[PUBLISH]

IN THE UNITED STATES COURT OF APPEALS

FOR THE ELEVENTH CIRCUIT

No. 19-10676

D.C. Docket No. 9:18-cr-80122-DMM-1

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

versus

ARMAN ABOVYAN,

Defendant-Appellant.

Appeal from the United States District Court
for the Southern District of Florida

(February 22, 2021)

Before WILLIAM PRYOR, Chief Judge, HULL and MARCUS, Circuit Judges.

HULL, Circuit Judge:

After a jury trial, Arman Abovyan appeals his convictions and sentences for

conspiring to commit healthcare fraud, conspiring to possess with intent to dispense controlled substances, and seven counts of unlawfully dispensing a controlled substance. On appeal, he argues that insufficient evidence supported his convictions, the jury instructions were improper, and his sentences were improperly calculated. After review, and with the benefit of oral argument, we affirm Abovyan's convictions and sentences.

I. FACTUAL BACKGROUND

This healthcare fraud conspiracy was orchestrated by Kenneth Chatman, a convicted felon with no medical training. Chatman owned and operated two substance-abuse treatment centers, Reflections Treatment Center ("Reflections") and Journey to Recovery ("Journey"), in South Florida.[1] The Facilities offered various levels of outpatient substance-abuse treatment for individuals suffering from drug and alcohol addiction, some of whom resided at separate "sober homes" and "halfway houses."[2]

The defendant Arman Abovyan was a primary-care physician, board-certified in internal medicine, with a private medical practice. Although Abovyan

[1]When we refer to Reflections and Journey collectively, we use the term "Facilities." On paper, Chatman's wife owned the Facilities because Chatman was a convicted felon. But in reality, Chatman was the true owner and operator.

[2]At trial, the terms "sober homes" and "halfway houses" were used for residences for patients attending outpatient drug treatment.

had no prior experience in substance-abuse medicine, Chatman recruited him to be the medical director of the Facilities.

In July 2016, Abovyan became medical director of Reflections and of Journey when it opened in October 2016. As medical director, Abovyan's duties included providing substance-abuse treatment, authorizing and ordering drug testing, and prescribing drug-treatment medication. Abovyan's employment contract specified that he would work around 18.5 hours per week and be paid $11,000 per month. In practice, Abovyan was present at the Facilities only about nine hours per week or less. Abovyan remained the Facilities' medical director until federal authorities executed search warrants and shut them down in December 2016. Below, we describe the healthcare fraud scheme and Abovyan's role in it.

A. The Healthcare Fraud Scheme

Chatman's healthcare fraud scheme involved over 20 individuals.[3] Chatman paid kickbacks to the owners of sober homes and halfway houses in exchange for them sending their patients to the Facilities for treatment and drug testing.

For example, Anthony Jackson testified that he met Chatman around August

[3]Before Abovyan's trial, Chatman pled guilty to conspiring to commit healthcare fraud, conspiring to commit money laundering, and conspiring to commit sex trafficking and was sentenced to imprisonment terms of 120 months on the healthcare fraud conspiracy, 240 months on the money laundering conspiracy, and 330 months on the sex trafficking conspiracy, all to run concurrent.

2015, when Jackson owned a sober home.[4] Most of Jackson's residents had insurance. Chatman paid Jackson to send his sober home residents to attend Reflections for treatment and testing. Jackson later became program director at Reflections.

Chatman required his employees at the Facilities to collect urine and saliva from their patients three times per week and send them for drug testing to specific toxicology labs, including Smart Lab and Ally Clinical Diagnostics ("Ally"). The labs charged thousands of dollars per specimen tested, for which the labs billed the Facilities' patients' insurance. In return, Chatman received kickbacks for sending specimens to Smart Lab and Ally for testing.

For example, from the summer of 2016 until 2017, Bosco Vega was a sales representative for Smart Lab. Its CEO was Hawkeye Wayne. Vega testified that the more testing he procured for Smart Lab, the more he was paid in commissions and the more kickbacks Chatman received. Vega had an arrangement with Chatman and Wayne, whereby Vega gave Chatman half of his net commissions as a kickback on all urine testing Reflections ordered from Smart Lab through Vega.[5] During Vega's time as a Smart Lab sales rep, he paid Chatman kickbacks of

[4]Before Abovyan's trial, Jackson pled guilty to conspiring to commit healthcare fraud and was sentenced to 42 months' imprisonment.

[5]Before Abovyan's trial, Vega pled guilty to money laundering but had not been sentenced.

approximately $40,000 in cash. Vega also was paid between $10,000 and $20,000 per month to "oversee[]" the organization and transportation of samples to Smart Lab.

Similarly, Stefan Gatt worked for Ally as a medical sales representative. Gatt testified that, starting in February 2016, he paid Chatman kickbacks to use Ally for saliva testing.[6] Gatt was a partial owner of Journey with Chatman. Gatt admitted that he oversaw the urine and saliva testing that both Smart Lab and Ally provided for the Facilities' patients.

B. Abovyan's Role in Ordering Tests

To help Chatman submit as many specimens as possible to Smart Lab and Ally, Abovyan ordered and authorized excessive lab drug testing that was medically unnecessary. Abovyan's predecessor at Reflections was Dr. Aron Tendler. Chatman fired Dr. Tendler after he attempted to curtail the excessive and medically unnecessary testing at Reflections. Chatman recruited Abovyan as Tendler's replacement.

When Abovyan started at Reflections, he wrote a letter adopting the testing regime that Dr. Tendler had unsuccessfully tried to curtail. The July 15, 2016, letter, typed on Reflections letterhead and signed by Abovyan, stated:

[6]Before Abovyan's trial, Gatt pled guilty to conspiring to commit healthcare fraud and finished serving his 18 months' sentence.

> I am the new Medical Director for Reflections Treatment Center. Prior to my hire, [Dr. Tendler] left his post without reviewing and signing off on client charts. We have been unsuccessful in our attempts to reach him and rectify this situation.
>
> As a result, I have reviewed the orders and progress notes. I agree with the factual and medical recommendations of the previous Medical Director.

Abovyan then wrote "standing orders" authorizing the testing of the Facilities' patients' urine at least two to three times weekly. For example, one of these standing orders, titled "Urine Drug Test Protocol," signed by Abovyan, established that, for every patient, "Point of Care Cup testing will be used for rapid detection and the specimen will be sent to a separate lab for Confirmation."[7] Abovyan's standing order authorized a laboratory testing frequency of "2-3 Scheduled times per week and up to 2 random times per week" and stated that Abovyan "confirm[ed] that the Urine Drug Screening & Confirmation tests ordered by me are medically necessary for the diagnosis and treatment plan and will be documented in patients[']chart[s] as medically necessary." Based on that protocol, Abovyan signed consent forms authorizing Smart Lab "to perform the toxicology testing for patient specimens from [the Facilities] based off of the individual requisition forms."

[7]There are different levels of urine testing. A "point of care" test is done in the office where the patient is getting care and involves an inexpensive cup and dipstick. Lab testing, also called "definitive or confirmatory testing," is not done on-site, is expensive, and requires a doctor's order.

Facilities employees then used these requisition forms to order the lab drug tests for each individual specimen. The Facilities used different requisition forms depending on the type of specimen (urine or saliva) because they used Smart Lab for urine testing and Ally for saliva testing. The Smart Lab requisition forms had the Smart Lab logo at the top, a space for patient information, diagnosis codes, and a series of boxes to check to indicate which types of drugs the urine was to be tested for. Because Abovyan established standing orders and consent forms for Smart Lab testing, he did not sign each requisition form. Instead, Abovyan's name was listed as the "Ordering Provider" on each form.

Ally's requisition forms were similar to Smart Lab's, with an Ally logo at the top, a space for patient information, and drug-test-request checkboxes. Instead of establishing standing orders and consent forms like he did with Smart Lab, Abovyan pre-signed Ally's testing requisition forms, leaving the patient information blank, but checking boxes for full comprehensive tests for all available drugs.

Co-conspirator Gatt testified that Abovyan pre-signed Ally saliva testing requisition forms so that Gatt and others could make copies of them. Abovyan knew that they were photocopying his pre-signed requisition forms so that he "did not have to continually sign off on each individual form." Gatt testified that either he or a staff member filled in the patient information and checked boxes for

various testing, and Abovyan knew about it because Gatt filled out one of the sheets in front of Abovyan and Abovyan signed it.

