonathan Marmur, testified that between 2003 and 2006 elective stents were considered medically appropriate if a patient had at least 50% stenosis and evidence of ischemia or angina. Marmur testified that 4 out of the 5 cases named in the indictment met that standard of care. Further, although Marmur did not agree with the percentage of stenosis McLean recorded, he testified that some of the angiogram slides in those cases could support a higher percentage. The defense also offered testimony from former patients, including several named in the indictment, that McLean's treatments relieved their symptoms, as well as testimony from former employees that McLean was an attentive doctor who cared about his patients.

Following ten days of trial, the jury convicted McLean on all counts. McLean subsequently moved for a judgment of acquittal and a new trial, which the district court denied. During sentencing, the district court applied a 16-level enhancement under United States Sentencing Guidelines § 2B.1.1(b)(1)(I) after calculating the total losses to be more than $1 million. The district court sentenced McLean to 97 months imprisonment and three years supervised release, and entered forfeiture and restitution orders of $579,070.

On appeal, McLean challenges his convictions on several grounds, arguing that the health care fraud statute is unconstitutionally vague as applied to him; that the evidence was insufficient to support his convictions on all counts; and that his trial was prejudiced by the government's failure to disclose impeachment evidence and certain erroneous evidentiary rulings committed by the district court. He also contends

that the case should be remanded for resentencing because his sentence is procedurally unreasonable.

II.

McLean first argues that the health care fraud statute, 18 U.S.C. § 1347, is unconstitutionally vague as applied to him because no clear standard of medical necessity governed the use of coronary artery stents during the relevant time period. We review the constitutionality of a statute de novo. *United States v. Williams*, 364 F.3d 556, 559 (4th Cir. 2004).

A statute is unconstitutionally vague if it fails to provide people of ordinary intelligence a reasonable opportunity to understand what conduct it prohibits, or if it authorizes or encourages arbitrary and discriminatory enforcement. *Hill v. Colorado*, 530 U.S. 703, 732 (2000). Here, we ask whether an ordinary person would understand that the health care fraud statute prohibited McLean's charged conduct. *See United States v. Passaro*, 577 F.3d 207, 218 (4th Cir. 2009) (explaining that vagueness challenges that lie outside of the First Amendment context must be evaluated based on the facts of the defendant's case).

The health care fraud statute makes it a crime to "knowingly and willfully execute[ ] . . . a scheme . . . (1) to defraud any health care benefit program; or (2) to obtain, by means of false or fraudulent . . . representations . . . any of the money . . . [of] any health care benefit program . . . in connection with the delivery of or payment for health care benefits, items, or services." 18 U.S.C. § 1347. McLean argues that the statute is unconstitutionally vague as applied because no government standard or professional guideline defined the stenosis level needed to justify a coronary stent during the relevant time period, and the reading of angiograms is inherently subjective. As such, he claims he had no way of knowing in advance whether his conduct was prohibited. We disagree.

The health care fraud statute is not a medical malpractice statute, it is a simple fraud statute. As applied here, it prohibited McLean from knowingly and willfully defrauding insurers by falsely certifying that the stents he placed in arteries with little to no blockage were reasonable and medically necessary in order to obtain reimbursement. Although the statute does not enumerate every possible fraud scheme, an average person would understand that this kind of conduct is prohibited. *See United States v. Franklin-El*, 554 F.3d 903, 910-11 (10th Cir. 2009) (rejecting an analogous vagueness challenge to § 1347 premised on complexity in Medicaid regulations because the statute is simply a fraud statute).[5] Further, the statute's *mens rea* requirement mitigates any ambiguity arising from the lack of clear medical guidance McLean alleges. *See United States v. Jaensch*, 665 F.3d 83, 90 (4th Cir. 2011) (rejecting vagueness challenge to federal statute prohibiting the production of false government identification documents based on statute's scienter requirement). McLean could only be convicted if the government proved beyond a reasonable doubt that he acted "knowingly and willfully" to defraud insurers, which necessarily entails proof that he knew the stent procedures were unnecessary. This requirement of proof eliminates the fair notice concerns he raises. As a result, the health care fraud statute is not unconstitutionally vague as applied to McLean.[6]

[5]Our reasoning is also consistent with an unpublished opinion of this Court, which we find persuasive. *See United States v. Janati*, 237 F. App'x 843, 846-47 (4th Cir. 2007) (unpublished) (rejecting vagueness challenge to health care fraud statute as applied to prohibit overbilling, and holding that the statute provides fair notice that overbilling is prohibited even though the billing manual may lack clarity).

