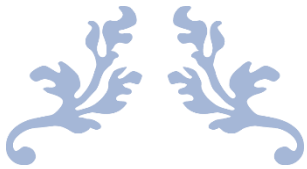

ADHERENCE

By L. Hofstra, J. Narula & J. Pearson

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Preface

This book is all about adherence to doctor's advice, especially taking medications exactly as directed. These non-compliant patients regularly put their lives in danger. An astounding 50% of all patients stop taking their prescriptions correctly after just twelve months! Consequently, nearly 10% of all hospital admissions are related to poor compliance with the dosing, timing or accuracy of prescription medications. This not only results in unnecessary suffering for patients, but it also generates immense extra costs for society. Each year, the EU endures an estimated 280 billion euros in additional health care costs directly caused by adherence issues.

The big question is: *How can we save the lives that hang in the balance now?*

The authors have a combined 70 years of patient care experience, in consultations with more than 100,000 patients. Through their research they have joined forces with top behavioral scientists to uncover what drives patients to make the right health decisions, and what leads them astray. Once they had collected this information and experienced the situation firsthand, they were compelled to write a book to help both patients and caregivers improve prescription adherence.

- What factors determine whether patients will take their medicines as directed?
- How can caregivers convince patients to stick to the prescription guidelines?
- What environmental factors influence patient decision making?

Beyond that, external influences like false rumors, fake news and bad social media are also involved, and it is here where we begin our investigation.

Bad Information vs. No Information

A famous incident in the Netherlands illustrates the importance of accurate reporting in the media. A Dutch television news segment had erroneously cast doubt on the effectiveness of 'statins', a critical and proven treatment for high cholesterol (hyperlipidemia) and cardiovascular issues. Not long after the airdate, nearly 100,000 Dutch people quit using the drugs due to this dangerous misinformation.

Authorities estimated hundreds of unnecessary hospital admissions and heart attacks came as the result of this fake news. Perhaps dozens of citizens lost their lives because of this irresponsible reporting – who can know the real numbers?

One Year Later: 50% Lost

Studies in the United States have shown that after twelve months, only 50% of patients still use their prescribed medications as originally directed. This means that half of the patients stopped the drug therapy altogether or used the medication in a different way than intended - in the first year! Isn't this incredible? The consequences of the poor adherence to medication are immense. Currently, nearly 10% of ALL hospital admissions are solely related to people taking their medication improperly.

Financial Consequences

Pharmacological non-compliance results in a staggering 290 billion dollars in extra costs for the health care system. The impact of this poor adherence is astonishing for society as a whole. Imagine how useful this money could be to help other causes!

Beyond this, on an individual level, poor adherence may have dire financial consequences. It has been calculated that yearly medical costs ***double*** for patients who do not properly use their medication. This reality not only puts one's health at risk, but also puts one's pocketbook in jeopardy. More doctor visits and higher insurance premiums mean larger, unnecessary hospital bills.

This inverse relationship between health care costs and drug adherence has been studied extensively in patient populations with high blood pressure, for example. Patients with good adherence (between 80-100%) spent an average of $ 489 per year on anti-hypertensive medications and about $ 4300 on annual health care costs. By contrast, patients with a low adherence (> 80%) certainly spent less on medication, $89, but their total health bills were 40% higher at around $ 6000 per annum.

Our Goal with this Book

Hopefully, patients who read this will better understand *why* it's so important to take medicines exactly as prescribed. Likewise, health care providers might better understand what motivates patient distrust and what psychological concepts are at play. Ideally, understanding these risk factors will help foster better compliance overall and give providers new tools to ensure their prescriptions are truly "taken as directed."

Over the next twenty chapters, we'll provide many real-world examples of patients who stop taking their medicines as prescribed. We will look into a variety of factors that contribute to the problem, in particular the communication between patients and health care providers. These interactions can be complex - especially with different levels of wealth, social class and education. To help invigorate this information and enhance the experience with some excitement, we've written this inside a novel, a compelling who-done-it with an international cast of characters and heart-stopping amount of fun!

The release of this manuscript on March 27th 2025 for World Adherence Day is a key development, as the authors planned to provide this information to those on the front lines of this important controversy. To maximize the reach of the book, patients can download it for free on Adherence Day through a special weblink. Additionally, we have partnered with numerous patient organizations in many countries across the globe. Yet we would be remiss if we did not thank the World Heart Federation and it's sponsors for this initial opportunity. Their insight and altruism make it possible to present this knowledge to as many people as possible. Thank you.

Dr. Edward Hawthorn and Mrs. Susan Meese

Dr. Thomas Narstra and Miss Sophie Sánchez

Inmate Dennis Pike, Jr.

Mrs. Mercedes Sánchez Mrs. Mercedes Sánchez

Susan Hawthorn's Beach House

Mr. Myron A. Meese

Chapter One
-1986-

A couple relaxes in their West Midlands living room one evening. Inside, a very fat man, Myron Meese, is watching 1980s UK television in a worn armchair, eating a snack. An ashtray next to him has a hundred crinkled cigarettes smashed together, with a thin trail of smoke still rising from it.

Moments later, the man grabs at his heart, squirms in agony, grimaces in pain, and begins to panic. He tries to get up, spills his snack, knocks over the ashtray, and begins to grunt and cough, calling out for help. An alarmed woman bursts into the room to find her husband in his death throes and immediately enters the kitchen to grab the telephone. Myron calls out again and again until the woman reappears in the kitchen doorway, now in a cheerful conversation on the phone. She smiles at the dying man, a single finger touching her lips with a wink, then returns to the kitchen.

The man's body convulses as a gameshow contestant loses on TV. Then slowly, Myron settles back down, with the occasional death rattle. In the other room, the woman laughs out loud on the phone as the television plays a commercial.

Chapter Two
-2008-

Dr. Thomas Narstra was really not a fan of parties, especially in his thirties away from the college scene. Tonight, however, he was happy to attend the retirement party for his good friend and mentor, Dr. Edward Hawthorn. Tom was also feeling proud to have his hot new girlfriend, Sophie Sánchez, on his arm, and the two floated into the grand ballroom of the Langham Hotel with style and grace.

Almost immediately, colleagues and coworkers surrounded the pair, with nods of recognition and handshakes from old friends. The pair made a handsome couple, with Tom looking a bit like a young Hugh Grant, and Sophie, an incredible raven-haired beauty with a lithe figure and a heart-shaped face. Crossing the room towards them was the man of the hour—Dr. Edward Hawthorn, MD. The esteemed physician had been the Dean of Queen's College Cardiac Care Unit until today, and his tenure was ending with this lavish official affair.

Dr. Narstra had done his dissertation under Hawthorn's tutelage, and the two continued a close relationship through his foundation programme and specialty training. When Tom stayed on at Queen's after his certification, the pair sometimes worked together at the Cardiac Preventative Care Clinic, a brainchild of Hawthorn's from the 1990s. Now Tom and Ed caught each other's eye across the ballroom and both grinned in recognition.

The men had remained good friends and discussed their passion for cardiovascular disease, risk reduction, and Guinness ale over many hours at the Kingsmen Pub on Harley Street. When Edward's wife, Donna, died unexpectedly in 2003, the bar visits increased, and the discussions got deeper. Unfortunately, their relationship stalled after Hawthorn's promotion to dean took away his free time. Now, Ed was walking towards his protege with a quiet smile and an outstretched hand as their colleagues stepped aside to witness their warm reunion.