These tests were not specialized to a named patient or a patient's background. Rather, Abovyan admitted that he established this testing protocol because that was "what Kenneth Chatman . . . wanted." Even if a patient were addicted only to cocaine, Abovyan admitted they would "test for everything." In many instances, this meant that a lab tested specimens for over 100 substances, including drugs that would not meaningfully inform treatment because they were non-addictive or rarely abused. Each lab urine test costs between $1,000 and $6,000.[8]

Patricia LaFrance, a Behavioral Health Technician, worked directly for Chatman at Reflections from July 2015 until around October 2016 and at Journey from October 2016 until the Facilities closed. LaFrance monitored patient urinalysis. LaFrance collected a cup of urine from every patient three times per week and performed a cup and dipstick test on every sample. Regardless of the cup test results, LaFrance sent the urine to the lab for further testing using lab requisition forms that Abovyan authorized in his standing orders. Another employee trained LaFrance to fill out the Smart Lab requisition forms with the

[8]Most uninsured patients did not receive this expensive lab testing and were tested only once per month with an on-site cup/dipstick test that cost around $3.

patient's information and to check the appropriate boxes so that the lab tested the sample for a myriad of different drugs.

When a patient did not show up for testing, various staff provided their own urine for lab analysis, at Chatman's direction. LaFrance also collected saliva samples and filled out Abovyan's pre-signed Ally requisition forms, which she gave to Gatt.

C. Abovyan's Role in "Treatment"

The Facilities also made money by billing patients' insurance for outpatient "treatment." The Facilities' treatment services included therapy sessions, medical checkups, and drug-treatment medication. In reality though, the patients received no real medical treatment.

In addition to excessive drug testing orders, Abovyan prescribed Suboxone to his patients, even though he was not licensed to do so. Suboxone is a controlled substance that contains the Schedule III narcotic buprenorphine. The Drug Addiction Treatment Act of 2000 requires physicians who are not addiction specialists to take a training course and obtain a special license before they can prescribe buprenorphine for addiction treatment, in light of the drug's potential for abuse and risk of side effects, including death. See 21 U.S.C. § 823(g).

After completing a specialized training course and registering, doctors apply for a DEA certificate and receive an X Number, which allows them to lawfully

prescribe buprenorphine for addiction treatment. This special license, including the X Number, is not needed when buprenorphine is prescribed to treat other things, like pain. Until September 2016, Abovyan did not have an X Number.

To get around the X Number requirement between July and September, 2016, Abovyan indicated on the Facilities' patients' buprenorphine prescriptions a diagnosis of "pain" or "withdrawal" (instead of drug addiction), even though patients' charts did not indicate that they were, in fact, experiencing pain or withdrawal.

Although ordering drug tests and prescribing buprenorphine, Abovyan often did so without actually examining patients, making assessments, or creating individualized treatment plans. Then, Abovyan rarely showed or discussed the lab drug test results with patients. Although Abovyan noted in many patient charts, "[r]eviewed and will discuss at next patient encounter," there was no such follow-up. Even when patients tested positive for drug use, there was no evidence in patients' charts or elsewhere that Abovyan discussed this with patients or modified treatment. In some instances, Abovyan noted that a patient was "doing well" or "normal" or "clean for a while" even though the test results indicated otherwise.

Despite being the Facilities' main doctor, Abovyan largely delegated his treatment duties. He pre-signed prescription pads for his nurses to fill in the patient name, drug, and diagnosis without his being present. Jackson testified that

he saw Abovyan's nurse practitioners with blank prescription pads signed by Abovyan. Abovyan also gave the nurses his log-in credentials to edit patients' electronic medical records. When Abovyan did meet with the Facilities' patients, it typically was for only around five minutes. Reflections even stored medications on site, and, if a patient was prescribed buprenorphine, Reflections would give the patient the medication from storage instead of waiting until the prescription was filled at the pharmacy.

D. Federal Investigation

When the Facilities were shut down in December 2016, the Federal Bureau of Investigation ("FBI") agents discovered Abovyan's signature on stacks of Ally testing requisition forms. The test forms had no patient names or information but did have diagnosis codes completed on the forms and boxes pre-checked to request full-panel lab testing.

Agents also searched the storage unit of Tina Barbuto, the clinical director of Reflections and Abovyan's codefendant. Agents found, inter alia, patient documents, test results, and pill bottles containing controlled substances, including Suboxone—which contains buprenorphine—that had been prescribed by Abovyan to the Facilities' patients. Jackson testified he saw Barbuto with blank prescription pads signed by Abovyan. At Reflections, agents found a November 2016 letter directed to Abovyan from an insurance company, which stated that, "[d]ue to

ongoing and serious investigations regarding member safety and potential insurance fraud, we are temporarily suspending all approval of authorization for treatment at Reflections Treatment Center and payment of claims for any treatment at this facility."

In April 2017, a UnitedHealthcare investigator interviewed Abovyan. Abovyan said that working at Reflections "was easy money," but also the "biggest mistake of his life." Abovyan admitted that he ordered the lab urine tests for patients at Reflections to be conducted two to three times per week.

The FBI interviewed Abovyan in June 2017. Abovyan admitted that he: (1) signed the standing lab orders; (2) ordered whatever lab tests that Chatman wanted three times per week per patient[9]; (3) provided the nurse practitioners with pre-signed, blank prescription pads; and (4) received additional payments for detox and treatment services, and was paid $5,000 per month "so that Kenny Chatman could use [Abovyan's] medical license to bill insurance."[10]

II. INDICTMENT & TRIAL

In 2018, a superseding indictment charged Abovyan and Tina Barbuto with:

[9]Abovyan told the FBI that he reviewed the lab test results for each patient and signed the electronic medical records indicating that he reviewed the results. However, at trial, patients and others testified that he did not review the test results with patients.

[10]In some months, the $5,000 appears to be over and above his $11,000 salary, as the record shows that he was paid $19,000 in October and $17,300 in December 2016. In November 2016, he was paid $15,300.

conspiracy to commit healthcare fraud, in violation of 18 U.S.C. § 1349 (Count One); conspiracy to possess with intent to distribute and dispense controlled substances, including buprenorphine and others, in violation of 21 U.S.C. § 846 (Count Two); unlawful dispensing of a controlled substance, buprenorphine, to specific patients (Counts Three through Nine), in violation of 21 U.S.C. § 841(a)(1) and 18 U.S.C. § 2; and possession with intent to distribute controlled substances, in violation of § 841(a)(1) and § 2 (Count Ten). Codefendant Barbuto pled guilty to conspiracy to commit healthcare fraud. Chatman and around 15 others were already charged in separate indictments for their roles in the healthcare fraud scheme.

During Abovyan's eight-day jury trial, the government presented over 20 witnesses and overwhelming evidence of the above healthcare fraud scheme at the Facilities. Among the witnesses, the government called former employees of Smart Lab, Ally, and the Facilities; nurse practitioners; an expert on addiction medicine; former Reflections patients; Abovyan's private practice manager; the UnitedHealthcare investigator; and several FBI agents. Three witnesses, Jackson, Vega, and Gatt, were already convicted for their roles in the scheme. The evidence also included thousands of pages of patient records, supporting documents, and photographs.

While the above evidence recounted Abovyan's overall role in the scheme,

we now detail more testimony about Abovyan's conduct.

A. Abovyan's Two Nurse Practitioners

Andrea Buehler was a nurse practitioner who worked for Abovyan from September 2016 until January 2018. Buehler did office work for Abovyan's private practice. Initially, Abovyan would have Buehler go to Reflections on Mondays and Wednesdays for around three hours each day. Sometimes Abovyan accompanied her, sometimes not. At first, Abovyan spent up to three hours with her there each day, but he was there less as time went on. Later on, Buehler went to Journey exclusively around twice per week; Abovyan accompanied Buehler to Journey only once or twice.

