

UNITED STATES COURT OF APPEALS

FOR THE SIXTH CIRCUIT

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

v.

ANIS CHALHOUB,

Defendant-Appellant.

No. 18-6180

Appeal from the United States District Court
for the Eastern District of Kentucky at London.
No. 6:16-cr-00023-1—Gregory F. Van Tatenhove, District Judge.

Argued: July 30, 2019

Decided and Filed: January 7, 2020

Before: SILER, STRANCH, and NALBANDIAN, Circuit Judges.

COUNSEL

ARGUED: Paul Shechtman, BRACEWELL LLP, New York, New York, for Appellant. Andrew E. Smith, UNITED STATES ATTORNEY'S OFFICE, Lexington, Kentucky, for Appellee. **ON BRIEF:** Paul Shechtman, BRACEWELL LLP, New York, New York, for Appellant. Andrew E. Smith, Charles P. Wisdom, Jr., UNITED STATES ATTORNEY'S OFFICE, Lexington, Kentucky, for Appellee.

OPINION

NALBANDIAN, Circuit Judge. A jury convicted Dr. Anis Chalhoub on one count of defrauding health care benefit programs under 18 U.S.C. § 1347. A cardiologist, Chalhoub implanted permanent pacemakers in patients who—it turned out—did not need the devices or the

slew of tests that he ordered before and after surgery. On appeal, Chalhoub does not challenge the legal sufficiency of the evidence supporting the jury's verdict. Rather, he alleges that the district court repeatedly admitted evidence unduly prejudicial to him—and to which he could not effectively respond. Although some of the government's tactics here leave something to be desired, Chalhoub's arguments ultimately prove unavailing. We AFFIRM Chalhoub's conviction.

I.

Dr. Anis Chalhoub practiced invasive cardiology in London, Kentucky, with several practice groups between 1999 and 2013. From 1999 to 2008, Chalhoub practiced with a group of physicians called Cardiovascular Specialists. Chalhoub then left Cardiovascular Specialists to start his own practice in 2008, which he named Cardiovascular Specialists of the Cumberlands. Two years later, Chalhoub sold his practice to St. Joseph Hospital, a Kentucky hospital system, and joined a group of cardiologists called the Cumberland Group as an independent contractor. When the Cumberland Group disbanded, several Cumberland Group physicians—including Chalhoub—joined St. Joseph Hospital as full-time employees in early 2012. Chalhoub worked at that hospital for a little more than a year before being terminated in June 2013.

While in London, Chalhoub had no trouble staying busy. Indeed, Chalhoub's productivity—measured by the number of patients he treated and the procedures he performed—set him apart from his peers. To show just how busy Chalhoub was, the Government used Chalhoub's 2007 productivity statistics as a point of comparison. A national survey of cardiologists that year revealed that 75% of American cardiologists performed 336 or fewer stress tests. Chalhoub, by contrast, performed 853. (R. 145, Tr. at PageID #3118.) And that same year, Chalhoub conducted about 2,000 more office visits than the average invasive cardiologist.

For Chalhoub, more procedures meant more compensation. For a simple office visit, Chalhoub would request reimbursement from the patient's insurer and submit a code corresponding to the nature of the visit. The reimbursement process was slightly more complicated when Chalhoub performed a procedure. In that case, the patient's insurer would

make two payments—one to the physician who performed the procedure (the professional component), the other to the facility where the procedure occurred (the technical component). So if the physician performed the procedure at his office, he could collect *both* the professional and technical payment components from the insurer.

Under this fee-for-service arrangement, a physician's profit motive might not always align with his duty of care. Consider Chalhoub's specialty: cardiology. A healthy heart beats at least sixty times per minute, and when the heart rate drops below that threshold, the patient experiences a phenomenon called bradycardia. Sometimes, bradycardia warrants medical attention—and intervention. Inside the right atrium of the heart lies the sinus node, which functions as the body's natural pacemaker by sending electronic pulses that cause the heart to beat. The sinus node can malfunction, particularly as patients become elderly, and when that happens, the heart will begin to beat irregularly (including too slowly or too quickly). Physicians may decide to treat this condition—called “sick sinus syndrome”—by installing a pacemaker, a metal-coated electric device that regulates the heart rate. But bradycardia is not always cause for concern. Well-conditioned athletes, such as marathon runners, commonly have slower resting-heart rates, often dipping to just forty-five beats-per-minute. And even non-athletes may have slower heart rates at night when they sleep. Moreover, certain medications that treat hypertension—such as calcium-channel blockers and beta blockers—may also slow the heart rate. So a slow heart rate does not, automatically, warrant medical intervention.