[6]In urging otherwise, McLean cites an unpublished decision of the Fifth Circuit, which dealt with a similar vagueness challenge to the health care fraud statute based on subjectivity in the standard of medical necessity for coronary artery stents. *See United States v. Patel*, 485 Fed. App'x 702, 707 (5th Cir. 2012) (unpublished). This case does not provide much support for McLean. Although the *Patel* court recognized that the defendant's vagueness concerns were not "insubstantial," the court ultimately rejected his arguments because the evidence showed that the concept of medical necessity meant something concrete to the defendant. *Id.* The same can be said of this case, as McLean's letter to the hospital indicates he was aware of the 70% threshold.

III.

McLean next argues that his convictions on all counts are unsupported by sufficient evidence. We review the sufficiency of the evidence de novo. *United States v. Ryan-Webster*, 353 F.3d 353, 359 (4th Cir. 2003). "A defendant bringing a sufficiency challenge must overcome a heavy burden, and reversal for insufficiency must be confined to cases where the prosecution's failure is clear." *United States v. Engle*, 676 F.3d 405, 419 (4th Cir. 2012) (internal quotation marks and citations omitted). Our review is limited to determining whether, viewing the evidence in the light most favorable to the government, the jury's verdict is supported by "substantial evidence," that is, "evidence that a reasonable finder of fact could accept as adequate and sufficient to support a conclusion of a defendant's guilt beyond a reasonable doubt." *United States v. Burgos*, 94 F.3d 849, 862 (4th Cir. 1996) (en banc). We are mindful that "the jury, not the reviewing court, weighs the credibility of the evidence and resolves any conflicts in the evidence presented, and if the evidence supports different, reasonable interpretations, the jury decides which interpretation to believe." *Id.* (internal quotation marks, alterations, and citation omitted).

A.

McLean first challenges the sufficiency of the evidence as to the health care fraud charge (Count 1). To sustain a conviction under 18 U.S.C. § 1347, the government was required to prove beyond a reasonable doubt that McLean knowingly and willfully executed a scheme to defraud insurers by billing for medically unnecessary procedures. "[T]he specific intent to defraud may be inferred from the totality of the circumstances and need not be proven by direct evidence." *United States v. Harvey*, 532 F.3d 326, 334 (4th Cir. 2008) (internal quotation marks, alteration, and citation omitted). After carefully reviewing the record, we conclude that substantial evidence supports McLean's conviction.

To begin, McLean's pattern of overstating blockage by a wide margin and placing unnecessary stents in a large number of cases was direct evidence of a fraudulent scheme. According to Dr. Cinderella, over 100 of McLean's cases involved blockage of 25% or less. And Dr. Gilchrist testified that McLean grossly overstated blockage in the 59 procedures he reviewed. For example, patient AW had 0% blockage, and McLean recorded it as 80% to 90%. Similarly, patient DD had 10% blockage, and McLean recorded it as 80%. McLean subsequently sought reimbursement from insurers, certifying that the procedures were reasonable and medically necessary based on the falsely recorded stenosis levels. The stark disparity between what McLean recorded and what the angiogram showed strongly suggests he intentionally committed fraud.

There was also sufficient evidence to rule out non-criminal explanations for McLean's overstatements. Gilchrist testified that the skill McLean displayed in an appropriate stent procedure demonstrated reasonable technique and the ability to discern appropriate treatment, undermining the possibility that McLean was simply a negligent physician. Dr. Miller, the expert neuro-ophthalmologist, testified that the optic stroke McLean suffered in his left eye in October 2006 would not have affected his vision in years prior and that his preexisting drusen was highly unlikely to have significantly affected his ability to see because it caused only a minor field defect and did not affect his central vision.[7] Based on his testimony, a rational juror could exclude McLean's eye conditions as an explanation for his blockage overstatements. Finally, although Gilchrist admitted that angiogram reading is subjective, he testified that physicians should be in the same ballpark and inter-reviewer variability should not exceed 10% to 20%. Both Gilchrist and Cinderella testified that the cases at issue were not borderline cases where inter-reviewer variability