For each patient at Reflections and later at Journey, Buehler discussed the patient's drug use, did a physical examination, and sometimes wrote prescriptions. She never discussed drug test results with patients. Buehler wrote prescriptions for buprenorphine on pre-signed prescription pads, and Abovyan instructed her to write "drug dependence pain withdrawal" as the prescription diagnosis. She accessed patients' electronic medical records with Abovyan's log-in credentials.

Lindsey Callaghan was a nurse practitioner who worked for Abovyan from around June until October 2016. For Abovyan's private practice patients, Callaghan would see patients for routine physicals, sick visits, and medication refills. Callaghan went to Reflections on Tuesday and Thursday mornings for

around four hours each day. She refilled patients' medications and performed quick physicals. Abovyan sometimes accompanied her to Reflections but did not always stay the entire time. Callaghan wrote prescriptions on a pre-signed prescription pad that Abovyan gave her. At Abovyan's instruction, Callaghan wrote "Drug dependence, withdrawal, pain" as the diagnosis on the prescriptions. Generally, Callaghan did not review any drug test results. She also accessed patients' electronic medical records with Abovyan's log-in credentials.

B. Patients' Testimony

Patient A.B. was an insured Reflections patient addicted to heroin. She became a patient on August 31, 2016. A.B. stayed at a halfway house and attended therapy at Reflections. She said that, during group therapy sessions at Reflections, her fellow patients "were nodding out" and "obviously high." A.B.'s fellow patients and even the managers of her halfway house were using drugs. A.B. witnessed Chatman give other patients "street drugs." Although A.B. remained drug-free at first, she became desperate and started using heroin again. When she told Chatman that she was using heroin again, he said, "okay." After that, A.B. overdosed on heroin at the halfway house. Another patient overdosed and died at the halfway house.

Reflections tested A.B.'s urine every day she attended Reflections. Yet neither Abovyan nor the nurse practitioners ever talked to her about the results.

Even though A.B.'s urine tested positive for heroin, nothing about her treatment changed. Reflections also tested A.B.'s saliva, and she never saw the results. A.B. spoke to Abovyan only once for about 20 minutes during her initial visit. She received her prescriptions, including Suboxone, from a nurse practitioner written on pre-signed prescription pads. A.B. testified that the Suboxone "didn't really help" her, but she continued to take it because "[she] knew [she] could get high off of it."

Patient H.F. was another insured Reflections patient starting in July 2016. She was prescribed Suboxone and subjected to rigorous blood, urine, saliva, and allergy testing, despite not having allergies. Her urine was lab tested about four times per week—a frequency that she felt "unnecessary to be able to catch someone using." H.F. never saw the results of any tests. Chatman made it difficult for patients to leave treatment. When H.F. decided to leave, Chatman kept her identification, phone, clothes, and medication under his control.

Patient J.B. was an insured patient at Reflections in 2016. J.B. saw Abovyan once, and Abovyan did not spend much time with her. Abovyan prescribed her three different anxiety medications. J.B. did not see Abovyan again, but she continued receiving prescriptions with Abovyan's signature on them. J.B. saw pre-signed prescription pads bearing Abovyan's signature on Chatman's desk. J.B. lived in a halfway house during her Reflections treatment and did not have to pay

rent. Her fellow Reflections patients in the halfway house were drinking and using drugs, and, at one point, there were "needles everywhere." One patient overdosed in the house.

During his FBI interview, Abovyan explained his attitude about patients' drug use after they left daily "treatment" at Reflections and returned to the halfway houses: "whatever happens happens."

C. Dr. Kelly Clark

The government called Dr. Kelly Clark as an expert witness. Dr. Clark, a board-certified physician in addiction medicine and psychiatry, is the President of the American Society of Addiction Medicine. Dr. Clark spent 100 hours reviewing patient files and other documents from the Facilities. She explained the legal requirements and best practices for addiction treatment centers and their medical duties, and how Abovyan failed to follow them. As to drug tests, Dr. Clark testified that: (1) drug testing always should be tailored to the patient, especially when ordering expensive confirmatory lab testing; (2) Abovyan improperly ordered across-the-board lab testing for every patient multiple times per week, every week; (3) a doctor "[a]bsolutely" should discuss the outcome of each test with the patient, particularly if they fail; and (4) there was no documentation in the charts that test results were ever discussed with the Facilities' patients.

As to prescriptions, Dr. Clark explained that: (1) Florida law does not allow

nurse practitioners to practice medicine without the supervision of a physician; (2) nurse practitioners may not write controlled substance prescriptions on a prescription pad that the doctor already has signed; (3) it is never appropriate for a doctor to sign blank prescriptions and give them to a staff member to fill in the patient name and drug; and (4) a doctor should not share his own log-in information for a patient's medical record with others.

As to buprenorphine, Abovyan improperly prescribed it without examining the patient, having a doctor–patient relationship, or making an assessment and individualized treatment plan. Dr. Clark testified that: (1) Abovyan signed prescriptions for buprenorphine to treat "pain/withdrawal"; (2) there was no documentation in the charts that the patients, in fact, had pain or withdrawal; and (3) those prescriptions were written to treat opioid addiction—and not for a withdrawal period, but as ongoing management.

Dr. Clark also testified that: (1) the amounts billed for urine testing were "outrageous"; (2) each lab test cost from over $1,000 to over $6,000 per urine specimen; (3) testing was done two to three times per week, with no patient follow-up; and (4) these tests thus were not used for treatment purposes.

Dr. Clark discussed the buprenorphine prescriptions charged in Counts Three through Nine. The Reflections patient in Count Three was E.L., who had an opioid and cocaine addiction. On July 12, Reflections sent E.L.'s urine sample to

Smart Lab for an "extraordinarily high" 100-panel drug test that included drugs not ordinarily tested in the treatment or assessment of an addiction patient. On both July 13 and July 15, E.L.'s urine was extensively tested again. E.L.'s saliva was tested on July 14 and 28. Dr. Clark testified that "[t]here [was] no reason for doing both" saliva and urine tests simultaneously.

On July 20, 2016, Abovyan prescribed E.L. Suboxone for "pain" and "withdrawal," even though E.L.'s chart had no indication that he was experiencing pain or withdrawal or that Abovyan had seen him. Dr. Clark testified that the Suboxone prescription "was not for a legitimate medical purpose."

E.L.'s three July drug tests showed continued drug use. After E.L. stopped coming to Reflections, Abovyan electronically signed all three July test results without any patient discussion. Yet, Abovyan added the note, "Reviewed and will discuss at next patient encounter." There was no follow-up discussion. Dr. Clark testified that the manner in which the urine testing was performed—ordering additional tests before receiving the results of prior tests and not discussing those results with E.L.—was "[n]ot for a legitimate medical purpose." This same pattern continued with the other patients.

Counts Four and Eight involved Reflections patient H.F., who had cocaine, opioid, and alcohol addictions. H.F.'s urine was also tested by labs at an "inappropriate" frequency: July 7, 8, 9, 11, 13, 15, 22, and 24. Although many

tests revealed continued drug abuse, Abovyan electronically signed them with his standard notation, "Reviewed and will discuss at next patient encounter." There was no follow-up discussion.

On July 25, 2016, Abovyan prescribed H.F. Suboxone with a "pain/withdrawal" diagnosis (Count Four) and, a month later, on August 29, Abovyan again prescribed H.F. Suboxone for drug dependence, pain, and withdrawal (Count Eight). Dr. Clark explained that, because H.F.'s actual diagnosis was drug addiction, Abovyan could not have lawfully prescribed Suboxone without an X Number, which he did not have.

Count Five involved Reflections patient A.C., who had an opioid addiction. A.C.'s urine was tested on June 15, 17, 20, 22, 27, and 29, and July 1, 4, 6, 11, 13, and 15, 2016. On July 27, Abovyan signed the results as "normal," even though results showed tampering and drug abuse. On August 4, Abovyan wrote a progress note stating that A.C. was "clean for a while," which plainly contradicted A.C.'s failed drug tests that Abovyan had reviewed and signed days earlier. On July 25, Abovyan prescribed A.C. Suboxone with a "pain/withdrawal" diagnosis. Again, Dr. Clark concluded that this Suboxone prescription was illegitimate because Abovyan falsely indicated that it was meant to treat "pain/withdrawal," when it was in fact treating drug addiction, and Abovyan did not yet have an X Number.