Sometime around the fall of 2011, the Government grew suspicious that Chalhoub was performing unnecessary invasive cardiac procedures on many of his patients—and then billing their insurers, including Medicare. The Government informed St. Joseph Hospital, which then hired an outside firm, Executive Health Resources (“EHR”), to conduct an internal investigation of Chalhoub's practices. Dr. Edward Solow, an experienced cardiologist, led the EHR team in its review of twelve pacemaker procedures that Chalhoub performed. Solow received the complete hospital record and all pertinent office records for each of the twelve patients and reviewed those records to determine whether there was any medical justification to install the pacemakers. Solow could not find support in any of the twelve cases for Chalhoub's decision to

install the pacemakers. Upon receiving the results of that investigation, St. Joseph Hospital terminated Chalhoub in June 2013.

The Indictment and Trial. A grand jury indicted Chalhoub on one count of health-care fraud in violation of 18 U.S.C. § 1347. The indictment charged him with executing or attempting to execute a scheme to defraud health-care benefit programs between March 2007 and July 2011.

At trial, the Government's primary expert witness was Dr. David Spragg, a professor at Johns Hopkins University and practicing cardiologist. Spragg testified that he reviewed thirty-one procedures Chalhoub had performed, twenty-seven of which Spragg considered unnecessary. Spragg also testified more broadly about some patterns that he detected while reviewing records of Chalhoub's former patients. Often, patients on heart rate lowering medications such as beta blockers would come to Chalhoub with nonspecific complaints—perhaps attributable to their medication. Chalhoub would first tell the patients to wear a Holter monitor, a special device that would track their heart rate around the clock. And often, that device would show that the patient experienced nighttime bradycardia (that is, a heart rate of fewer than sixty beats-per-minute while the patient was asleep) but that the patient's daytime heart rate was normal. But Chalhoub would tell the patients that they had sick sinus syndrome—and then install a pacemaker to regulate their heart rate. Even after a patient received the pacemaker, Chalhoub would order more testing—including the Holter monitor—for which he would bill the patient's insurer.

Still more doctors testified at trial. The Government called Dr. Solow, who testified about his review of Chalhoub's pacemaker installation practices. The Government also called four practicing cardiologists in Kentucky—Drs. Aaron Hesselson, Gery Tomassoni, John Gurley, and Oluwole John Abe—to testify about some reasons for installing a pacemaker. In fact, Hesselson had treated some of Chalhoub's former patients. Hesselson noted that Chalhoub's patients with pacemakers “seemed to be much younger than the average patient having a pacemaker put in.” (R. 142, Tr. at PageID #2420.) And Hesselson testified in detail about his treatment of seven named patients in whom Chalhoub had installed a pacemaker. According to Hesselson, four of those patients never required a pacemaker to begin with, prompting him to

either turn their pacemaker down or remove it altogether.¹ Finally, Hesselson testified more generally about his treatment of patients who came to him after Chalhoub had installed a pacemaker. Hesselson stated that he either turned down or turned off the pacemakers of “approximately twenty” of those patients. (*Id.* at PageID #2466.) That figure stood out to Hesselson. Indeed, Hesselson testified that over the course of his career, he had treated at least 5,000 patients with pacemakers, of which he could recall only one other patient whose pacemaker he needed to turn down. Hesselson, however, could not provide the names of any of those twenty patients.

In its closing argument, the Government told the jurors that it had “identified approximately fifty examples” of pacemakers that Chalhoub had installed unnecessarily—the twenty-seven patients that Spragg identified plus the twenty unnamed patients that Hesselson described. (R. 148, Tr. at PageID #3944.) The jury convicted Chalhoub, and the district court sentenced him to forty-two months in prison. This appeal follows.

II.