[7]Although Miller could not test the effect of the drusen on McLean's left eye due to the optic stroke, his opinion was based on the effect of the drusen on his right eye because the drusen was symmetrical in both eyes.

would come into play. And the jury viewed many of the angiograms themselves, providing them an opportunity to determine whether they were within the borderline area where subjectivity could account for McLean's overstatements. Based on this evidence, the jury could reasonably exclude the phenomenon of inter-reviewer variability as an explanation for McLean's conduct.

McLean nonetheless argues that the government's pattern evidence is not probative of fraud because a 2009 – 2010 study published in the Journal of the American Medical Association found that 12% of stents performed nationwide were medically unnecessary. He argues that his own error rate was not much higher, as the Cinderella fives constituted only 15% of the total stent procedures he performed between 2003 and 2006. We are not persuaded that this study undermines the government's pattern evidence. First, if the Cinderella fours are included, McLean's error rate was approximately 30%, not 15%. But more importantly, the import of the pattern evidence is not simply that McLean repeatedly performed medically unnecessary stents, but rather that he repeatedly overstated blockage by a wide margin. Indeed, we do not believe that pattern evidence showing that a physician placed more unnecessary stents than the national average necessarily would be probative of fraud, for such a pattern might only suggest negligence. The distinction here is that McLean repeatedly overstated blockage by a margin well beyond the normal variation between observers. McLean cites nothing from the study showing that his pattern of misrepresentation was comparable to the conduct of other physicians nationwide. As a result, the study does not undermine the weight of the pattern evidence described above.

Moreover, even assuming the study McLean cites calls into question the strength of the government's pattern evidence, separate evidence of fraud provided a substantial basis for the conviction. Tellingly, McLean told patient C.L. that he placed a stent in an artery with no blockage "because it was easy,"

not because he saw blockage. That statement implies he knew the stent was unnecessary and the blockage he recorded was false. Additionally, the evidence indicates McLean made other misrepresentations to create the illusion of medical necessity. He gave patients misleading pictures purporting to show cleared blockage when the angiogram, viewed in full, showed no significant blockage. In L.H.'s case, the apparent blockage was actually a spasm of the artery, which McLean knew occurred because he treated it. McLean also recorded symptoms patients did not experience. For instance, patient F.M. testified that he never experienced the chest discomfort McLean recorded. And in two of the cases named in the indictment, medical records showed that patients had previously denied symptoms, such as chest pain, which McLean nevertheless recorded after the stent procedures were completed. McLean also gave inconsistent explanations for his conduct, suggesting on at least one occasion to Dr. Weiland that his eye condition had caused the inappropriate stents, but insisting on many other occasions to patients and employees that his vision was fine. These inconsistencies reasonably suggest that McLean falsely blamed his conduct on his eye condition to cover up his true fraudulent intent. *See United States v. Hughes*, 716 F.2d 234, 240-41 (4th Cir. 1983) (noting that a defendant's inconsistent alibi statements can be probative of illicit intent). Finally, McLean attempted to shred patient files subpoenaed by the United States. McLean argues that this incident was not probative of fraud because he was honest about what he was doing, and the documents found in the shred bin were not material to the investigation. However, viewing the evidence in the light most favorable to the government, as we must, a reasonable juror could conclude McLean had something to hide, even if his motives for selecting particular documents are unclear.

There was also sufficient evidence to prove McLean had a financial motive for the fraudulent scheme. McLean received reimbursement for each stent procedure he performed, as well as for a series of regularly scheduled diagnostic tests after the

procedure, which were administered to patients at his office pursuant to standing orders.[8] This evidence showed that stenting provided a significant source of reimbursement for McLean's private practice, and thus, that he had a financial motive for executing the fraudulent scheme.