Count Six involved Reflections patient D.W., who had a cocaine and opioid

addiction. The results of D.W.'s urine test on July 15, 2016, indicated tampering, yet Abovyan signed off on the results as "normal." Abovyan's progress notes stated that D.W. was "doing well," even though he repeatedly failed drug tests. Although D.W. did not complain of pain, Abovyan prescribed Suboxone for "withdrawal/pain" on July 27, 2016.

Count Seven involved Reflections patient C.D., who came for an opioid addiction treatment from June until August 2016. C.D. provided urine specimens multiple times per week for expensive lab testing. Dr. Clark testified that the frequency of C.D.'s testing was "inappropriate" and lacked utility, that the money billed was "amazing," and that the results were never discussed with the patient. Although C.D. did not complain of pain, Abovyan prescribed Suboxone for "pain/withdrawal" on August 3, 2016. In reality, Abovyan was prescribing the Suboxone for treatment of an opioid addiction, but he still did not have the required X Number.

Count Nine involved Reflections patient A.B., who had no pain complaints. On August 31, Abovyan, without an X Number, prescribed A.B. Suboxone for drug dependence, withdrawal, and pain.

Dr. Clark explained that Abovyan pretextually prescribing Suboxone for "pain/withdrawal" without an X Number was only one of many factors underlying her opinion that Abovyan's prescriptions were not for a legitimate medical

purpose. Dr. Clark explained that Suboxone is an excellent medication for use in treatment of an opioid disorder. But Abovyan was only prescribing controlled substances and was not treating his patients. Medical treatment requires assessing the information, working with the patient, coming up with a treatment plan for that patient, getting more information, following up on tests and reviewing them with the patient, assessing the additional information, and working more with the patient and the treatment plan. None of that occurred here. Abovyan's patients repeatedly failed their drug tests, but he and his nurses never talked about it with them. "There was no treatment."

Dr. Clark also noticed that "scholarship" patients without insurance generally would not receive a single expensive 100-panel lab test. Scholarship patients received a 12-panel cup/dipstick test once per month that cost a few dollars.

At the close of the government's evidence, Abovyan moved for judgment of acquittal under Federal Rule of Criminal Procedure 29, which the district court denied as to Counts One through Nine and reserved ruling as to Count Ten.

D. Defense and Verdict

Abovyan's defense was that he was an "unwitting patsy," who was used by Chatman and others for their criminal scheme. Abovyan did not testify, but presented an expert witness, Dr. Kenneth Starr, who is a board-certified physician

in emergency and addiction medicine. Dr. Starr spent "[m]aybe six" hours preparing for the case and did not review any patient files. Dr. Starr confirmed that buprenorphine may be prescribed for pain without an X Number, but that the X Number is required for use in addiction treatment. Dr. Starr admitted that it was not a common practice to pre-sign blank prescriptions, and that the drugs found in some of Abovyan's patients' test results would be something that he would want to discuss with the patients. At the close of evidence, Abovyan renewed his Rule 29 motion, and the district court maintained its earlier ruling.

In closing argument, Abovyan's counsel acknowledged that "[Gatt] and Kenny Chatman essentially conspired . . . to defraud the insurance companies," and LaFrance "dummied up these [requisition] forms." But he argued that "Abovyan had no knowledge" about excessive urine testing. The jury convicted Abovyan on Counts One through Nine and acquitted him on Count Ten. The district court denied Abovyan's motion for judgment notwithstanding the verdict or for a new trial.

The district court sentenced Abovyan to 120 months' imprisonment on his Counts One through Eight convictions, to run concurrently, and a consecutive 15-month sentence on his Count Nine conviction. The district court ordered $1,058,097.88 in restitution to the defrauded insurance companies.

III. SUFFICIENCY OF THE EVIDENCE

On appeal, Abovyan argues that the government's evidence is insufficient to support his convictions. We review de novo Abovyan's sufficiency-of-the-evidence claims, taking all evidence and drawing all reasonable inferences in the light most favorable to the government. United States v. Chalker, 966 F.3d 1177, 1184 (11th Cir. 2020).

A. Conspiracy to Commit Healthcare Fraud (Count One)

Abovyan accepts that the healthcare fraud conspiracy existed at the Facilities, but contends the government's evidence was insufficient to prove his knowledge of and participation in it. At most, he argues, the government showed negligent medical practices on his part, not willful participation in a criminal conspiracy. He asserts that there is not "a shred of evidence" that he agreed with anyone to engage in healthcare fraud and that "the [g]overnment still has not identified a single text, email, document, or snippet of testimony that there was ever any conversation or communication between Abovyan and any other person about engaging in any illegal act."

"For a defendant to be found guilty of conspiracy, the government must prove beyond a reasonable doubt (1) that a conspiracy existed; (2) that the defendant knew of it; and (3) that the defendant, with knowledge, voluntarily joined it." United States v. Vernon, 723 F.3d 1234, 1273 (11th Cir. 2013)

(quotation marks omitted). "Because the crime of conspiracy is predominantly mental in composition, it is frequently necessary to resort to circumstantial evidence to prove its elements." United States v. Toler, 144 F.3d 1423, 1426 (11th Cir. 1998) (quotation marks and citations omitted).

A healthcare fraud conspiracy exists when defendants agree to submit false claims to a healthcare benefit program, such as an insurance plan. See United States v. Ruan, 966 F.3d 1101, 1142 (11th Cir. 2020); 18 U.S.C. §§ 24(b), 1347. "[A] defendant can be convicted of conspiracy if the evidence demonstrates that he was aware of the conspiracy's essential nature, even if he did not know all of its details, played only a minor role in the overall scheme, did not have direct contact with other alleged co-conspirators, or did not participate in every stage of the conspiracy." United States v. Sosa, 777 F.3d 1279, 1290 (11th Cir. 2015).

First, we reject Abovyan's claim that the government must present direct evidence that Abovyan agreed to join the conspiracy. It is well settled that the government may prove a conspiracy through circumstantial evidence or inferences from the defendant's conduct. See United States v. Moran, 778 F.3d 942, 960 (11th Cir. 2015); United States v. Molina, 443 F.3d 824, 828 (11th Cir. 2006). The government can show participation "through proof of surrounding circumstances such as acts committed by the defendant which furthered the purpose of the conspiracy." Moran, 778 F.3d at 961 (quotation marks omitted).

Second, although largely circumstantial, the government introduced ample evidence to support Abovyan's conviction for conspiring to commit healthcare fraud. The evidence showed that Abovyan: (1) created Smart Lab standing orders so that the Facilities could order expensive and medically unnecessary lab urine tests three times per week per patient; (2) pre-signed requisition forms so that the Facilities could order even more unnecessary testing from other labs, like Ally; (3) forwent lab testing for uninsured patients; (4) reviewed and signed off on certain lab test results without discussing them with the patients; (5) admitted the Facilities would "test for everything," even non-addictive drugs not ordinarily tested in addiction treatment; (6) provided his medical record log-in and pre-signed prescription pads for his nurses to prescribe drugs to patients without him being present; (7) received a letter alerting him that insurance billing issues existed and did nothing; (8) admitted that he allowed Chatman to make all testing decisions—"what [Chatman] wanted"—even though Chatman had no medical training and the testing was excessive; and (9) admitted that he received $5,000 per month for Chatman to use his medical license to bill insurance for "treatment" at the Facilities.

Abovyan's full cooperation with Chatman, along with Abovyan's own medical conduct, advanced the healthcare fraud scheme. The government proved Abovyan not only agreed to join the conspiracy but also willfully participated in it

and knew of its essential nature. See Ruan, 966 F.3d at 1143–44 (finding sufficient evidence of conspiracy to commit healthcare fraud where defendant doctors (1) ordered "expensive off-site urine screen tests that were medically unnecessary," and (2) "rarely discussed inconsistent test results with patients, whether to counsel them into compliance or fire them as patients"); see also United States v. Mateos, 623 F.3d 1350, 1362 (11th Cir. 2010) ("While it is hypothetically possible that a person under these circumstances could have been ignorant of the [conspiracy to commit healthcare] fraud, the jury was entitled to draw the reasonable inference from this evidence that [the defendant] was in on the scheme.").