Chalhoub contends that the district court made four erroneous evidentiary rulings during his trial, three relating to Federal Rule of Evidence 403. Under that rule, the court may exclude relevant evidence “if its probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” Fed. R. Evid. 403. “We review a district court’s Rule 403 determination only for an abuse of discretion.” *United States v. Sassanelli*, 118 F.3d 495, 498 (6th Cir. 1997). In doing so, we give “[b]road discretion” to the district court’s admissibility ruling—and we will not disturb the court’s judgment if that ruling, though erroneous, was harmless. *United States v. Jackson-Randolph*, 282 F.3d 369, 376 (6th Cir. 2002). Further, when an appellant challenges an evidentiary ruling but failed to object to that ruling before the district court, we review the court’s ruling for plain error. *United States v. Young*, 847 F.3d 328, 349

¹Hesselson testified that one other patient may not have ever needed her pacemaker, either. But because the patient was pregnant when he examined her, Hesselson decided to leave her pacemaker in place and at the current rate to avoid any risk to her pregnancy.

(6th Cir. 2017). Before reaching the Rule 403 claims, we review Chalhoub's claim that the government violated his due process right to put on a defense.

A.

Chalhoub alleges that the district court erred by admitting Hesselson's testimony about the twenty unnamed, former Chalhoub patients whose pacemakers Hesselson turned down. Because Hesselson could not identify the twenty patients' names, Chalhoub argues that he could not review his records to refute the claim that he had unnecessarily installed the pacemakers. As Chalhoub sees things, Hesselson's testimony was "both damning and unanswerable." (Appellant's Br. at 24.) Because Chalhoub objected to Hesselson's testimony on this basis at trial (and, before trial, moved in limine to bar Hesselson's testimony), we review the district court's decision for abuse of discretion. *United States v. White*, 846 F.3d 170, 174 (6th Cir. 2017).

Chalhoub's argument is a sympathetic one. Notice of the charges against you and the victims against whom you allegedly committed a crime is part of our judicial system's notions of due process. U.S. Const. amend. VI; Essays by The Impartial Examiner, in 5 *The Complete Anti-Federalist* 185 (Herbert J Storing ed. 1981) (describing elimination of a criminal defendant's "right to demand the cause or nature of the accusation" as one of "the most flagrant acts of oppression"). And if the government's only evidence against Chalhoub were these twenty unnamed patients (presented through the testimony of an expert), Chalhoub may have a meritorious claim. But that is not this case. As Chalhoub acknowledges, none of these twenty unnamed victims is necessary to sustain a conviction for one count of defrauding health care benefit programs—any of the twenty-seven named victims is sufficient for that. Chalhoub's own counsel correctly noted that even without these twenty unnamed patients, there was "no doubt that the prosecution had a legally sufficient case against Dr. Chalhoub." Oral Argument at 0:35, *United States v. Chalhoub*, -- F.3d -- (6th Cir. 2020) (No. 18-6180), <https://tinyurl.com/ubyurg3>. Counsel for Chalhoub also disavowed that his argument was based in Rule 403, instead contending that the government violated Chalhoub's due process right to present a defense.

We take Chalhoub at his word and analyze whether admission of the testimony about the twenty unnamed victims violated his due process right to put on a defense.²

Chalhoub argues that a defendant has a right to know the names of his purported victims so that he may mount a proper defense, pointing us to law related to bills of particulars. As we have explained, a “bill of particulars is meant to be used as a tool to minimize surprise and assist defendant[s] in obtaining the information needed to prepare a defense and to preclude a second prosecution for the same crimes.” *United States v. Salisbury*, 983 F.2d 1369, 1375 (6th Cir. 1993) (citations omitted). Thus, district courts presiding over criminal fraud trials have granted defendants’ requests for bills of particulars to learn the names of their alleged victims. *See, e.g., United States v. Vasquez-Ruiz*, 136 F. Supp. 2d 941, 943 (N.D. Ill. 2001); *United States v. Crisona*, 271 F. Supp. 150, 156 (S.D.N.Y. 1967). But Chalhoub is not challenging the district court’s denial of his request for a bill of particulars. Instead, he is objecting to the court’s *admission* of the testimony based on the particulars he sought. (Appellant’s Br. at 24 (“If there was no way for Dr. Hesselson to identify the 20 patients, then the court should have excluded his testimony about them.”), 27 (“[T]estimony about the 20 unnamed patients should not have been allowed.”).) Thus, he is pointing us to cases discussing a pleading issue in making an evidentiary objection. *See* 1 Charles Alan Wright & Arthur R. Miller, *Federal Practice and Procedure* § 130 (4th ed. 2008) (“A bill of particulars is a formal written statement by the prosecutor providing details of the charges against the defendant. Its functions are to give the defendant notice of the essential facts supporting the crimes alleged in the indictment or information, and also to avoid prejudicial surprise to the defense at trial.”). So bill-of-particulars law is not directly on point. Rather, his argument is rooted in the constitutional right to put forth a defense. *See Chambers v. Mississippi*, 410 U.S. 284, 294 (1973) (“The right of an accused in a criminal trial to due process is, in essence, the right to a fair opportunity to defend against the State’s accusations.”).