Lovely Sophie Sánchez watched their embrace with reverence and admiration, and she was proud to be introduced to his role model moments later. Though she and Tom had only been dating for six months, she already knew a lot about Dr. Hawthorn and found their relationship endearing. The senior doctor looked all of his 64 years and more, with tufts of grey hair and wild, bushy eyebrows that bordered on comical. Still, there was an elegance and grace to his manner when welcoming the couple, and he kissed Sophie's hand gently upon meeting her.

Almost immediately a strange woman inserted herself into the situation and clumsily took Sophie's hand away, enveloping it with her own no-consensual handshake. She introduced herself too enthusiastically as Susan Meese.

The couple were initially put off by this *faux pas* but quickly recovered when it turned out that Susan was actually Dr. Hawthorn's new 43-year-old redheaded girlfriend. As the aging doctor introduced her to the group, a few eyebrows were raised at the May-December romance before them—but it was Tom who was shocked the most, and not because of the age difference.

The woman before him was the spitting image of Ed Hawthorn's first wife, Donna Hawthorn, who died of ovarian cancer in 2003. She was a bit younger, with more curves and too much makeup, but the resemblance was still uncanny.

Tom nearly said something about it but thought better of it on this special day.

Miss Sánchez had a different reaction to Ed's obnoxious girlfriend. She detected a Brummie accent in her English and correctly deduced her working-class Birmingham roots. Susan made up for her lack of formal education with flattery, street smarts, and social charms. But as the peacock held court with stories of her recent courtship with Ed, Sophie felt the woman was a flagrant narcissist, with all the attendant attention-seeking behavior - a poor choice as a partner.

Eventually, Tom and Sophie slipped away from the 'Vanity Club' and watched the unlikely couple work the room from afar. The hospitality steward announced the dinner service, directing the six dozen or so attendees into the dining room for the formal affair. At the head table, Tom and Ed sat together with their dates on either side, while Chief Medical Officer Sid Franklin and Chairwoman Liz Tyson filled out the ensemble.

The evening went smoothly, and through the introductions, toasts, and tributes, Susan had vapid comments about it all. When the dinner service concluded, Liz Tyson went up to the podium, gave the keynote address, and gifted Dr. Hawthorn with a gold watch with an invitation to speak. Ed was embarrassed by all the attention and sheepishly wandered through the friendly crowd up to the stage to unending applause. In an unscripted but moving soliloquy, the honoured administrator waxed sentimentally about his job and colleagues over the years, mentioning Dr. Narstra twice by name. The flow of heartfelt appreciation and admiration for his colleagues was earnest and magical.

As Ed was winding down with his final, gracious remarks, there was a disturbance in the room that broke the spell. Suddenly, Susan Meese jumped up and faced the crowd—spattering her double vodka onto the balding head of an annoyed Sid Franklin. In a loud, tipsy toast, the drunk debutante reminded her beau to tell everyone the biggest news of all—they were engaged and getting married over the summer bank holiday!

Another explosion of applause filled the air, and the cheering continued as Susan awkwardly staggered up to join an obviously overwhelmed Dr. Hawthorn on stage. A standing ovation formed, and the room was all cheers and smiles except for Tom and Sophie, who just looked bewildered, concerned, and offended by the interloper.

By the end of that summer, the pair had indeed married and moved to Gibraltar so Ed could enjoy his golden years with his young wife in the sunshine. To afford such a move, the professor was convinced to put his ancestral home on the market, the so-called 'Hawthorn Manor' near Windsor. The sale was a surprise to most, because Edward often vowed he would never sell the estate, a family heirloom property from the 1700s.

Moreover within the Hawthorn clan it was understood that, upon the good doctor's demise, Ed's much younger brother Timothy would assume ownership of the house and estate. Despite that, there was a very different future for Tim now, courtesy of the manipulative powers of Mrs. Susan Hawthorn. The manor sold quickly, Susan and Ed made millions, but brothers never spoke again.

Chapter Three
-2020-

A decade later, Tom and Sophie still live in central London. Dr. Thomas Narstra, MD, is still at Queen's College and the senior registrar at the Cardiac Care Unit there. Mrs. Sophie Sánchez-Narstra became a features writer for the Daily Standard, mostly doing investigative reporting on the financial and insurance industries. They were a fit, secure, and happy couple for the most part, although often overworked and distracted. Yet despite being married for nearly 10 years, children had eluded them—somewhat by choice, mostly by circumstance.

As time pushed into the second quarter of 2020, COVID hit, and Sophie was sidelined at home. Being out of the newsroom started her thinking more about her biological clock. At 38, the window for having a baby was beginning to close, just as Sophie's mind about it began to open.

During that same decade, a lot had happened in the Hawthorns' world. In 2010, the couple bought a pricey beach condominium on Gibraltar's east side. For the first year, all seemed well with the new expats; Susan busied herself with high-end shopping, spa treatments, and evenings out, while Ed was more of a homebody. Susan also had a little plastic surgery done and treated herself to a new designer wardrobe that she could show off to her wealthy friends at the Lady's Elite, an exclusive spa and fitness center with a private beach club.

By contrast, Edward began to get bored with retirement in paradise, and frankly, a little bored of Susan as well. Their sex life had all but stopped, her spending was maddening, and her constant yammering about trivial matters wore on him. Within a year, Dr. Hawthorn began consulting for Gibraltar's Columbus Hospital just to stay active and away from home. He saw real patients again for the first time in years, and now he loved it. His passion for medicine was rekindled, especially since he was actually getting to know his charges and making deep personal connections. Before long, Dr. Hawthorn had a wonderful local reputation as a brilliant and caring heart specialist, and dozens of old British retirees and locals crowded the waiting room every month to see him.

The dedicated doctor was also still a researcher and academic, and as such, he noticed the same trend amongst his heart patients that he saw in London. Specifically, simply following his prescribed drug regimens was a real problem; many people didn't take their medications as directed. He learned that after the first year of treatment, nearly half his patients were out of compliance and in jeopardy. Adherence issues were undermining his success with patients, so he decided to open his own clinic and collect his own research.

By December 2010, Dr. Hawthorn was cutting the ribbon to the new Hawthorn Centre, a 15,000-square-foot facility in the former polio ward next to Columbus Hospital. In a couple of years, the doctor was seeing hundreds of patients a year with a budget of over a million pounds. While the energy and excitement of the clinic were a lifesaver for Ed, for his wife Susan it was a harder sell.

It wasn't the stress, long hours, or on-call emergencies that were the problem—Mrs. Hawthorn rather enjoyed her husband away and busy most of the time. No, it was the cash investment that bothered her most. Though the clinic rented the building, the upfit, medical equipment, and employee salaries were all financed by Doctor Hawthorn and the 'Columbus Physicians Group'. In the first year alone, that was a seven-digit number.

Susan worried their nest egg was being squandered to prop up the practice and so put herself in charge of their finances and hired her lawyer friend Donna Rice to help. She began to argue with Edward over every penny and started hiding her cash in the house. The constant tension at home made the esteemed physician stay at work all the more, so the two grew further apart each following year.