Abovyan relies on United States v. Willner, 795 F.3d 1297 (11th Cir. 2015), and United States v. Ganji, 880 F.3d 760 (5th Cir. 2018), which reversed healthcare fraud conspiracy convictions. The evidence against Abovyan, however, is substantially stronger and materially different than in these cases.

In Willner, we reversed Dr. Abreu's conviction, despite her being the program director at a sleep clinic that defrauded Medicare. 795 F.3d at 1303, 1305–10. The government contended that Dr. Abreu (1) "falsified patient files" to make it appear that patients were eligible for the clinic's partial hospitalization program, and (2) "admitted or participated in the admission of ineligible patients" into the program. Id. at 1306, 1309. Although Dr. Abreu admitted some ineligible patients (cognitively impaired, elderly patients), no evidence showed that it was

anything more than "poor admission decisions on occasion." Id. at 1309. Unlike Abovyan, Dr. Abreu did not gain anything from the criminal conspiracy. Id. at 1310. While Dr. Abreu knew Dr. Gumer was signing charts without reading them, this Court explained that this evidence about chart signing "does not support an inference that Dr. Abreu knew that the patients were ineligible, that they had not received partial hospitalization services, or that Dr. Gumer had not treated the patients." Id. at 1309. The government's circumstantial evidence against Dr. Abreu was weak, and her conduct was isolated and peripheral at best. It pales compared to the overwhelming evidence showing Abovyan's role and conduct that was central to the criminal conspiracy and its success, his consistent and ongoing participation in the scheme throughout his tenure as medical director, and his significant financial gains from the scheme.

Similarly, in Ganji, the Fifth Circuit reversed the healthcare fraud conspiracy conviction of a physician serving as the medical director of a home healthcare agency. 880 F.3d at 763–64. The evidence was only that: (1) another doctor, Dr. Winston Murray, who previously held a similar position, defrauded Medicare; (2) when Dr. Ganji accepted the job, she received a monthly check of $1,000; and (3) Dr. Ganji's referral of patients to the agency increased after she became medical director. Id. at 771. No evidence supported any inference that Dr. Ganji acted in the same fraudulent manner as Dr. Murray. Id. Dr. Ganji's increase in

referrals was not nefarious; rather, her patients simply followed her when she became affiliated with the home healthcare agency. Id. at 773. And Dr. Ganji "provided testimony of her innocence that went unanswered by the [g]overnment," including her explanation that certain blank sheets she signed were bundled with other documents she reviewed. Id. at 771. The Fifth Circuit emphasized that "[t]he trial record rebut[ted] the [g]overnment's theory." Id. at 772.

Again, in stark contrast, the government's evidence here was powerful and showed Abovyan's key role, conduct, and participation in the healthcare fraud scheme. Abovyan knew he pre-signed all the prescription pads, signed the standing orders for excessive lab testing, was not seeing or following up with patients at the Facilities, was not doing or revising individualized treatment plans, gave his log-in credentials to his nurses, and did not have the required training and X Number to prescribe Suboxone. Abovyan even admitted that he was paid "easy money" for "Chatman [to] use [Abovyan's] medical license to bill insurance." Given our extensive record review recounted above, we readily conclude that the government's evidence sufficiently supported Abovyan's conviction for conspiracy to commit healthcare fraud.

B. The Controlled Substances Act Counts (Counts Two through Nine)

Counts Two through Nine involve the conspiracy and substantive counts as to the buprenorphine prescriptions. Abovyan argues that the government failed to

prove his buprenorphine prescriptions were not for a legitimate medical purpose or were outside the scope of professional practice.

Under the Controlled Substances Act, it is unlawful, except as otherwise authorized, "for any person knowingly or intentionally . . . to manufacture, distribute, or dispense . . . a controlled substance." 21 U.S.C. § 841(a)(1); see also 21 U.S.C. § 846 (making it unlawful to conspire to violate § 841). An unlawful distribution occurs in the medical context when "1) the prescription was not for a legitimate medical purpose or 2) the prescription was not made in the usual course of professional practice." United States v. Joseph, 709 F.3d 1082, 1102 (11th Cir. 2013) (quotation marks omitted). The rule is disjunctive, and a doctor violates the law if he falls short of either requirement. See Ruan, 966 F.3d at 1172. "The appropriate focus is not on the subjective intent of the doctor, but rather it rests upon whether the physician prescribes medicine in accordance with a standard of medical practice generally recognized and accepted in the United States." United States v. Merrill, 513 F.3d 1293, 1306 (11th Cir. 2008) (quotation marks omitted).

Here, Abovyan violated 21 U.S.C. § 823(g) when he prescribed buprenorphine without an X Number. See 21 U.S.C. § 823(g)(2)(E)(i). We agree with Abovyan that this is not a per se violation of § 841(a), and, more importantly, this alone does not support a § 841(a) conviction. However, as Dr. Clark testified, Abovyan's lack of an X Number was not the only problem with his buprenorphine

prescriptions. Abovyan prescribed buprenorphine for pain/withdrawal when patients did not have pain/withdrawal. Further, he provided no medical addiction treatment and, without accompanying treatment, Abovyan's buprenorphine prescriptions did not serve a legitimate medical purpose.

Dr. Clark explained that buprenorphine can be a very effective drug when used in addiction treatment, but she unequivocally stated that Abovyan's patients were not actually being treated. Prescribing buprenorphine to drug addicts without more is not medical treatment. Viewing the evidence in the light most favorable to the government, Abovyan prescribed buprenorphine after conducting no physical examinations or only a cursory physical examination, having no doctor–patient relationship, and making no assessment or treatment plan. Abovyan generally delegated the prescribing of buprenorphine to his nurse practitioners, inappropriately giving them blank prescription pads and access to his log-in credentials for patients' electronic medical records. When many patients he was supposedly "treating" with buprenorphine failed subsequent drug tests, he did nothing. Patients rarely even saw their test results. Dr. Clark testified that Abovyan's use of buprenorphine deviated from professional standards of medical addiction treatment, and the prescriptions were "not for a legitimate medical purpose."

Thus, setting aside the X Number issue, Abovyan either prescribed

buprenorphine for "pain/withdrawal" to patients who were not experiencing pain or withdrawal, or he prescribed it to "treat addiction" without actually treating addiction. Either way, under the particular circumstances here, the prescriptions did not serve a legitimate medical purpose and were not done in the usual course of professional practice.

Our decision in United States v. Joseph, 709 F.3d 1082, is instructive. In Joseph, Spurgeon Green Jr., a physician, and Dorothy Mack, a physician's assistant, were convicted under § 841(a). Id. at 1087–88. They conceded their federal-regulation violation by not properly dating and signing the prescriptions. Id. at 1102. Mack admitted that she, as a physician's assistant, lacked the authority to write prescriptions for Schedule II substances under Georgia law. Id. This Court agreed that their violation of the federal regulation did not constitute a per se violation of § 841(a). Id. Nonetheless, "the jury was entitled to infer, based on Green's pre-signing and pre-dating of the prescriptions and Mack's delivery of those prescriptions to Green's patients, that they violated [§ 841(a)]." Id. We observed that "a physician's delivery of a prescription without conducting any physical examination of the patient provides strong evidence to support a conviction under [§ 841(a)]." Id.

Here, Abovyan violated federal law by prescribing a drug, buprenorphine, without the required training, licensing, and X Number. Although this does not

constitute a per se violation of § 841(a), "the jury was entitled to infer" that Abovyan violated § 841(a) based on all of his conduct described above, including how Abovyan was not actually treating his patients for their addiction. See id.

We also reject Abovyan's claim that the prescriptions, nonetheless, served a legitimate medical purpose because "these patients were addicts who needed [the] buprenorphine that Dr. Abovyan prescribed." The question is not whether a doctor could prescribe buprenorphine for legitimate medical addiction treatment actually being rendered, but whether Abovyan himself did prescribe buprenorphine for such actual addiction treatment. Based on the cumulative evidence about the patients and these prescriptions, a jury could reasonably find that Abovyan was not legally prescribing buprenorphine, especially given that the addicts were not being treated, were failing drug tests, were not in withdrawal or pain, and were not being seen by him.[11] Therefore, we conclude sufficient evidence supported Abovyan's convictions on Counts Two through Nine.[12]

[11]For example, the jury could infer from the evidence that Abovyan's buprenorphine prescriptions were intended mainly as window-dressing so that the Facilities appeared to be providing drug "treatment" when their real purpose was to conduct expensive and unnecessary tests on the patients that could be billed to their insurance.