The constitutional right to put forth a defense encompasses two main categories: notice and an opportunity to be heard. *Flaim v. Med. Coll. of Ohio*, 418 F.3d 629, 634 (6th Cir. 2005).

²Chalhoub’s briefing was unclear about the precise basis for this claim. That said, we believe that Chalhoub’s analogy to bill of particulars’ claims shows that his argument is essentially a due process argument.

Chalhoub does not argue that he was denied notice of the criminal proceedings against him.³ At bottom, Chalhoub's argument is that he could not rebut Hesselson's testimony. But that is simply not true. To begin, Chalhoub knew that Hesselson might testify about the twenty unnamed patients before trial began, and, indeed, Chalhoub moved in limine to bar that testimony. Although Chalhoub's motion in limine failed, he was not defenseless at trial. To the contrary, Chalhoub had a full and fair opportunity to cross-examine Hesselson, which the Supreme Court has described as the

principal means by which the believability of a witness and the truth of his testimony are tested. Subject always to the broad discretion of a trial judge to preclude repetitive and unduly harassing interrogation, the cross-examiner is not only permitted to delve into the witness' story to test the witness' perceptions and memory, but the cross-examiner has traditionally been allowed to impeach, i.e., discredit, the witness.

Davis v. Alaska, 415 U.S. 308, 316 (1974). Chalhoub could have responded to Hesselson's testimony by, on cross-examination, assailing Hesselson's inability to recall the names of any of the twenty former Chalhoub patients. Chalhoub did not have to leave Hesselson's testimony unanswered.

To prevail on a claim of a denial of the right to be heard when a hearing has been held, a criminal defendant must show that exclusion of evidence was "unconstitutionally arbitrary or disproportionate [and that exclusion] infringed upon a weighty interest of the accused." *United States v. Kerley*, 784 F.3d 327, 342 (6th Cir. 2015) (quoting *United States v. Scheffer*, 523 U.S. 303, 308 (1998)). Because the court did not exclude evidence that Chalhoub otherwise tried to present, but rather Chalhoub chose not to answer Hesselson's testimony, Chalhoub does not have a valid argument that he was denied an opportunity to be heard. And the Supreme Court has held that "[t]here is no general constitutional right to discovery in a criminal case." *Weatherford v. Bursey*, 429 U.S. 545, 559 (1977). None of the limited exceptions apply to Chalhoub. See *Arizona v. Youngblood*, 488 U.S. 51, 57–58 (1988); *Brady v. Maryland*, 373 U.S. 83, 89–90

³True, Chalhoub does argue that he was denied notice of the evidence that the government presented against him. But the Due Process Clause's notice requirement is not that broad. Instead, notice is required only of the *proceedings* against a defendant. In other words "the charge, the policies or regulations the accused is charged with violating, and a list of possible penalties—is constitutionally required." See *Flaim*, 418 F.3d at 635.

(1963). Chalhoub thus has not shown a due process violation resulting from the admission of Hesselson's testimony relating to the twenty unnamed victims.

Chalhoub also tries to undercut Hesselson's testimony by noting that the district court refused to count the installation of the pacemakers in the twenty unnamed patients as relevant conduct in calculating the loss amount used for sentencing. But there is no inconsistency. Loss amounts are factual findings made by the court. *United States v. Poulsen*, 655 F.3d 492, 513 (6th Cir. 2011). So inclusion of the twenty unnamed patients in the court's calculation would have required the Government to prove that misconduct by a preponderance of evidence. *Id.* The district court explained that it could not make such a finding. (R. 179, Sentencing Tr. at PageID # 4660–61 (“ . . . there is some evidence that these 20 were problematic in some way. But I don't think there's enough here for me to include them as relevant conduct in this particular case.”)) The standard for admission of this evidence at trial, however, only requires that the evidence have “any tendency to make a fact more or less probable than it would be without the evidence” and that “the fact is of consequence in determining the action.” Fed. R. Evid. 401. It is consistent for Hesselson's testimony to satisfy this lower standard for relevance at trial—as evidence of Chalhoub's general scheme—but not the higher preponderance threshold for factual findings at sentencing.