As the clinic grew, Hawthorn began to take detailed notes about his patients that were special to him, a collection of observations, research, and anecdotes about particularly interesting cases. At some

point, Nurse Riley began to organize these findings by patient and finally organized them into a chronicle of the practice known simply as ‘The Archive’

Over the next ten years, the Hawthorn Centre became the leading heart clinic in the region, treating over 1,000 patients a year. This accomplishment was mentioned in a post on the Queen’s College Alumni Facebook page, and that’s where Tom Narstra rediscovered his mentor’s activities. The two got back in touch through emails and there were discussions about a visit, but the COVID outbreak of 2020 ruined those plans.

By the time the pandemic passed Hawthorn was facing his own medical issues. His arthritis had worsened making him less mobile, and his memory had started to fail him. The clinic staff had noticed his decline and covered for him in the last few years, but by the summer of 2024 the advisory board unanimously requested that he step down. He left before the end of summer, and went under the care of his annoying trophy wife.

Before leaving his position, Dr. Hawthorn directed Nurse Riley to officially ask Doctor Narstra to run the clinic. The email surprised the young doctor, but for his wife Sophie it was a godsend. The move would bring her closer to her eccentric Spanish family in Marbella, Spain, just an hour’s drive north from Gibraltar and get her out of the political hell that was the post-Brexit UK.

The couple discussed the job offer, with Sophie fuelling the debate. It was Thomas who was most resistant, as all his friends and colleagues were in an exciting world-class metropolis - London. But the reality of Brexit, the eternal English winter, the constant rain and city crowds, the never-ending bureaucracy and the non-stop traffic, Britain’s high cost of living and their painful English taxes were all good reasons to leave, Sophie explained, so Thomas began to seriously consider the move.

However, all their debate ended on Monday, November 11th, 2024 when Dr. Edward S. Hawthorn died from a silent myocardial infarction at his home in Gibraltar overnight.

Mrs. Susan Hawthorn reported Ed’s lifeless body the next morning to the authorities, and Dr. Narstra got the news in London from clinic staff later that day. Almost immediately Thomas flew to the port city to deal the situation, while Sophie took that opportunity to visit her relatives in nearby Spain to inform them about their potential move.

It was determined that a Windsor funeral was best, so preparations were made for a small local remembrance while Ed’s body was being prepared for transport to the UK. After a touching memorial at the Hawthorn Centre, which Susan did not attend, Thomas, the clinic staff, and board members met to discuss the handover of the practice straightaway. With the agreements signed, Thomas was committed to the move and prepared forthwith.

Meanwhile, Ed’s brother Tim made arrangements for his brother’s funeral in England. He had become the de facto custodian of the Hawthorn Trust; now that the patriarch was gone. It took the entire week to arrange an elegant funeral for the dozens of former students, colleagues and administration staff that would attend. By Saturday morning the rainy parking lot at Windsor’s St. George’s Chapel was overfilled with mourners, clergy and well-wishers - all there to celebrate the great Dr. Hawthorn.

After the service, the crowd dispersed and the weather cleared, so Tom and Sophie took a walk into town to discuss their emotional morning. Over coffee, Thomas mentioned how overweight and unhealthy the corpse appeared as they passed the open coffin to say goodbye. This was not the Ed Hawthorn they knew.

Sophie agreed, and soon a discussion of Susan Hawthorn’s funeral antics could not be avoided. Beginning with Tim’s heartfelt eulogy, the grieving widow’s overzealous crying and perfectly timed sobs annoyed the congregation. This disruption seemed over-the-top to them both, and they agreed it compromised the memorial for everyone.

The next day, on a sunny November afternoon, Ed was laid to rest at a graveside service near the River Thames. The dynamic Mrs. Susan Hawthorn was there in her designer mourning dress and a

lime green Derby hat, her homely face mercifully obscured by a Dior funeral veil. But once again, her crocodile tears and forced sobs seemed to dominate the proceedings and Tim seemed very put off. He left before the end of the service in a huff and only to return when she was escorted back to her limo.

This hostility between Tim and Susan escalated in the following weeks, after the Narstra's had returned to Gibraltar. It turns out while Tim was the *custodian* of the trust, the *executor* of the will was somehow Donna Rice, Susan's friend and lawyer. And this was bad news for Tim Hawthorn, received just days before Christmas.

With no children of his own, Edward's estate *should* have been passed onto his brother, but at the probate meeting the widow's wily attorney proudly produced a document declaring Susan Hawthorn as the solo beneficiary. Tim and his wife stormed out of the office, returning only to argue loudly about how and when this horrific change to the will paperwork occurred.

Later it was discovered that after Hawthorn Manor was sold in 2010, a codicil with this critical change was discreetly included in the huge stacks of sales documentation that Edward had signed in haste. Now it meant the Hawthorn family had been defrauded and bilked out of millions by a scam artist extraordinaire.

Chapter Four
- Christmas 2024 -

Tom was bringing groceries back to Sophie's childhood home in Spain when he got an angry text from Tim Hawthorn about the grand deception. He pulled into the driveway and furiously texted back and forth about this latest outrage. The Narstras were staying in Marbella, hosted by Mercedes Sánchez, Sophie's mother and queen of the clan since her husband's passing in 2002. Sophie's younger sister, Malvina, was also home for Christmas Eve dinner, along with her newborn daughter, Bianca, Sophie's niece.

Sophie was annoyed to have to fetch Thomas out of the SUV in the driveway. The car was full of holiday goodies, and he'd been on his mobile for nearly 15 minutes; she was tired of waiting. When Sophie didn't return from the yard in a minute, her irritated sister, Malvina, came out to get them both. She found the power couple blindsided by Tim's crazy news about Edward's estate—now technically 'Susan's' estate. The incident only deepened Sophie's hatred of Susan, and she tried to put it all out of her mind to preserve the holiday evening.

Once the clan was back inside the villa, the scene played out as a lovely 'Nochebuena,' and a traditional Christmas dinner was offered. After several rounds of Cava and Priorat (Spanish wines), an appetizer of cheese fondue was offered, followed by 'Salchichas en Hojaldre' (wrapped sausage pastries) which preceded the main course.

Before long, Mercedes floated in with a luscious 'Jamón Ibérico' (cured ham with nuts) on a silver serving tray, while Malvina brought out a stuffed turkey with gravy—all served with buttered potatoes, deep-fried mushrooms, and pumpkin fritters (Buñuelos de Calabaza). A side dish of Turrón (a sweet almond nougat) was available, as were endless chocolate Churros, Bianca's favourite. Dessert was a 'Buche de Noël,' a sweet bread filled with buttercream resembling the Yule log.

Though the crew enjoyed this feast immensely, the attending cardiologist couldn't get over just how unhealthy it all was. Almost every dish was filled with sugars, calories, and fat of the worst kind, and the drinking went from careful to indulgent. Unfortunately, the family's daily fare wasn't much better, so eating healthy had been a big challenge for the couple since they moved in a few weeks ago.