[12]To the extent Abovyan argues that he did not know about or join a conspiracy to unlawfully dispense buprenorphine (Count Two), his argument fails for the same reasons it fails as to the conspiracy element in Count One. Abovyan's prescribing of buprenorphine was part of the overall healthcare fraud scheme that Abovyan knew about and joined. Chatman told Abovyan that he should prescribe buprenorphine; the prescriptions were part of the purported "treatment" that the Facilities billed to insurance but were not really providing.

IV. JURY INSTRUCTIONS

Abovyan also challenges various jury instructions, which we discuss in turn.

A. Instructions as to Count One

On appeal, Abovyan argues for the first time that the district court plainly erred in failing to instruct the jury on the elements of substantive healthcare fraud, which was the object of the healthcare fraud conspiracy charge in Count One. Abovyan did not object to this omission in the instructions, and plain-error review applies. See United States v. Benjamin, 958 F.3d 1124, 1133 (11th Cir.), cert. denied, __ U.S. __, 141 S. Ct. 561 (2020).[13]

The district court adequately instructed the jury as to the elements of a criminal conspiracy and that its object was healthcare fraud. For example, the district court instructed that the jury had to find Abovyan "agreed to try to accomplish a common and unlawful plan to commit health care fraud, as charged in the superseding indictment" and that, knowing "the unlawful purpose of the plan," he "willfully joined in it." In turn, the unlawful purpose of the conspiracy, as described in the superseding indictment, was that Abovyan conspired to: "(a) defraud health care benefit programs . . . ; and (b) obtain, by means of materially

[13]Plain error requires (1) error, (2) that is plain, and (3) that affects substantial rights. Benjamin, 958 F.3d at 1133. But even if all these elements exist, this Court may exercise its discretion to correct the error only if such error seriously affects the fairness, integrity, or public reputation of the judicial proceedings. Id. We reject the government's contention that defense counsel invited the error.

false and fraudulent pretenses, representations, and promises, any of the money and property owned by, and under the custody and control of, health care benefit programs . . . ." Superseding Indictment at 9 (emphasis added). The district court, itself, however, did not expressly instruct the jury as to the elements of a healthcare fraud offense.

The Supreme Court has explained that "an instruction that omits an element of the offense does not necessarily render a criminal trial fundamentally unfair or an unreliable vehicle for determining guilt or innocence." Neder v. United States, 527 U.S. 1, 9, 119 S. Ct. 1827, 1833 (1999). Although such an omission may constitute plain error, that is not always the case. See United States v. Musgrave, 444 F.2d 755, 764 (5th Cir. 1971) ("[T]he trial judge's failure here to instruct the jury on all the essential elements of the crimes in counts two and four, even though not requested, [is] plain error.")[14]; United States v. Hensel, 711 F.2d 1000, 1005 (11th Cir. 1983) ("Musgrave does not hold that every failure to charge on all the essential elements of the crime results in plain error.").

In United States v. Gonzalez, the defendant argued that the district court plainly erred by failing to instruct the jury on the elements required to prove a violation of the federal anti-kickback statute, which was one of the objects of the

[14]In Bonner v. City of Prichard, 661 F.2d 1206, 1209 (11th Cir. 1981) (en banc), this Court adopted as precedent the decisions of the former Fifth Circuit handed down prior to October 1, 1981.

conspiracy. 834 F.3d 1206, 1225 (11th Cir. 2016). We held that the failure to explain the term "kickback" was not "a clear or obvious error." Id. One reason was because "the indictment essentially quoted the entire relevant portion of the anti-kickback statute." Id. at 1226.

Similarly, here the district court referred to an "unlawful plan to commit health care fraud, as charged in the superseding indictment." The jury had a redacted copy of the superseding indictment, which incorporated the statutory elements of healthcare fraud into the conspiracy charge. See 18 U.S.C. § 1347(a). The superseding indictment described healthcare fraud as a scheme to both "(a) defraud health care benefit programs . . . ; and (b) obtain, by means of materially false and fraudulent pretenses . . . any of the money and property owned by . . . health care benefit programs," which tracks almost verbatim the language of 18 U.S.C. § 1347(a)(1) and (2). Superseding Indictment at 9 (emphasis added). If anything, the description in the superseding indictment required more than the statute, which only requires proof of one of those two elements. See 18 U.S.C. § 1347(a)(1)–(2).

Moreover, in this particular case, there was no dispute that there was a healthcare fraud conspiracy and its object—healthcare fraud—did occur. Even if it was plain error, the omission of the elements of healthcare fraud from the instructions did not affect Abovyan's substantial rights. See Benjamin, 958 F.3d at

1133. Abovyan's theory of defense acknowledged that there was a healthcare fraud scheme but asserted that he was merely an "unwitting patsy." By the time of Abovyan's trial, numerous people were already convicted for their involvement in Chatman's healthcare fraud scheme at the Facilities, and three of them testified in Abovyan's trial. Abovyan argued solely that he was unaware of any conspiracy and did not agree to join it. Under the actual circumstances of this case, any error in failing to explain the elements of the substantive healthcare fraud did not affect Abovyan's substantial rights, given the jury charge, the superseding indictment, and that all parties agreed the substantive offense had been committed by others at the Facilities. See Gonzalez, 834 F.3d at 1225 ("[I]n reviewing jury instructions, our task is also to view the charge itself as part of the whole trial." (quotation marks omitted)).

B. Denial of Abovyan's Requested Instruction

Next, Abovyan argues that, as to Counts Two through Nine, the district court abused its discretion by declining to give his requested instruction on the difference between criminal and civil liability. We review for an abuse of discretion a refusal of the district court to give a requested jury instruction. Joseph, 709 F.3d at 1093. "When we review the refusal to give an instruction for abuse of discretion, we ask whether the requested instruction is correct, not adequately covered by the charge given, and involves a point so important that failure to give

the instruction seriously impaired the party's ability to present an effective case." United States v. Duperval, 777 F.3d 1324, 1334 (11th Cir. 2015) (quotation marks omitted).

The district court did not abuse its discretion in refusing to give Abovyan's requested instruction because it was not a correct statement of the law. Abovyan's proposed instruction stated, among other things: "the [g]overnment must prove beyond a reasonable doubt that Dr. Abovyan was not acting as a doctor but as a drug dealer," that "[t]he essential issue for your determination is whether Dr. Abovyan acted not as a doctor, or even as a bad doctor, but as a 'pusher,'" and that he was engaged in criminal activity, like "knowingly selling narcotics to a 'patient' who was not really sick but wanted drugs for recreational purposes." Contrary to Abovyan's proposed instruction, and as explained above, the law requires only that the jury find the doctor prescribed a drug "not for a legitimate medical purpose" or not "in the usual course of professional practice." See Ruan, 966 F.3d at 1136 (quotation marks omitted). The district court properly declined to give Abovyan's proposed instruction.

C. Instructions as to X Number

Abovyan also argues that the instructions created strict § 841(a) liability for the violation of § 823(g), which contains the licensing requirement for an X Number. We review de novo whether a given jury instruction misstated the law.

United States v. Melgen, 967 F.3d 1250, 1259 (11th Cir. 2020). "[W]e will reverse a conviction due to an erroneous jury instruction only when 'the issues of law were presented inaccurately, or the charge improperly guided the jury in such a substantial way as to violate due process.'" Gonzalez, 834 F.3d at 1222 (quoting United States v. Williams, 526 F.3d 1312, 1320 (11th Cir. 2008)). "We must have 'a substantial and ineradicable doubt as to whether the jury was properly guided in its deliberations' before reversing a conviction on a challenge to the jury charge." United States v. Joyner, 882 F.3d 1369, 1375 (11th Cir. 2018) (quoting United States v. House, 684 F.3d 1173, 1196 (11th Cir. 2012)).