Finally, Chalhoub argues that he suffered still more prejudice when the Government argued in summation that he had installed unnecessary pacemakers in 50 patients. That fifty-patient figure is the approximate sum of the twenty-seven patients about whom Dr. Spragg testified, plus the twenty unnamed patients about whom Hesselson testified. According to Chalhoub, there is no way to know whether there is any overlap in those patient groups. He contends it is conceivable that all twenty of the unnamed patients are a subset of the twenty-seven patients about whom Spragg testified. But even if there were a complete overlap, so that the Government effectively double-counted the number of patients in whom Chalhoub unnecessarily installed a pacemaker, there is no harm to Chalhoub. Again, Chalhoub's attorney conceded at oral argument that the Government had a legally sufficient case against Dr. Chalhoub. And relatedly, the Government indicted, and the jury convicted, Chalhoub on only

one count of a scheme to defraud Medicare and other health insurers, not fifty separate counts of installing unnecessary pacemakers.

So we determine that the district court did not abuse its authority in admitting Hesselson's testimony. We emphasize that the government did not base its case solely on allegations about these twenty victims. That troubling scenario would present us with a different case. Nor, as we note, does Chalhoub argue that it was unduly prejudicial under Fed. R. Evid. 403 for the court to have allowed this testimony.

B.

Chalhoub next argues that he was severely prejudiced by testimony that he misbilled insurers for other unspecified procedures. The indictment charged Chalhoub with a scheme to defraud Medicare and other health insurers by (1) installing permanent pacemakers in patients without sufficient medical need or justification; and (2) causing claims for medically unnecessary procedures and services to be submitted to health care benefit programs. (R. 1, Indictment at PageID #3.) Before trial, Chalhoub moved for a bill of particulars requesting additional information, specifically:

(1) the identities of the specific patients in whom Dr. Chalhoub allegedly implanted single chamber and dual chamber permanent pacemakers “without specific medical need or justification,” as alleged in paragraph 11 of the Indictment; [] (2) the nature of the “medically unnecessary procedures and services,” as alleged in paragraph 12 of the Indictment[; (3)] the identities of the specific patients on whom the “medically unnecessary procedures and services” were allegedly performed[;] and [(4)] the specific dates on which such “medically unnecessary procedures and services” were allegedly performed.

(R. 57, Mot. for a Bill of Particulars at PageID #717.)

In a reply memorandum in support of his motion, Chalhoub clarified that he was also seeking: “(a) what *other* ‘medically unnecessary procedures and services’ [he performed in addition to the pacemaker installations], (b) the identities of the patients on whom [he performed] the *other* ‘medically unnecessary procedures and services,’ and (c) the dates on which [he performed] these *other* ‘medically unnecessary procedures and services.’” (R. 61, Def.’s Reply Mem. in Supp. of Mot. for a Bill of Particulars at PageID #787.) The magistrate

judge denied Chalhoub's motion, explaining that the discovery provided by the Government, especially the Government's expert report prepared by Dr. Spragg which identified thirty-two specific procedures, provided enough information for Chalhoub to prepare his defense. Chalhoub objected to the magistrate's denial and the district court overruled Chalhoub's objection. But at trial, when the Government introduced evidence of these unnecessary procedures, Chalhoub did not object. Chalhoub now argues that the district court erred in admitting this evidence.

We note, again, that Chalhoub does not appear to object to the district court's denial of his request for a bill of particulars. Instead, he contends that the district court erred in admitting evidence about the purportedly unnecessary procedures he ordered. (Appellant's Br. at 27 ("Dr. Chalhoub was severely prejudiced by testimony and argument that he misbilled for other unspecified procedures."), 31 ("[P]roof and argument about 'billing, billing, billing' for unspecified procedures was entirely unfair.")) Because Chalhoub did not object to the presentation of this evidence at trial, we review only for plain error. That means Chalhoub must show that the district court committed "(1) error (2) that was obvious or clear, (3) that affected [his] substantial rights and (4) that affected the fairness, integrity, or public reputation of the judicial proceedings." *United States v. McAllister*, 693 F.3d 572, 584 (6th Cir. 2012) (citation omitted).