Their relocation here was a temporary but necessary sacrifice until the Narstras could find a suitable apartment in Gibraltar—and it wasn't going well. Preparations to reopen the Hawthorn Centre in the new year required the young doctor's full attention, and there just weren't enough hours in the day. Sophie was sidelined, counselling the recently heartbroken Malvina, and adoring her new niece. And while she was able to make some calls and sift through housing ads, in reality, she couldn't do much without a car, as she was an hour's drive from Gibraltar proper.

After dinner, Thomas had to muster up the courage to talk with his mother-in-law Mercedes while she was smoking in the backyard, enjoying a digestif sherry in the twilight. Since his wedding to Sophie in 2012, he had only met her a couple times; Mercedes was averse to travelling because of her lacklustre English. In reality, he had never really connected with her, partly because of the distance and language, but mostly because they were very different people.

Mercedes was an emotional, deeply religious Catholic 'maruja' with little formal education and a low energy, overweight vibe. By contrast Thomas was a practical agnostic with a sophisticated demeanor that matched his fit, well-dressed persona. Presently, the practitioner approached his mother-in-law to have a difficult conversation with her, in more ways than one.

The cardiologist had noticed Mercedes was a bit unsteady lately and began watching her over the holidays. A few days before Christmas, the doctor had asked her (and Malvina) to give him a blood sample with an excuse about Bianca's genetics. In actuality it was a more serious request, as Dr. Narstra had grave concerns about the health of his extended family.

Nurse Riley did the bloodwork with extra care and accuracy and the results were alarming - with Mercedes borderline for CVD and even the young Malvina with elevated triglycerides.

As the last glow of sunset faded over the northern mountaintops, Thomas joined the matriarch on the veranda and began to talk about her test results. At first Sophie's mother was confused, so she called over the bilingual Malvina to translate.

It didn't go well.

Perhaps Thomas should have taken off his doctor hat and approached this as a family member, but he was Dutch direct instead. He told Mercedes that her lifestyle was unsustainable and had to change. Between her smoking, drinking, inactivity and her terrible diet, she was racing towards an early grave, and as her son-in-law and a doctor, Thomas simply could not allow this.

Malvina began the translation, and Thomas could see neither woman was very happy to hear this.

"Tell her at the rate she's going she'll be dead in 10 years unless we do something now." he said, looking at Malvina. She took a deep breath and looked at Tom hard before turning away to explain his English.

As her daughter spoke, Mercedes first looked shocked, then defiant. She stood up and began pacing around, lighting another cigarette. The healer readied himself for the blowback, but he was pretty confident in his assessment – based mainly on the Framingham Risk Score.

This revolutionary 1948 study evaluated the health of thousands of citizens from Framingham, Massachusetts, not far from Boston. Generations of inhabitants were asked to fill out extensive questionnaires about their lives, including family history, exercise, diet, smoking, the presence of diabetes, age etc. Each participant also had their blood pressure and cholesterol levels measured regularly and professionally.

For the next 75 years, the Framingham investigators followed their study subjects carefully, tracking the development of heart disease and stroke in the participants. By combining lifestyle factors, cholesterol levels and blood pressure data with the disease outcome, the researchers were able to construct a formula to calculate someone's risk to develop a heart attack or stroke.

Back on the veranda, Malvina and her mother were arguing in Spanish. Suddenly the señora switched to bad English and spat out her words in anger.

"Who are you to tell how I live? You tell me ten years? I don't care at all! Ten years is far away, I worry about it in ten years, yes? You worry you, I worry me. You try scare me? No hay posibilidad, no yo! (not possible, not me!)

Dr. Narstra immediately realized his mistake. Whenever a 10-year assessment for heart disease is discussed, one needs to drive home that illness would likely take place *within* this time frame. It could happen next week, next month, next year, or in a decade – and it's important heart patients understand the difference. Otherwise, there's too much psychological distance for people to internalize the reality of the situation, most patients just can't relate. This was certainly the case with Mercedes Sánchez, who was spinning out of control right in front of him.

Narstra grabbed Malvina's arm to get her attention. "Tell her I can help her," Tom pleaded, "There are medicines that might stop this, we can manage this. If she would just consider…" SMASH!

Mercedes sherry shattered at Tom's feet and glass flew everywhere as the woman snatched her daughter from the gob smacked Englishman. She hustled Malvina away screaming "You no touch

her!" and went into the house. Drawn by the commotion Sophie showed up completely disoriented and followed the ladies into the back bedroom. For the next 10 minutes the women argued in loud Spanish behind closed doors.

Thomas stood there agape on the porch until the chill of the evening made him drift back inside as the quarrel continued in the back bedroom. Finally, a distraught Sophie came racing around the corner, pushing him into their bedroom and saying the words no husband wants to hear –

"What the hell did you say!?"

The bright Mediterranean sun was the only nice thing about the following morning. With sealed lips and angry expressions, the Sánchez family made it clear even without speaking that he was no longer welcome in the house. Sophie, caught in the middle, decided to stay for awhile as a peacekeeper, but for now the dye was cast – Thomas was out.

*It should be noted that different countries have developed their own health calculators because risk factors can vary greatly- in Europe, for instance, the SCORE risk calculator is used.

Chapter Five
-Gibraltar, 2024-

After the blowup, Tom found a hotel for the night in Gibraltar, but at several hundred euros a night, this wasn't a long-term solution. As he settled into his fancy room, he was relieved to be out of the pressure cooker in Marabella, but still unhappy with himself about how he handled Mercedes. His clumsy communications with family reminded him of an incident with his own mother a few years earlier in London.

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Patient: Nora Melvin Narstra   DOB: 04/20/1953    File Number: 51987-1
Marital Status: Widowed        Children: 2/grown  Sex: Male    Age: 72

Overview: A health-conscious senior followed instructions and took all her medicines
until her biometric data improved. When it did, she stopped her meds and crashed.
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Nora Narstra, Thomas's birthmother, had always been the picture of vitality. With her mellow smile, toned physique and positive energy, she painted an elegant portrait for a seventy-year-old retiree. That's why when Tom discovered her high LDL cholesterol levels in 2017, it came as a shock for the grand dame. Determined to take control of her health and her life, Nora not only took her medications religiously but made significant lifestyle changes as well. She adopted a more heart-healthy diet, exercised more regularly, and stayed on top of her blood pressure and lipoproteins.

As the months passed, her efforts paid off as LDL levels dropped and her blood pressure normalized, lowering her risks. There was high praise from her son at her follow-up appointment and she felt a sense of accomplishment. But once Nora thought she had conquered all her health issues, she stopped taking her medications - suddenly and without permission, inviting disaster.

In reality her lipoproteins were controlled almost exclusively by her medications. When she quit taking them, her LDL-cholesterol skyrocketed again to dangerous levels almost immediately. In Nora's defense, many patients often feel that once their health has stabilized they can stop all their medications and everything will go back to normal, a phenomenon called the Drug Discontinuation Syndrome or DDS.

Unfortunately, DDS can be very dangerous for a patient. When these medications are stopped abruptly, the body can experience a rebound effect, causing a sudden and significant increase in heart rate and blood pressure. This rapid change can lead to serious health issues, such as heart attacks, angina (chest pain), and arrhythmia (irregular heartbeat).