The jury instructions accurately stated the law. First, the district court correctly described the elements of a § 841(a) violation. The district court explained that Abovyan was guilty under § 841(a) if the government proved beyond a reasonable doubt that he "dispensed . . . not for a legitimate medical purpose or outside the usual course of professional practice, the controlled substance, as charged." The instructions charged that § 841(a) has a mens rea of "knowingly and intentionally" and that Abovyan cannot "knowingly" do something "because of a mistake or by accident."

Second, appearing to reference 21 C.F.R. § 1306.05, the district court properly instructed that prescriptions must "be dated as of, and signed on, the day when issued" and that "the prescribing practitioner is responsible in case the

prescription does not conform in all essential aspects to the law and regulations."

Third, the district court precisely recited the X Number requirement in § 823(g), the process to obtain it, and the consequences for non-compliance, as follows:

> [I]n order to prescribe buprenorphine for detoxification and maintenance treatment, a practitioner is required to obtain a waiver under the Drug Addiction Treatment Act of 2000. The practitioner must apply to the Substance Abuse and Mental Health Services Administration ("SAMHSA"), under the Secretary of Health and Human Services, who verifies that the practitioner meets the requirements, including completion of not less than eight hours of a qualified training course by the physician. After SAMHSA notifies the Drug Enforcement Administration ("DEA") that the requirements have been met, DEA then assigns the practitioner a special registration number, known as a "DEA X-number." If a practitioner is in violation of these conditions and dispenses buprenorphine for maintenance treatment or detoxification treatment, the Attorney General may consider the practitioner to have committed an act that renders the registration of the practitioner pursuant to subsection (f) to be inconsistent with the public interest.
>
> A prescription for buprenorphine for "detoxification treatment" or "maintenance treatment" must include the practitioner's DEA X-number.

Fourth, the instructions well explained "the usual course of professional practice," as follows:

> A controlled substance is prescribed by a physician in the usual course of professional practice and, therefore, lawfully, if the substance is prescribed by him as part of his or her medical treatment for the patient in accordance with the standards of medical practice generally recognized and accepted in the United States. The appropriate standard of care is based on the knowledge, circumstances and standards that are recognized as acceptable and appropriate at the time the physician

> acted. The fact that bad results follow treatment rendered by a physician does not, in itself, mean that the physician's conduct fell below the appropriate standard of care.

Finally, the instructions rightly reiterated that, to convict Abovyan for violating § 841(a), the government had to prove that his "actions were not for legitimate medical purposes or were outside the usual course of professional practice."

At no point did the district court instruct the jury that a violation of the X Number-licensing requirement necessitated a finding of guilt on Counts Two through Nine. As discussed above, we agree that a violation of § 823(g) is not a per se violation of § 841(a). And the district court here did not instruct the jury that it was. We thus conclude that these instructions, considered as a whole, did not create strict § 841(a) liability for the violation of the X Number license requirement.[15] Because the issues of law were presented accurately to the jury, there was no error.[16] See Gonzalez, 834 F.3d at 1222.

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[15]We recognize that, at the charge conference, the district court and the government made some statements that seemed to suggest Abovyan's alleged violation of § 823(g) made him "strict[ly] liab[le]" under § 841(a). But the instructions themselves did not charge that. Further, to the extent that Abovyan contends that the refusal to give his requested instruction, combined with the above instructions actually given, resulted in reversible error, we disagree because the district court did not err in either instance.

[16]Abovyan also challenges two evidentiary rulings during his trial. He claims that the district court abused its discretion in admitting evidence of Abovyan's gambling hobby and in improperly limiting cross-examination of the government's case agent. We conclude that these claims wholly lack merit and do not warrant further discussion.

V. SENTENCES

Abovyan also challenges his sentences. We review how the district court calculated Abovyan's advisory guidelines range and then his claims on appeal.

A. Guidelines Calculation

The presentence investigation report ("PSI") determined that, during Abovyan's five-month employment at Reflections, 42 insurers were billed a total of $11,345,741.55, from which Reflections received $1,058,097.88 in reimbursements, and Abovyan was responsible for the intended loss of $11,345,741.55.

For Count One, the PSI calculated an offense level of 32, consisting of: (1) a base offense level of 6, under U.S.S.G. § 2B1.1(a)(2); (2) a 20-level increase based on an intended loss of between $9.5 million and $25 million, under § 2B1.1(b)(1)(K); (3) a 2-level increase because the offense involved more than ten victims, under § 2B1.1(b)(2)(A); (4) a 2-level increase, under § 3A1.1(b)(1), because Abovyan knew or should have known the victims were vulnerable; and (5) a 2-level increase, under § 3B1.3, because Abovyan used his skill as a medical doctor to facilitate the offense.

For Counts Two through Nine, the PSI used the base offense level of 24 because the offense involved a drug equivalency of between 100 and 400 kilograms of marijuana. See U.S.S.G. § 2D1.1(a)(5) and (c)(8).

After making the multiple-count adjustment under § 3D1.4(a)–(c), the PSI recommended a combined adjusted offense level of 33. Based on an offense level of 33 and a criminal history category of I, Abovyan's advisory guidelines range was 135 to 168 months' imprisonment.

Abovyan objected to the PSI's use of intended loss, instead of actual loss, to calculate his advisory guidelines range. He acknowledged that the Sentencing Guidelines define loss as the greater of actual or intended loss. See U.S.S.G. § 2B1.1 cmt. n.3(A). Here, the amount that Abovyan helped the Facilities and labs bill to the insurance companies was approximately $11.3 million (intended loss), but the insurance companies only reimbursed approximately $1 million (actual loss).

Abovyan argued that the use of the higher intended loss would cause an unwarranted disparity among similarly situated defendants. His codefendant Barbuto was held accountable only for the actual loss, as stipulated in her plea agreement. The PSI also referenced other co-conspirators' convictions; they pled guilty too, and their sentences were based on actual loss.

At the sentencing hearing, the district court overruled Abovyan's objection and used the intended loss amount. The district court adopted the PSI's findings and guidelines calculations and sentenced Abovyan to 120 months' imprisonment on his Counts One through Eight convictions, to run concurrently, and a

consecutive 15-month sentence on his Count Nine conviction.

B. Sentencing Disparity Argument

Abovyan argues that the district court erred in calculating his advisory guidelines range based on intended loss, instead of actual loss. Because actual loss was the basis for his codefendant and his other co-conspirators' sentences, Abovyan contends the district court created an unwarranted sentencing disparity by using the higher intended loss to calculate his guidelines range.[17]

First, there is no guidelines-calculation error. The guidelines define loss as the greater of actual or intended loss. See U.S.S.G. § 2B1.1 cmt. n.3(A). The district court correctly used the intended loss here because it was greater than the actual loss. See id.

Second, the essence of Abovyan's argument is more that there is an unwarranted sentencing disparity, which addresses the reasonableness of the sentences. In imposing a sentence, district courts must consider several factors, including the need "to avoid unwarranted sentence disparities among defendants with similar records who have been found guilty of similar conduct." 18 U.S.C. § 3553(a)(6). "[D]efendants who cooperate with the government and enter a

[17]"This Court reviews de novo the District Court's interpretation of the guidelines and its application of the guidelines to the facts." United States v. Fox, 926 F.3d 1275, 1278 (11th Cir.), cert. denied, __ U.S. __, 140 S. Ct. 639 (2019). We review the reasonableness of a sentence for abuse of discretion. Williams, 526 F.3d at 1321.

written plea agreement are not similarly situated to a defendant who provides no assistance to the government and proceeds to trial." United States v. Docampo, 573 F.3d 1091, 1101 (11th Cir. 2009); see also United States v. Jayyousi, 657 F.3d 1085, 1117–18 (11th Cir. 2011). "There is no unwarranted disparity even when the sentence the cooperating defendant receives is substantially shorter." Docampo, 573 F.3d at 1101 (quotation marks omitted).