Chalhoub identifies several statements at trial that he argues were both unduly vague and prejudicial. Dr. Spragg, the Government's primary expert witness, remarked that Chalhoub seemed to perform "a very high volume of diagnostic tests," as compared to Spragg's own practice and those of physicians with whom he practices. (R. 140, Tr. at PageID #1919.) Likewise, Carmel Jones, a hospital administrator at St. Joseph Hospital, described Chalhoub as a "very busy [doctor]," and provided detailed statistics about Chalhoub's productivity relative to other cardiologists. (R. 145, Tr. at PageID #3113-14.) Finally, in summation, the Government told the jury:

You saw that when it came to nuclear tests this meant actually in the 75th percentile. The national average is 336. He did 853 in that year. Saw that for echocardiograms that 75th percentile, meaning 75 percent of doctors and below did 362 or less. He did 953. Look at the office visits. Again, he's about 1200

higher than that 75th percentile. This isn't the average. This is the 75th percentile. He's literally off the charts. Now you have heard, I think, what I would call a euphemism, that he's just hard working . . . This isn't working hard. This is billing, billing, billing.

(R. 148, Tr. at PageID #3949–50.)

Chalhoub asks how any doctor or professional services provider could defend himself against such vague allegations or show how the allegedly superfluous procedures were, in fact, necessary. But Chalhoub's second argument fails for the same reason as his first: he had a full and fair opportunity to cross-examine the witnesses who testified about his use of these procedures. For example, Spragg reviewed the medical files of thirty-one of Chalhoub's former patients and noted that Chalhoub had ordered a high volume of diagnostic tests. The government produced these files to Chalhoub. On cross-examination, Chalhoub could have asked Spragg about each patient and procedure, seeking to impeach Spragg. And if Chalhoub felt that the allegations about his procedure volume were vague, he could have pressed that exact point to the jury.

Simply put, Chalhoub's second argument challenges the weight—not the admissibility—of the Government's evidence. But that is not grounds for disturbing a trial court's evidentiary rulings. *Cf. United States v. Stafford*, 721 F.3d 380, 394 (6th Cir. 2013) (holding that the district court did not abuse its discretion where it permitted an expert's "vague conclusions" because that went to "the weight of the [] evidence, not its admissibility"); *see also Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596 (1993) ("Vigorous cross-examination . . . [is a] traditional and appropriate means of attacking shaky but admissible evidence.").

In sum, the district court's admission of this testimony was not plainly erroneous.

C.

Chalhoub next argues that the district court should have excluded testimony about his income and expenditures. Before trial, Chalhoub moved in limine to bar evidence about his lifestyle and expenditures. The trial court evaluated the evidence by applying the test set forth by this court in *United States v. Jackson-Randolph* for determining when the unfair prejudice of evidence of a lavish lifestyle significantly outweighs the evidence's probative value. *See*

282 F.3d 369, 378 (6th Cir. 2002). The court found that the evidence was directly connected to the period of Chalhoub's alleged illegal activity and showed the jury a motive to commit the alleged crimes. Thus, the district court found that Rule 403 did not require exclusion of the lifestyle and expenditure evidence. Important to the court's ruling was the government's assertion that they would cabin the lifestyle evidence they presented to a correlation between Chalhoub's spending and productivity—without focusing on specific evidence of Chalhoub's lavish lifestyle such as expensive clothing or cars. In any event, Chalhoub continued to object to the admission of that evidence at trial, so we review the district court's evidentiary ruling for abuse of discretion. *White*, 846 F.3d at 174.

FBI agent Thad Lambdin testified about Chalhoub's income and expenditures. Lambdin's testimony focused on four years and provided the following figures. Chalhoub's after-tax income and expenditures, respectively, were: \$549,288 and \$464,017 in 2008; \$577,378 and \$496,080 in 2009; \$825,412 and \$813,865 in 2010; and \$528,586 and \$463,494 in 2011.⁴ The jury also learned that Chalhoub had automobile expenses of \$181,593 between 2008 and 2013, credit card expenses of \$221,411 in 2009 and \$273,881 in 2010, and home-improvement and mortgage expenses of \$409,359 in 2010. In summation, the Government told the jury:

We also heard about his income and expenses, right? And I think you heard this idea about well, he was making a good amount of money and there's nothing wrong with that, right? Great thing about this country: if you work hard, you make money. Nothing wrong with that. But he was making a lot of money, and you heard this idea that he was living well within his means. Is that really the right question here? Or is the question, how did he get those means? We can live within means that we get the wrong way. That doesn't make it okay, right? And you saw personal expenses, \$200,000 a year or more on credit cards, expenses on school, on home, hundreds of thousands of dollars, automobiles, 30 to 60 thousand dollars during this time, right? Spending a lot of money.