Based on the direct evidence that McLean overstated blockage in numerous cases, his pattern of misleading patients and making other misrepresentations in patient files, his admission to C.L. that he placed an unnecessary stent "because it was easy," his inconsistent explanations for his conduct, his attempt to shred patient files, and the circumstantial evidence of a financial motive, we hold that McLean's health care fraud conviction is supported by substantial evidence.

McLean's two remaining challenges to the evidence do not persuade us otherwise. First, McLean argues that the government's peer comparison evidence was actually exculpatory. The government used the evidence to show that McLean placed twice as many stents on average in each patient he chose to stent as his peers. As McLean notes, however, the evidence also showed that McLean only stented 16 out of 100 patients in his practice, a rate 67% lower than the average of his peers. We are not persuaded that this evidence is exculpatory. The peer comparison evidence simply compared the number of stent procedures McLean performed to the average of his peers; it said nothing about the necessity of those procedures. As such, its probative value was marginal at best. Even construing the evidence as McLean urges, proof that he stented less patients on average than his peers does not undermine the other evidence of fraud outlined above.

Second, McLean argues that the evidence of his condomin-

[8]McLean argues that the government failed to prove beyond a reasonable doubt that standing orders existed. However, billing data and testimony from patients and staff provided a sufficient basis for the jury to make this finding.

ium purchase was not adequate to prove a financial motive because the funds he received from stent procedures constituted a small fraction of the purchase price. We agree with McLean that this evidence is not particularly probative. A condominium purchase is hardly evidence of a financial motive to commit fraud; it is a personal financial decision that falls well within the bounds of law-abiding conduct. However, as explained above, there was separate evidence showing that McLean benefitted financially from the unnecessary stent procedures and follow-up diagnostic tests he performed. Thus, even setting aside the condominium purchase, there was sufficient evidence to show McLean had a financial motive to commit fraud.

For these reasons, we hold that McLean's health care fraud conviction is supported by substantial evidence.

B.

McLean next challenges the sufficiency of the evidence as to the false statement charges (Counts 2-5, 7). To sustain a conviction under 18 U.S.C. § 1035, the government was required to prove beyond a reasonable doubt that McLean "knowingly and willfully . . . ma[de] . . . materially false . . . or fraudulent statements . . . in connection with the delivery of or payment for health care benefits, items, or services." 18 U.S.C. § 1035. The specific intent to defraud may be inferred from the totality of the circumstances, and need not be proven by direct evidence. *Harvey*, 532 F.3d at 334.

Dr. Gilchrist testified about the cases cited in the indictment and explained to the jury how McLean overstated the level of stenosis in each case. Even McLean's own expert, Dr. Marmur, disagreed with the stenosis diagnoses McLean recorded, although he testified that some slides could support a higher reading. Given the sheer disparity between the stenosis McLean recorded and what the angiograms showed, and the other evidence of fraud outlined above, there was suffi-

cient evidence for the jury to conclude that McLean intentionally overstated stenosis levels in the patient files named in the indictment. Further, the evidence showed that these misrepresentations were material insofar as they were necessary for McLean to justify the stents and obtain reimbursement from insurers.

McLean's challenge to the sufficiency of the evidence on these counts is based on the same arguments he raises with respect to the health care fraud charge. He argues that the government failed to prove that his misrepresentations were intentional and that he was not simply a negligent physician, and that the phenomenon of inter-reviewer variability and his vision problems could explain his overstatements. As discussed above, however, there was sufficient evidence from which the jury could rule out these non-criminal explanations for his conduct.

For these reasons, we hold that there is substantial evidence to support the false statement convictions.

C.

Lastly, McLean argues that the evidence was insufficient as to all counts because the government failed to prove beyond a reasonable doubt that an objective standard of medical necessity existed. There was ample evidence, however, that a standard existed. Both government experts testified that stents are not justified unless there is 70% or more stenosis in an artery and the patient suffers from symptoms of blockage. McLean was aware of this standard because he referenced it in a letter to the hospital. Although Dr. Marmur disagreed with the minimum threshold of stenosis required to justify a stent, he agreed with the government's experts that stents are contraindicated in cases of less than 50% stenosis. At a mini-

mum, the evidence clearly showed that stents are objectively unnecessary in cases of less than 50% stenosis.[9]

IV.