Because codefendant Barbuto and the other co-conspirators involved in the fraud scheme all pled guilty and their plea agreements provided for how loss was to be determined, those defendants are not "similarly situated" to Abovyan. See id. Therefore, any disparity between the sentences of Abovyan and them is not an "unwarranted" sentence disparity within the meaning of § 3553(a)(6), much less one that required the district court to impose a lower sentence regardless of the other § 3553(a) factors. See 18 U.S.C. § 3553(a) (requiring the district court to consider multiple factors, only one of which is the need to avoid unwarranted sentence disparities, in choosing the appropriate sentence).[18] The district court did

[18]To the extent Abovyan argues that the district court's use of intended loss was unconstitutional because it unfairly penalized him for going to trial, his argument is meritless. See Frank v. Blackburn, 646 F.2d 873, 882–83 (5th Cir. 1980) (en banc), modified on other grounds, 646 F.2d 902 (5th Cir. 1981) (en banc) (explaining that "the mere imposition of a longer sentence than defendant would have received had he pleaded guilty" is not automatically unconstitutional punishment). Further, Abovyan does not point to any evidence that the district court imposed a sentence within the correctly calculated advisory guidelines range to punish him for exercising his right to go to trial.

not err in calculating Abovyan's advisory guidelines range or abuse its discretion in sentencing him.

C. Loss Amount and Foreseeability

Abovyan also argues that the district court erred in determining the amount of the intended loss because it was not supported by a preponderance of the evidence. He asserts that the district court failed to make underlying findings as to the scope of the criminal activity that Abovyan agreed to undertake and the reasonable foreseeability of the loss amount attributed to him.[19]

Abovyan waived these arguments because he did not object to the amount of the intended loss in the PSI or its foreseeability and, instead, repeatedly told the court that he challenged only the use of intended instead of actual loss.[20] See United States v. Bennett, 472 F.3d 825, 832 (11th Cir. 2006) ("[C]hallenges to the facts contained in the PSI must be asserted with specificity and clarity. Otherwise, the objection is waived." (citation omitted)); United States v. Wade, 458 F.3d 1273, 1277 (11th Cir. 2006) ("It is the law of this circuit that a failure to object to

[19]"We review a district court's determination of the loss amount under the Sentencing Guidelines for clear error." Melgen, 967 F.3d at 1265. "Because the district court is in a unique position to assess the evidence and estimate the loss based upon that evidence, its loss determination is entitled to appropriate deference." Id. (citing U.S.S.G. § 2B1.1 cmt. n.3(C)).

[20]Although Abovyan suggested at one point that the loss amount was "not reasonably foreseeable" for him, he then clarified that he "agree[d] with the numbers" but objected to using the intended loss amount.

allegations of fact in a PSI admits those facts for sentencing purposes.").

In any event, Abovyan's arguments are meritless. Under the Sentencing Guidelines, a defendant's offense level shall be adjusted based on the reasonably foreseeable activity of co-conspirators that is within the scope of and in furtherance of the conspiracy. U.S.S.G. § 1B1.3(a)(1)(B). "[T]o determine a defendant's liability for the acts of others, the district court must first make individualized findings concerning the scope of criminal activity undertaken by a particular defendant." United States v. Hunter, 323 F.3d 1314, 1319 (11th Cir. 2003) (quotation marks omitted). The district court may determine reasonable foreseeability only after it makes those individualized findings. Id. However, this Court will not vacate a defendant's sentence based on the district court's failure to make specific findings "[i]f the record otherwise supports the court's determination." United States v. Baldwin, 774 F.3d 711, 727 (11th Cir. 2014).

At sentencing, the government presented testimony of an Internal Revenue Service special agent, who prepared a "loss amount" chart based on records from insurance companies and the Facilities. The billing information contained in the chart concerned only the period that Abovyan worked at the Facilities. The chart showed that the Facilities billed a total of $1,892,273.15 to seven insurance companies for treatment services, but the chart did not include amounts billed to the other defrauded insurance companies. The chart showed that Smart Lab billed

$9,453,468.40 to insurance, but the chart did not include amounts billed by other labs, like Ally. Based on those limited numbers alone, the chart calculated that insurance companies were billed a total of $11,345,741.55.

After the special agent's testimony, the district court found that (1) the loss amounts presented by the government relate only to the time when Abovyan was there and are actually conservative in terms of total billings, and (2) the $11.3 million figure accurately reflects the loss amount.

The record supports the district court's findings. As medical director, Abovyan authorized the Facilities' urine testing protocol and signed standing consent orders that allowed the Facilities to send urine samples out for lab testing at least two to three times per week. He pre-signed Ally requisition forms knowing that they would be filled in and copied by Facilities employees. He approved any outstanding orders by Dr. Tendler. Abovyan admitted that the Facilities would "test for everything," meaning full panels of tests on each sample, and he reviewed and electronically signed the test results. Abovyan knew that the Facilities were billing insurance for patient "treatment," as he admitted that Chatman paid him to "use his medical license to bill insurance." Given Abovyan's key role in the healthcare fraud scheme, the amounts billed to the insurance companies were reasonably foreseeable to him. Plus, as the district court noted, the $11.3 million figure is conservative because it does not include the amounts billed by toxicology

labs other than Smart Lab, like Ally, and only includes amounts billed by the Facilities to a subset of the 42 defrauded insurance companies. See Melgen, 967 F.3d at 1265 ("[T]he district court need only reach a reasonable estimate of loss."). Therefore, the district court did not clearly err in reaching its loss findings.

D. Count Two Statutory Penalty

Finally, Abovyan argues that his Count Two sentence exceeds the statutory maximum penalty. Count Two alleged that Abovyan conspired to distribute controlled substances spanning Schedules II, III, and IV, each of which carries a different statutory maximum penalty. Generally, the statutory maximum penalty for a Schedule II drug is 20 years, a Schedule III drug is 10 years, and a Schedule IV drug is 5 years. 21 U.S.C. § 841(b)(1)(C), (b)(1)(E), (b)(2). The jury rendered a general guilty verdict for the Count Two conspiracy offense and did not specify which substance was involved.

The government conceded for sentencing purposes that, because the jury did not make a specific drug-type finding, Abovyan's statutory maximum penalty should not exceed the penalty for conspiring to dispense the Schedule III buprenorphine involved in Counts Three through Nine. On appeal, Abovyan contends that, due to the ambiguity, he should receive the most lenient statutory

maximum penalty of 5 years (Schedule IV).[21]

Because Abovyan did not raise this objection at the sentencing hearing, we review for plain error. See United States v. Deason, 965 F.3d 1252, 1265 (11th Cir. 2020). In United States v. Candelario, 240 F.3d 1300 (11th Cir. 2001), the defendant was convicted of conspiring to traffic, and possessing with intent to distribute, crack cocaine. Id. at 1303. During the trial, Candelario's codefendant testified that, as part of the conspiracy, Candelario sold him nine ounces of crack cocaine for distribution. Id. at 1303, 1312. The jury, however, did not find the drug quantity as to either Candelario's substantive or conspiracy convictions. See id. at 1311–12. Despite the district court's plain error, we declined to vacate the defendant's conspiracy sentence because "Count One of the indictment, the conspiracy count, necessarily subsumes the amount of cocaine in the possession charge." Id. at 1312. "Because the jury found at least nine ounces of crack cocaine in the possession charge, the jury also must have determined that at least nine ounces were involved in the conspiracy." Id.

The same principle is applied here. It is plain error for a district court to "sentence a defendant beyond the maximum sentence for the least serious

[21]Abovyan also contends, in a passing statement in his brief, that his total sentence should not have exceeded 10 years, but he does not explain why or cite any law in support. Accordingly, we deem that issue abandoned. See United States v. Jernigan, 341 F.3d 1273, 1283 n.8 (11th Cir. 2003).

substance charged in a multi-object drug conspiracy" "in the absence of a special verdict." United States v. Grow, 977 F.3d 1310, 1330–31 (11th Cir. 2020) (quotation marks omitted). But like in Candelario, this error did not affect Abovyan's substantial rights. Because the jury returned convictions for seven substantive counts of unlawful distribution of buprenorphine, a Schedule III drug, it "also must have determined" that buprenorphine was involved in the conspiracy to distribute a controlled substance, permitting a statutory penalty of 10 years on Count Two. See Candelario, 240 F.3d at 1312; 21 U.S.C. § 841(b)(1)(E); 21 C.F.R. § 1308.13(e)(2)(i).

VI. CONCLUSION

For the foregoing reasons, we affirm Abovyan's convictions and sentences.

AFFIRMED.