(R. 148, Tr. at PageID #3951–52.)

“[A]ppeals to class prejudice are highly improper and cannot be condoned and trial courts should ever be alert to prevent them.” *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150,

⁴Chalhoub sold his practice in 2010 for \$335,000, which was part of his income for that year.

239 (1940). Moreover, “it is illogical and improper to equate financial success and affluence with greed and corruption.” *Jackson-Randolph*, 282 F.3d at 377. But there is a distinction between evidence that impermissibly appeals to class prejudice and wealth-related evidence that passes muster under Rule 403. *Id.* at 378. To that end, we established a three-part test in *Jackson* that, if satisfied, means the unfair prejudice from wealth-related evidence does not outweigh the probative value: “(1) there is other credible evidence, direct or circumstantial, of the illegal activity; (2) the money spent was not available to the defendant from a legitimate source; and (3) the accumulation of great wealth or extravagant spending relates to the period of the alleged illegal activity.” *Id.*

Chalhoub focuses only on the second factor—whether the money he spent could have come from a legitimate source. As Chalhoub explains, the reimbursements he received from insurers related to the pacemaker installations paled in comparison to his annual income. Recall that when a physician performs a procedure, the insurer makes two payments: the professional component, which goes to the physician, and the technical component, which goes to the hospital at which the procedure occurred. Chalhoub underscores that between 2007 and 2011, the average professional component for a pacemaker procedure was just \$377. And Chalhoub performed, on average, forty-seven pacemaker procedures annually over that four-year span. So even if every pacemaker procedure were unnecessary, the annual, *pre-tax* income Chalhoub collected from those procedures would have been less than \$18,000, a mere fraction of his average, *post-tax* annual income of \$622,103. Thus, Chalhoub contends that he could have financed all his expenditures through other legitimate income (and, for that matter, insists it would have been illogical to risk his reputation, medical license, and liberty to execute an unprofitable scheme).

But the professional component of the payments tells only part of the story. The insurer would also make a much larger payment—the technical component—to the hospital where the procedure occurred. For a pacemaker procedure, that payment ranged from \$5,000 to \$10,000. Of course, not all of that payment made its way to Chalhoub. The Government claims that Chalhoub’s employer used a formula that factored in Chalhoub’s productivity—including the revenue he generated from tests and procedures—to calculate Chalhoub’s total compensation.

Indeed, just as it asserted in opposing Chalhoub's motion in limine to presentation of the lifestyle and expenditure evidence, the Government presented testimony at trial to show that the number of pacemaker procedures Chalhoub performed in a given year roughly correlated with his income. That testimony echoed what Chalhoub himself acknowledged at trial: that he and his colleagues "were compensated based on the work that we do." (R. 147, Tr. at PageID #3730.) And as the Government underscores, Chalhoub's expenditures correlated with his income. Indeed, Chalhoub spent almost every penny of his earnings between 2008 and 2011. The Government therefore argues that the evidence about Chalhoub's expenditures helps establish Chalhoub's motive to install pacemakers, even if they were necessary.

Evidence about the correlation between Chalhoub's income and expenditures is probative, given that it helps establish Chalhoub's motive for performing procedures that may not have been necessary. As to prejudice to Chalhoub, the Government argues that the evidence it presented about Chalhoub's expenditures was relatively bland. To be sure, each case is unique, although we note that in *Jackson-Randolph*, we did not overrule the district court's decision to admit evidence of the defendant's purchases of "expensive jewelry, clothing, and several fur coats" and trips to "Aruba, the Bahamas, Las Vegas, and Atlantic City for gambling[.]" *Jackson-Randolph*, 282 F.3d at 376. Here, by contrast, the Government presented testimony about how much Chalhoub spent on his credit cards (the jury did not learn—nor do we know—what expenses he placed on those cards), his home, and his automobiles, generically.