McLean next argues that his trial was prejudiced by the government's failure to disclose impeachment evidence and by certain evidentiary and discovery rulings committed by the district court. We do not believe a new trial is warranted based on these assertions of error for the reasons stated below.

A.

Shortly after McLean's trial, the government issued a press release stating that it had reached an agreement with PRMC to settle a civil fraud investigation of the hospital for being aware of and failing to take action to prevent McLean's medically unnecessary procedures. Subsequent disclosures revealed that the parties had reached a handshake settlement months before. McLean argues that the government's failure to disclose this information to him before trial violated his due process rights because he could have used the information to impeach the PRMC witnesses. In particular, he argues that the evidence would have allowed him to explore Dr. Cinderella's motivations for testifying and to probe bias, thereby undermining the credibility of a key witness.

The due process clause of the Fifth Amendment requires the government to disclose favorable impeachment evidence to the defendant. *See Brady v. Maryland*, 373 U.S. 83, 87 (1963) (holding that due process requires the disclosure of

[9]McLean points out that Dr. Gilchrist sometimes referred to 50% stenosis when explaining why a particular stent was inappropriate, arguing that his reference to something other than the 70% threshold highlights the inadequacy of proof on this issue. Dr. Gilchrist, however, testified that stents are contraindicated at stenosis less than 50%, and we do not find his reference to that threshold in individual cases inconsistent with his opinion that stents are generally necessary only after stenosis reaches 70%.

evidence favorable to the accused and material to guilt or punishment); *Giglio v. United States*, 405 U.S. 150, 154-55 (1972) (including impeachment evidence within the scope of materials that *Brady* requires prosecutors to disclose). A due process violation occurs when (1) the evidence is favorable to the accused because it is exculpatory or impeaching; (2) the evidence was suppressed by the government, either willfully or inadvertently; and (3) the evidence is material. *United States v. Moussaoui*, 591 F.3d 263, 285 (4th Cir. 2010). To be material, there must be a reasonable probability that disclosure of the evidence would have produced a different outcome. *Kyles v. Whitley*, 514 U.S. 419, 434 (1995).

We find no due process violation here because the settlement information had little impeachment value, and there was no reasonable probability it would have affected the jury's verdict. Neither Cinderella nor any other PRMC witness was a party to the settlement, and they did not agree to testify in exchange for the release of the government's claims against the hospital—the impeachment value of the information was therefore minimal. If anything, disclosure of the settlement to the jury likely would have bolstered the government's case, for the hospital's liability was based entirely on its failure to prevent McLean's misconduct. Finally, even assuming the settlement had some impeachment value, the jury's verdict could have rested on the testimony from Dr. Gilchrist and the many other former employees and patients who testified at trial. We cannot say there is a reasonable probability that disclosure of the settlement would have altered the jury's verdict.

B.

The day before McLean's expert was scheduled to testify, the district court allowed the government to conduct voir dire on him to remedy McLean's failure to provide adequate disclosures under Federal Rule of Criminal Procedure 16. McLean argues that the court's ruling was erroneous and that it deprived him of a fair trial.

We review the district court's decision as to the appropriate remedy for a violation of Rule 16 for abuse of discretion. *United States v. Barile*, 286 F.3d 749, 759 (4th Cir. 2002). A court abuses its discretion if its decision is "guided by erroneous legal principles" or "rests upon a clearly erroneous factual finding." *United States v. Johnson*, 617 F.3d 286, 292 (4th Cir. 2010) (internal quotation marks and citation omitted).

Rule 16 imposes mutual obligations on the prosecution and the defendant to disclose, at the other party's request, a written summary of any expert testimony that will be used at trial. The summary must describe the expert's opinions and "the bases and reasons for those opinions." Fed. R. Crim. P. 16(b)(1)(C); *id.* 16(a)(1)(G). If a party fails to comply with this rule, the court may "prohibit that party from introducing the undisclosed evidence" or "enter any other order that is just under the circumstances." *Id.* 16(d)(2)(C).