It is known that the body needs time to adjust to the absence of the medicine, so a gradual tapering off process is best. This allows time to acclimate slowly to a drug free reality, and minimize the risks associated with sudden discontinuation. Dr. Narstra knew stopping these powerful drugs suddenly could have severe consequences, of course, but he didn't know his mother was non-compliant.

At first, everything seemed fine. Nora continued her healthy habits, and life went on as usual. As the days rolled by subtle changes began to creep in. She noticed the occasional chest tightness and shortness of breath, but dismissed it as 'age' or 'exhaustion'.

Then, one summer evening Nora was hosting a family barbecue. As she laughed and mingled with her guests, a sudden wave of dizziness washed over her. Her chest felt heavy, and she struggled to catch her breath, knocking over a flower vase as she crashed onto a serving table. Panic set in as the symptoms intensified and people gathered around her. Thomas remembers rushing to her side and calling for an ambulance.

At the hospital, the staff confirmed that Nora had suffered a minor heart attack. The doctors explained that despite her healthy lifestyle, her decision to stop taking her medications had allowed her LDL levels to rise again, causing the incident. She realized too late that managing her health required a combination of lifestyle changes and medical intervention, and deeply regretted her decision to stop taking her medications without consulting her son, the heart doctor.

Tom's mother returned home with a newfound understanding of how important these maintenance drug are. She shared her story with others, emphasizing the importance of listening to medical advice and recognizing that sometimes, medications are necessary for long-term healthcare.

Dr. Hawthorn would say Nora was lucky. Stopping medications abruptly can result in severe consequences, even cardiac death. This makes it crucial for patients to consult with a healthcare professional before making any changes. It's vital both patients and providers understand the hasty discontinuation of beta blocking drugs can be potentially life threatening. "Stop Smart, Ask First!"

But what about other types of medication?

Let's start with acetylsalicylic acid (aspirin), one of the most common medications in the cardiovascular field. The major benefit of aspirin is that it inhibits the clogging of platelets, which controls clotting. Unfortunately when cardio patients spontaneously discontinue aspirin, studies found a steep increase in the number of heart attacks.

The same is true for statins, a class of drug used to lower LDL-Cholesterol. This lipid particle in itself is not dangerous, but if the levels of LDL-C cholesterol become too high, arteriosclerosis becomes an issue and the coronary artery could become clogged. According to some research, when patients stop taking their statins, their risk of heart attack doubles or even triples.

Moreover, a JAMA study revealed that patients who stopped taking statins had a 33% higher risk of requiring hospital admission for cardiovascular problems in the next 12 months. Specifically, older individuals who discontinued statin use had a much higher (46%) risk of experiencing heart issues and strokes than those who stayed the course.

The science is clear that statins not only lower LDL-cholesterol, but also improve the function of blood vessels by helping them dilate. When arteries increase in diameter it allows for better blood flow through them which improves the delivery of oxygen and nutrients to the organs supplied by these arteries. When the coronary arteries dilate, the heart muscle receives more blood, which enhances its function and health.

Several important studies have shown that discontinuation of any cardiovascular drug, even aspirin, can have dangerous consequences and at least double the chance of having a heart attack. To wit, Thomas's own experience with patients found if they stopped taking a prescribed medicine, the risk factor treated by that specific medication quickly goes in the wrong direction. He understood that it was important to highlight this reality for the patient.

Dr. Narstra was reminded of this interesting passage from Dr. Hawthorn in The Archives:

"*We must always consider the possibility our patients may discontinue the very medication that effectively suppressed the risks factor they treated. This is ignorance, so we health professionals have to educate patients not to discontinue medication even when symptoms and risk metrics have improved. You must impart and assure them that all this improvement is due directly to continuing their drug therapy exactly as directed."*

After a night at the Gibraltar Majesty Hotel, Thomas remembered the Sun Tzu quote from The Art of War - "Keep your friends close but your enemies closer". With that, the doctor reached out to a friend with a Catalan beach condo – Mrs. Susan Hawthorn! Remember, she still had no knowledge of Tom's true feelings about her, so she was fine to allow the Ed's old colleague to stay over a few days.

He moved in that night and over the next week or so they would become better acquainted, discussing memories of Edward and the Hawthorn Centre's future. But something seemed off to Thomas.

While Susan seemed affected about losing Ed at first, her sadness suddenly disappeared when a large life insurance check arrived and she began to act differently. The grieving widow started to go out at

night, often coming home late, dishevelled and drunk. One night, Tom discovered her hunky friend 'Bennie' trying to sneak away through the kitchen in the wee hours of the morning.

This strange behavior came to a head on New Year's Eve, when Susan slipped into Tom's bedroom well past midnight after more than a few drinks. The next scene was sloppy and awkward, and after his rejection of her, things between them were weird. In response Susan disappeared on a month-long Mediterranean cruise due to return in February. She only allowed Dr. Narstra to continue house-sitting if he would take care of her pet monkey - Quonk.

With that crazy woman gone, Tom convinced Sophie to come stay at the empty beach house with him. His wife was glad to reconnect, as a few weeks with her own family was quite enough. There was only one monkey living here, she thought, and thankfully he wasn't a relative.

Once she moved in, they reconnected as lovers and friends. Thomas learned that, after the Christmas blow up, Mercedes later confessed to having 'fainting spells' and shortness of breath occasionally, even after normal activities like gardening and cooking. This revelation solidified Tom's notion that she should be on several medications, and he urged Sophie to have her come into the clinic.

They also discussed Susan's peculiar behaviour since Hawthorn's even more peculiar death. How could an esteemed cardiac physician die from a heart attack? The two grew increasingly skeptical of the official story and decided to launch an investigation on their own. One of the first things they did was search the Hawthorn's beach villa for clues.

While the downstairs of the flat looked normal enough, insanity was found on the second floor. Susan's upstairs bedroom was awash with gift boxes, shopping bags, shipping boxes, tagged clothing and unopened merchandise from upmarket outlets all over the city. They were careful not to disturb much, so they took mobile pictures for reference, documenting it all.

For the next few hours, the couple hunted through the hoard of unbridled consumerism - finding dozens of designer handbags, famous perfumes, expensive sunglasses, shoe boxes, and crates of expensive imported wine. One unusual item was a single box of old comic books all wrapped in cellophane with authenticity certificates for a few. Yet frustratingly, nothing was discovered that could tie Susan to any crime.

But then Sophie found the woman's General Certificate (GCSE) from her school time in England and discovered it was issued to a 'Susan Peacock', not 'Susan Meese.' That meant that 'Peacock' was her maiden name, so 'Meese' had to be a married name. When she explained this to Tom, they both realized the grieving widow must have been married before, which raised more questions than answers.

For the next couple hours, they focused on any documents, forms or records they found; but aside from occasional references to 'Susan Meese', there was nothing about a husband. What they DID find was a safe under the sink in the upstairs bathroom, and it was likely that any damning paperwork was locked away behind the tumbler.

But they also found some real evidence in the bathroom cabinet nearby. An insane variety of vitamin pills was secreted away in the back of the bathroom cabinet. The couple found nearly two dozen of these bottles that had all been opened, but remained curiously full. Was the suspect trying to find the right look-alike for Edward's medication? Was she successful?