This is a close question. Although we question whether evidence of how Chalhoub spent his income—be it on automobiles, clothing, or charity—offers much probative value, the district court did not abuse its discretion in allowing this testimony. Especially because the government classified the data into generic categories, as compared with the direct presentation of luxury expenditures we allowed in *Jackson-Randolph*. *Cf. id.* The government's evidence here showed that Chalhoub earned a handsome living, especially as compared to the average wage-earner in London, Kentucky. That the government made the jury aware that Chalhoub spent a nontrivial share of this wealth on housing and automobiles, however, did not expose Chalhoub to the level of prejudice that would warrant disturbing his conviction.

D.

Chalhoub's final argument concerns testimony about his installation of a pacemaker in Ruthene Banks, a former patient. Chalhoub argues that the district court should have barred testimony about his treatment of Banks under Federal Rule of Evidence 403. Because he failed to object to the introduction of this evidence at trial, we review for plain error. *See Young*, 847 F.3d at 349.

Dr. John Gurley, a cardiologist who treated Banks, explained to the jury that a pacemaker has between one and three insulated wires, called "leads," which send an electronic pulse to the heart muscle wall. As Gurley explained, the cardiologist is supposed to insert the leads into one of the patient's veins—not arteries—in the upper chest. But when Gurley examined Banks, he discovered that Chalhoub had misplaced one of the leads in Banks's pacemaker. According to Gurley, Banks's lead had punctured part of Banks's aorta (not a vein) and then traveled across her aortic valve and into her right ventricle. That was a far different explanation from what Chalhoub relayed to Banks. Banks testified that Chalhoub informed her several days after installing the pacemaker that one of the leads in her pacemaker had inadvertently traveled through a hole in her heart and into the left ventricle—but that she would be fine. Chalhoub took no further action to correct his mistake, nor did he refer Banks to another physician. Gurley testified that the lead was damaging Banks's two most important cardiac valves, putting her at risk of a stroke, and Spragg, the Government's primary expert witness, described the misplacement of a lead in the left ventricle as "a potentially catastrophic situation." (R. 144, Tr. at PageID #2864; R. 140, Tr. at PageID #2120.) Gurley operated on Banks, removing the misplaced lead and installing a new pacemaker.

On appeal, Chalhoub argues that the evidence about Banks's pacemaker was unfairly prejudicial because it portrayed him as an inept doctor who was indifferent to Banks's potentially fatal condition. But the Government counters that the purpose of that testimony was not to depict Chalhoub as incompetent but to show the degree to which Chalhoub was willing to conceal his installation of unnecessary pacemakers from other physicians. According to the Government, Chalhoub dissuaded Banks from seeking additional treatment; not simply to prevent other physicians from detecting his mistake, but to avoid scrutiny about his decision to

install the pacemaker in the first place.⁵ Viewed in that light, the district court did not plainly err in admitting the testimony. Of course, the evidence harmed Chalhoub, but so does most evidence admitted against criminal defendants. The evidence must be *unfairly* prejudicial to warrant exclusion under Rule 403. See *United States v. Sanders*, 95 F.3d 449, 453 (6th Cir. 1996) (citation omitted) (“Evidence that is prejudicial only in the sense that it paints the defendant in a bad light is not unfairly prejudicial pursuant to Rule 403.”).

IV.

Chalhoub has identified no erroneous evidentiary decisions—harmless or otherwise—so we need not consider his argument that the cumulation of harmless errors rendered his trial fundamentally unfair.

For these reasons, we **AFFIRM** his conviction.

⁵ Chalhoub argues that the Government’s theory holds no weight, given that Gurley installed a new pacemaker in Banks when he removed her misplaced lead. This, according to Chalhoub, suggests that Banks needed the pacemaker after all. But Spragg testified that his review of Banks’s medical records led him to believe that the pacemaker was unnecessary. And even Gurley remarked that he did not know for sure whether Banks ever needed a pacemaker—but that when he operated on her, the most pressing task was to safely remove the misplaced lead and reduce the risk of stroke. (R. 144, Tr. at PageID #2864.) As Gurley explained, “when you’re fighting one war, you don’t want to pick a fight on another front if you don’t have to.” (*Id.*) So Gurley replaced Banks’s pacemaker, describing his decision as a “risk mitigation strategy.” (*Id.*) This was testimony that the jury had a right to credit.