On June 24, 2011, three weeks before trial, McLean informed the government that Dr. Marmur would be testifying at trial and provided a Rule 16 disclosure describing his testimony. The disclosure stated that Marmur would testify that in five cases he had reviewed, McLean's stent treatment met the "interventional cardiology standard of care." Four days later, the government asked McLean to clarify the definition of the "interventional cardiology standard of care" and the bases and reasons for Marmur's opinions. McLean did not respond. As a result, on July 17, 2011, the government moved the court to exclude Marmur's testimony regarding the five cases. On July 20, 2011, the day the defense case began, the court considered the government's motion. Rather than excluding Marmur's testimony, the court gave the government the option to conduct voir dire of Marmur the next morning.

We see no abuse of discretion in this ruling. Because McLean's Rule 16 disclosure did not describe Marmur's opinions "beyond stating the conclusion he had reached and did not give the reasons for those opinions as required under Rule

16(b)(1)(C)," the disclosure did not satisfy the rule. *Barile*, 286 F.3d at 758. It was not an abuse of discretion to allow the government voir dire, especially given the fact that Marmur was scheduled to testify the following day. *See id.* ("Upon finding a violation of Rule 16, the district court has discretion under the Federal Rules of Criminal Procedure to determine the proper remedy.") (citing Fed. R. Crim. P. 16(d)(2); *United States v. Muse*, 83 F.3d 672, 675 (4th Cir. 1996)). By that point, the government's need to discover the bases and reasons for his opinions was pressing, and there was no excuse for McLean's delay.

C.

McLean also argues that the district court erroneously sustained the government's objection to several aspects of Dr. Marmur's testimony. Specifically, McLean argues that the district court erred in excluding Marmur's testimony on: (1) the medical necessity of follow-up tests post-stent intervention; (2) the treatment McLean gave other patients beyond those named in the Rule 16 disclosure; (3) the Journal of American Medicine Association article showing a national error rate of 12% in stent procedures; and (4) that four of the five cases named in the indictment met the interventional cardiology standard of care, in part, because Marmur had seen other doctors perform similar stents. We review the district court's evidentiary rulings for abuse of discretion. *United States v. Basham*, 561 F.3d 302, 325 (4th Cir. 2009). Evidentiary rulings are subject to harmless error review under Federal Rule of Criminal Procedure 52. *United States v. Heater*, 63 F.3d 311, 325 (4th Cir. 1995). To find a district court's error harmless, we need only say "with fair assurance, after pondering all that happened without stripping the erroneous action from the whole, that the judgment was not substantially swayed by the error." *Id.* (internal quotation marks and citation omitted).

With respect to the first two topics, we find no abuse of discretion because McLean did not provide notice that Marmur

planned to testify on these subjects as required by Rule 16. *See* Fed. R. Crim. P. 16(d)(2)(C) (allowing courts to exclude undisclosed evidence to remedy a Rule 16 violation); *Barile*, 286 F.3d at 758-59 (finding no abuse of discretion in district court's decision to exclude part of expert's testimony based on defendant's failure to provide adequate notice of the testimony under Rule 16).

As for the journal article, assuming without deciding that the court abused its discretion, any error was harmless. McLean introduced the study during his cross-examination of Dr. Gilchrist, and defense counsel relied on it during closing argument, emphasizing that the error rate discovered was 12%. Because the pertinent evidence from the study was introduced through other means, we can say with fair assurance that the jury's verdict was not swayed by the district court's ruling.

As for the last topic, the government's voir dire revealed that there were two bases for Marmur's opinion that the standard of care was met in four of the five cases he reviewed: (1) that the patients had at least 50% stenosis and symptoms or evidence of ischemia; and (2) that he had seen other doctors perform similar stents. The district court sustained the government's objection to the latter basis for Marmur's opinion, reasoning that Marmur's personal observations were not sufficiently reliable to be admissible under Federal Rule of Evidence 702. *See* Fed. R. Ev. 702 (providing that admissible expert testimony must be "the product of reliable principles and methods"); *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 592-93 (1993) (holding that district courts must make a preliminary assessment of whether the reasoning or methodology underlying an expert's testimony is scientifically valid and can be applied to the facts in issue).

McLean argues that this ruling was an abuse of discretion because medical standards of care are defined, in part, by the behavior of physicians in the relevant medical community.