The downstairs was much harder to search, especially with Quonk's constant antics and shrieking. The monkey was finally lured into the garage just to bring some peace back to the household, but ultimately, nothing of note was found on the ground floor. But in the laundry room next to the garage, the sleuths uncovered a treasure trove.

Tucked deep inside a sewing box in the linen closet they found a half-dozen packets of 100-euro notes. Sophie easily counted the 60,000 euros, as the bills still had the bank's official currency bands intact. Why would anybody have an average year's salary ready to go like that? Unfortunately, they both already understood the answer to that question, and it motivated them even more to get justice for Edward.

While Dr. Narstra was at the clinic the next day, Sophie the reporter went on an intense internet search about their findings and finally discovered the spouse of Susan Peacock was Mr. Myron Meese. Only a few other things popped up - most notably, a marriage certificate from 1985 issued in Malta, a 1986 death certificate from the Birmingham public records archive and some legacy references to Myron's ownership and sale of several extremely rare comic books from auction sites.

Sophie found an apartment on Queensway Road just one day before the widow Hawthorn returned. The couple moved everything out just hours before the debutant's showed up but it took a couple trips back and forth as their rental car was tiny. Though they missed the beachside access and stunning sunsets, they were glad to say goodbye to 'Quonk' the monkey. The lovers had more than enough of the relentless primate in the last month and the cardiologist joked the beast was about to have "some real heart problems if he didn't shut up!"

Luckily, they were separated for now, but it wouldn't be the last of "Quonk the Terrible".

Chapter Six
- The Archives –

To better prepare for his new position, Dr. Narstra decided to dig into 'The Archives' of patient records that could give him a better idea of what Dr. Hawthorn was thinking and his vision for the clinic. The small file cabinet featured reems of handwritten records, patient analysis and diagnostic critiques. Dr. Narstra pulled the first folder in the drawer – Carl Gómez.

```
Patient: Luke Carlton Gómez    DOB: 11/12/1975    File Number: 56129-1
Marital Status: Married        Children: 2/grown  Sex: Male    Age: 50

Overview: Risky genetics make for a risky attitude about fate, medicine, and
the modern treatment of cardiovascular disease.
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Carl Gómez was a beefy, cheerful man who spent his whole life as a longshoreman in his native Gibraltar. At 50, the Spaniard was now a respected dock supervisor, thus spared the toil of warehouse work that earned him that position. He retained his sturdy physique and rugged good looks despite his softening muscles and a bit of extra weight.

His medical file begins in the emergency room, where he was brought one afternoon after what turned out to be a heart attack at the dockyard. Once the patient was stabilized, the attending ER supervisor Dr. Felix Ryson contacted Hawthorn and they agreed a stent was required ASAP. After a surgical consult, a coronary angioplasty was scheduled for the next morning.

Hawthorn then explains that a coronary angioplasty is a stenting procedure which involves inserting a catheter with a small balloon into the blocked artery which inflates to allow more blood flow. A small wire mesh tube called a stent is then placed in the artery to keep it open and prevent future blockages. These types of notes convinced Thomas that The Archive was actually Ed's notes for a cardiology textbook about preventative medicine.

Post-op records show that Gómez spent half a day in the PACU (Post-Anaesthesia Care Unit) and then a week in the two-bed CCU (Cardiac Care Unit) at the Hawthorn Centre. During his recovery, Edward had extensive discussions with Carl about his troubling family history, which he included in his chart.

Ed learned the Gómez family was a deeply religious clan from El Zabel, a slum neighborhood of poorly educated dayworkers bordering north Gibraltar with southern Spain. Known locally as "Villa Narco' because of drug and crime problems, the ghetto was a breeding ground for dangerous living.

It was in this unhealthy and stressful environment that the Gómez family survived, despite their circumstance. The hard-working Catholic family was blessed with incredible grit and resilience to their situation, but struggles were always around the corner.

Not only did Carl's father die in 1985 of a heart attack at 50, his grandfather had died that same way in 1958, also at age 50. The grim pattern went back to 1938, when his great-grandfather was found 'collapsed in a field' according to family lore – also quite possibly a heart attack. He was only 58.

Growing up in the seventies, Carl lost his older sister to drug addiction, and his older brother in a boating accident, both in their 20s. While his mother was still alive, she suffered from high blood pressure. Her sister Ann (Aunt Annie) died from complications during the birth of his nephew Raul, who himself died in 1990 due to Ischemic heart disease.

Remarkably, Carl remembered his paternal grandmother, Celeste Cruz-Gómez taking nitroglycerine tablets for her 'heart issues' (likely angina) in the '50s. He always wondered why she didn't explode as a kid! Before his *'abuela'* died in a 1966 car accident, Carl recalled Grandma Celeste often spoke of the "maldición del corazón" (curse of the heart) that haunted the Gómez family for generations.

Despite this family history of early death and heart ailments, Carl's cynical attitude was quite shocking, especially since he just had a major myocardial infarction. Hawthorn transcribed this bit of the interview:

"I was glad to be saved this time Ed, but we're only delaying the inevitable. There's no point in prescribing a medicine cabinet full of pills because it won't matter in the long run. My father had a heart attack, as did his father before him, my grandmother had angina, even my birth mother had high blood pressure, so it's just a matter of time, it's in my genes."

Hawthorn wrote how this mindset is held by many older, religious folks who have witnessed generations of heart disease firsthand. After living through the death of relatives, some fatalistic patients are convinced this is *their* destiny as well. The Catholic faith indirectly supports this attitude, and Edward thought hard about how to get past these misbeliefs.

"The Catholic faith emphasizes God's sovereignty and a divine plan," Ed wrote, *"which supports a 'fatalismo' attitude - the belief that events are predetermined and inevitable – 'what will be, will be'.* Traditional Catholics are taught to offer their sufferings to God as penance and find spiritual growth through these trials. Edward found this attitude frustrating in the light of genetic predisposition.

As Always, Knowledge is Power.

Hawthorn writes of the many genetic disorders that can result in heart disease, the most dangerous is 'inherited high cholesterol'. Known as Familial Hypercholesterolemia or 'FH', it is the most common cause for genetic heart attacks at an early age. Sufferers may endure LDL-cholesterol levels of 200-400 mg/dl, more than three times a healthy score of 70 mg/dl. This is deadly – regardless of age.

It's hard to believe a child could have a heart attack, but individuals with FH generate LDL-C levels so high that cardiovascular disease can develop within the first 10 years of a youngster's life. In fact, FH patients suffer 20 times the chances of heart issues compared to the general population.

Thankfully, these risks are now controlled with effective medications like statins, which lowers the chances of developing heart disease by 20% with every 40 mg decrease of LDL cholesterol. For a statin patient with an LDL decrease from 200 mg/dl to 80 mg/dl, their chances of developing heart disease are decreased by 60%. These are extraordinary numbers.

A large 2002 Dutch study of familial hypercholesterolemia supports this, and showed KH patients taking statins had a 76% lower chance of a heart attack than those that didn't.

Hawthorn noted that in reality some patients don't tolerate these lipid reducing agents well. Symptoms like muscle pain and body fatigue have been reported by some users. Luckily, for these patients, newer drugs have recently come to the market.

For example "Evolocumab" (Repatha), a twice monthly subcutaneous injection, is in a new class of innovative medicines called "PCSK-9 inhibitors" that have been tremendously successful in lowering LDL-cholesterol, especially among those with a genetic predisposition towards high cholesterol.

Another new drug "Inclisiran" (Leqvio) which inhibits the creation of PCSK-9 in the first place, by silencing of the gene coding for the protein with one simple injection every 6 months.

But as a drug class, 'statins' are the most effective in lowering LDL-cholesterol, and thereby the risk of heart disease. And even if statins are not tolerated, these are two new classes of anti-cholesterol drugs in the pipeline that offer new solutions for decreasing the risk of heart disease.

Hawthorn took note of his conclusions about the Gómez case. *"Its important doctors recognize that some traditional or religious patients with a high genetic risk for heart disease may have the perception that nothing can be done. It is important to explain this reality can be changed dramatically with the right prescription if taken as directed. Even if heart disease runs in your family, the use of modern medication is often the most effective way to lower the risk. When the correct medicine is taken as directed, bad genetics need no longer be a death sentence."*

Chapter Seven
- Donnie Gómez –

Edward was so concerned about the Gómez family curse, the *'maldición del corazón',* that he called upon Carl's younger brother Donnie to visit the clinic to try to establish a baseline and perhaps some preventative measures to help break the curse for good.

```
Patient: Donald Michael Gómez  DOB: 12/3/1977    File Number: 56317-1
Marital Status: Married        Children:2/grown  Sex: Male    Age: 48

Overview: Slightly overweight dockworker with a long family history of
cardiac issues needs meds to combat his significant 'combined' risk factor.
```

One of the only patients Hawthorn ever sought out was Donnie Gómez, Carl's brother. Born into the same working-class religious community as his brother and raised in near poverty, the 48-year-old dock worker spent a lifetime avoiding doctors at all costs. In his world, doctors were an expensive last resort, and hospitals were places you went to die.

Notes indicate that in the previous week his brother Carl had a heart attack that landed him in the Columbus Hospital emergency room. Dr. Hawthorn clearly documented the case, and consulting notes from the attending ER physician Dr. Felix Ryson were included. Hawthorn wrote that when he saw the Gómez family history, he had Nurse Riley reach out to brother Donnie Gómez to come in for a health exam based on his dangerous genetics.

Mr. Gómez's initial exam found a BMI of 28 kg/m^2, a blood pressure of 150/85 mmHg and a total cholesterol of 255 mg/dl with a LDL-cholesterol measure of 158 mg/dl. After explaining the lab results and his inherited risk factors, Ed told him the reality of the situation: His test results were on the threshold of alarming, and preventative medications like ACE inhibitors were needed. He recorded Donnie's objections in his chart.

Donnie's pushback included questions like *"Why should I start taking pills if my values are just borderline – why start down that road now?"*

In response, Dr. Hawthorn confessed these kinds of discussions happen every day in the life of a cardiologist. And indeed, if one looks at the various risk factors separately, one could argue there is no need for medication. Unfortunately, it's ALL the risk factors together that pose a threat to a patient's long-term health.

Hawthorn's notes featured Donnie's tragic family history of cardiovascular disease. Both his father and grandfather suffered a deadly heart attack at a relatively young age, and now his brother has similar issues.

"Additionally, the patient has hypertension, which will require constant monitoring and medication. And both his total cholesterol, as well as his LDL-cholesterol levels were elevated – each one already a well-known medical threat. And finally his BMI (27) was ok, but he is still technically overweight so yet another risk factor!"

The research and academic mentor Thomas remembered was revealed in the next few paragraphs.

"The critical question is how the combination of these four borderline factors collectively impacts Donnie's cardiovascular health. Multiple studies have found that the more risk factors one has, the greater the chances of a medical incident. Beyond that, the likelihood of an adverse event grows exponentially as the risks multiply."

Hawthorn continued by writing that two concerns do not just double the risk, but may triple it for heart issues. Even worse, suffering just three of these conditions increases the chances of a real medical issue fivefold! Obviously, compliance is vital, even when it's a 'preventative' prescription.

"Looking at this patient as presented, we've established he has four major risk conditions, and although they seem borderline, together these indicators put him in the highest risk category."

Riley's notes show Dr. Hawthorn took time to explain all this to Donnie and presented his brother Carl's current struggles as motivation. After a fifteen-minute consultation, the big man finally changed his mind about medication. (Apparently, watching his sibling ignore everything and end up in the hospital was a real wake-up call, and he convinced Donnie to see the light.)

His chart today indicates by using preventative medications with some mild lifestyle changes, Donnie has remained disease-free and helped his brother through recovery as well. At the bottom of the chart, the eloquent Dr. Hawthorn put it this way:

"It may be a challenge to convince an otherwise 'healthy' patient to take preventative drugs, so it's essential to explain that managing known risk factors through medication is a necessary and effective way to extend life, maintain health and control heart disease. Having multiple risk factors is a serious threat to patient health, even if those conditions are borderline individually. Timely intervention with effective medication will substantially lower the chances of an adverse event, and with this, compliance is critical to success."

Thomas continued to browse through Hawthorn's notes with fascination and reverence. It seemed each case taught him not only about compliance, but who Dr. Hawthorn was as a caring physician.

Chapters Eight
-Nadia Javier-

Sophie was surprised to get a mobile call from anyone in Gibraltar, she hardly knew anyone yet. Then again maybe it was something about their moving shipment or the new flat! She hesitantly picked up to hear the voice of Susan Hawthorn with some kind of animal yakking in the background.

S.H.- Hello, is this Sophie? Mrs. Narstra?

S.N.- Yes, it's me, this is unexpected Mrs. Hawthorn, what's going on?

S.H.- I think you know why I'm calling.

S.N.- Well, I'm sure I don't. What's this all about?

S.H.- Oh really? Are you gonna play this game? Fine.

S.N.- I don't know what you're ta…

S.H.- (Interrupting) Did you live in my house while I was on holiday?!

S.N.- (long pause) Ah, yes. Yes I did Susan. Is something the matter?

S.H.- Who gave you permission to stay there? I certainly didn't – I said TOM could stay there and watch Quonk during my vacation. Why were you there?

S.H.- I was...Look, Tom tried to call you about it, but you were on a boat in the middle of the sea! He couldn't reach you so. . .

S.N.- So you decided you could just move in for a month! You made twice the garbage! My neighbors saw you! What were you doing there?

S.N.- I was with Tom, my husband...we were looking for a flat, somewhere to live. I needed to be local, I guess we thought you'd be ok with it. Christ Susan, what do you want from me?

S.H.- Four thousand pounds – cash please.

S.N.- What!? What are you talking about?

S.H.- Rent. Four thousand pounds is what I would have charged a STRANGER to stay in my luxury condominium for a month on the beach, so that's what I need from you. Wait, of course Tom did care for my monkey so I'll credit you 200 pounds for that...

S.N.- What are you talking about?

S.H.- I'm talking about thirty-eight hundred pounds sterling. Sooner is better than later for me Mrs. Narstra – when can I expect payment?

S.N.- I'll have to talk to Thomas about it first, I'll get back...

S.H.- What's there to talk about? You stayed in my place, you own me rent. You're lucky I don't file squatting charges on you, that's a £5,000 penalty right there – you're getting off cheap – so be grateful and pay your debt.

S.N.- I don't know what...

S.H.- You've got a week before file for a court judgement so you go 'talk to Thomas' about that now, ok? I am expecting your payment this week Mrs. Narstra. Please be an adult and deal with this responsibly – I thank you in advance. [disconnect]

Sophie was dumbfounded and looked at her cell phone as if it were to blame. She dropped her shoulders and tried to process what had just happened – was Susan serious? Beyond that she wondered how much Susan really knew – did she discover their snooping? Worse yet, how was she going to tell Thomas about all this? The reporter decided the best defence is a strong offence, so she began a full investigation of Mrs. Susan M. Hawthorn – murder suspect.