We need not decide whether the court's ruling was an abuse of discretion because even assuming it was erroneous, any error was harmless. The court allowed Marmur to testify that the standard of care was met in the four cases because the objective criteria he referenced (50% stenosis plus symptoms or evidence of ischemia) were satisfied. That an additional explanation for his opinion was excluded did not detract from the ultimate point of his testimony, which was that in his opinion, the stents were within the standard of care. We see no prejudice resulting from the district court's decision.

V.

Finally, McLean argues that his sentence is procedurally unreasonable because the district court erred in calculating the loss amount. We review the sentence imposed by the district court under "a deferential abuse-of-discretion standard," *Gall v. United States*, 552 U.S. 38, 41 (2007), applying clear error review to the district court's finding of fraud loss, *United States v. Pierce*, 409 F.3d 228, 234 (4th Cir. 2005).

In calculating the appropriate sentence, the Sentencing Guidelines allow the district court to consider as relevant conduct the acts of the defendant, as well as the acts "willfully caused by the defendant" and "all harm that resulted from the acts and omissions." U.S.S.G. § 1B1.3. In deciding whether to apply an enhancement under Guidelines § 2B.1.1, the district court "need only make a reasonable estimate of the loss," U.S.S.G. § 2B1.1, cmt. n.3(C), based on a preponderance of the evidence, *see United States v. Mehta*, 594 F.3d 277, 282 (4th Cir. 2010). Because the traditional rules of evidence are not applicable to sentencing proceedings, Fed. R. Evid. 1101(d)(3), the sentencing court may consider any "relevant information . . . [that] has sufficient indicia of reliability to support its probable accuracy," U.S.S.G. § 6A1.3(a).

To establish the amount of loss, the government submitted evidence showing that from 2003 to 2006, McLean received

$579,070 in reimbursement from Medicare and private insurers for the unnecessary stent procedures and related follow-up tests. Mary Hammond, an auditor from the U.S. Attorney's Office, testified that the number of unnecessary stent procedures was calculated as the sum of procedures Dr. Cinderella categorized as fours and fives. Hammond also testified the hospital repaid $1.3 million to federal programs in connection with the settlement, which corresponded to reimbursement it received for hospital facilities used in McLean's unnecessary stent procedures. For purposes of the settlement, Hammond testified that the unnecessary stents were defined as the Cinderella fives, fours, and a few threes. Based on these figures, the district court found that "with the 579,000 clear stent-related loss and the hospital's reimbursement . . . there certainly is a loss in excess of a million dollars, and the 16-level enhancement should apply."[10]

McLean argues that loss was not established by the preponderance of the evidence because Cinderella's analysis was unreliable, the government failed to prove that any specific follow-up test was inappropriate, and the hospital's losses were not caused by "relevant conduct." We are not persuaded. Neither the follow-up tests nor the hospital's losses would have occurred but for the medically unnecessary stents McLean performed; as such, they were properly included as losses from relevant conduct. *See* U.S.S.G. § 1B1.3(a)(3) (permitting sentencing courts to consider "all harm that resulted from the acts and omissions" of the defendant). Moreover, the district court did not clearly err in relying on Cinderella's analysis. McLean contends that Cinderella was biased and his opinions were not grounded in objective criteria. However, the district court had the opportunity to

[10]McLean argues that the case should be remanded for resentencing because the district court did not specify the amount of loss. We disagree. Although the district court did not do the math in open court, the court clearly found that the total loss equaled the sum of $579,000 and the hospital's $1.3 million settlement figure, as the above statements demonstrate.

evaluate Cinderella's credibility and the strength of his opinions at trial, and we cannot say it was unreasonable to credit his testimony. In sum, we find no clear error in the district court's loss calculations.[11]

VI.

For the reasons explained above, the convictions and sentence are affirmed.

AFFIRMED

[11]McLean also argues that the hospital's repayments for Cinderella threes should have been excluded because the government never attempted to prove that these cases were fraudulent. We disagree. Although Cinderella classified these cases as "judgment call[s]," the judgment that they were inappropriate was made when the hospital agreed to repayment. Based on that judgment, it was not clear error to find that the procedures were more likely than not part of McLean's fraudulent scheme.