Meanwhile, over the next few days, Doctor Narstra took nearly every free moment he had at the clinic to research The Archives. He also prepared himself for future patients by not only reading their chart, but Doctor Hawthorn's personal notes as well. Such was the case for his appointment today with the gorgeous Ms. Nadia Luis-Javier.

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Patient: Nadia Luis-Javier     DOB:03/30/1968     File Number: 52974-1
Marital Status: 2 Divorces     Children:2         Sex: Female  Age: 56

Overview: A local fitness fanatic was dismayed to have cardiac problems
despite making exceptionally healthy lifestyle choices.
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Wellness coach Nadia Javier was a Gibraltar city native known all over town for her sporty personality, friendly demeanor and natural good looks. An attractive woman in her fifties, she prided herself on her organic and healthy lifestyle without depending on doctors or medication. Her mornings were spent supervising the amazing gym at *Ladies Elite,* and group cycling around the city. Afternoons involved yoga in the park, art photography, and tending to her lively 12-year-old daughter after school. A mother of two, her eldest boy was already away in the Royal Navy as a communications officer and was a source of great pride for her.

Perhaps her biggest cause of stress was co-parenting her daughter with reprobate ex-husband Ronnie, a local dockworker. Dr. Hawthorn's notes begin after a routine check-up in 2020 when Nadia's primary care physician expressed concern about her slightly elevated blood pressure and cholesterol levels, as well as some shortness of breath lately. He sent her to the Hawthorn Centre for further evaluation.

After a perfunctory screening, her vitals were revealed as a BMI of 21 kg/m^2, a blood pressure of 130/90 mmHg, a LDL-cholesterol of 132 mg/dl and a total cholesterol score of 210 mg/dl. Her resting heart rate was 68 bpm, SpO2 97% and a blood glucose level of 110 mg/dL.

The notes from her 2020 appointment revealed a prescription for atorvastatin to keep things in check. But Nadia scoffed at the idea, according to Hawthorn, believing in natural remedies and lifestyle changes over pills. "I'll watch my diet and exercise even more," she promised. But Nurse Riley discovered her pharmacy records indicate the medication was left at the pharmacy.

At a later appointment, Nadia claims she meticulously crafted heart-healthy meals, engaged more yoga and less ex-husband to reduce stress, and maintained her active lifestyle like she promised. However, the subtle symptoms of CVD began to creep in anyway.

It started with occasional bouts of dizziness and shortness of breath, which were dismissed as overexertion. Her abnormal fatigue was blamed on her age and busy schedule, so she began to turn down social engagements and dating opportunities to conserve her energy for her child.

Then, one autumn rush hour in 2024 while riding on Europa Road, Nadia felt a strange pressure in her chest. She dismissed it at first, but the pain intensified and radiated down her arm. She stopped cycling and tried to call for help but her jaw began to lock-up. She knew something was terribly wrong and was barely able to call 112 for help. Her slurred words were hard to understand and she collapsed on a park bench until a bystander finished the call and summoned an ambulance post haste.

At the hospital, the diagnosis was clear: Nadia had suffered a heart attack. Dr. Hawthorn explained that despite her healthy lifestyle, her untreated high blood pressure and cholesterol had taken their toll. Lifestyle is just one factor, but age, sex, genetics, air pollution, diabetes and other variables all play a role in this diagnosis. Nadia listened in stunned silence at all this, and then began to get angry and resentful. Ed wrote down her frustrations.

"How could I have a heart attack!? I did the best I could – everyday! I don't smoke, I don't drink, and we eat healthy meals at home all the time." Nadia began feeling hopeless. "Maybe it's just destiny, this is how it ends for me. How are your medications gonna help me now? I'm already a victim, soon I'll be a casualty!"

Edward admitted in The Archives that hard conversations like these are often encountered in the consulting room of a cardiologist. Patients who have lived a health-conscious existence are often shocked when confronted with the reality of atherosclerosis. A European study recently showed over 40% of 'healthy' Swedes still had measurable plaque by middle-age, despite a sporty lifestyle. These patients were universally surprised and disturbed by these findings.

When fit people are diagnosed with atherosclerosis they may feel demoralized and defeated that their arteries have clogged up despite their best efforts. This feeling of disappointment may hinder the motivation to seek treatment or take the prescribed medication needed in such cases.

But why does this ever happen to 'healthy' people? Hawthorn asks. And the answer is there may be multiple reasons that formerly athletic patients develop clogged arteries around the heart.

New Studies Challenge Old Ideas

Certainly stress is a primary reason even healthy people suffer. The InterHeart Study (2001-2004) proved stress is an instigator of heart disease for everyone, regardless of fitness level. Chronic anxiety results in the overproduction of cortisol, a flight-or-fight hormone which increases blood pressure, cholesterol scores and glucose levels – all major risk factors for heart disease – especially clogging of the arteries.

The long-term effects of stress are well known, but even 'good' stress may be a risk factor. Studies have shown that just watching an intense sports game can double the chances of getting a heart attack for a passionate fan. Maybe playing sports is a better idea than watching!

Another reason the healthy suffer is known as the "above-average effect" according to Hawthorn. This is a cognitive bias where people tend to overestimate their own abilities, qualities, or characteristics compared to others. For instance, 93% of Americans think that they are better than average drivers – which is statistically impossible. Yet this illusion persists even as Norwegians have a tenth of the accident rate per capita as their reckless American brethren.

Further studies note this overestimation is particularly common in highly educated people, which is a bit of a surprise in itself. For example, a classic 1997 study suggested that 90% of college professors think that they're better than average teachers, despite the mathematical improbability of it. Even a study of psychotherapists showed that they rated their own skills 'better-than-average' consistently, even amongst this group of mental health professionals who should know better.

Studies show this especially obvious when it comes to evaluating one's own lifestyle, and two good examples were given in The Archives.

1) A recent Dutch survey reported 80% of the participants *thought* they ate enough fresh produce, fruits and vegetables for a balanced diet. The real number was more like 20%.

2) Another 2010 UK study proved that 60% of people consistently overestimate the amount and intensity of their exercise regime. Turns out self-evaluation is an untrustworthy measure and most overstated their commitment by half.

There's no avoiding 'environmental risk factors' either, which are conditions outside of our control. Simply being aware of things like individual genetics, the poverty rate, local water quality, access to healthcare, family social status, and even the weather can help patients like Nadia manage their health. Most recently, a new threat has appeared in the Mediterranean skies; severe air pollution.

Hidden Air Pollution

Edward was keenly aware of the air quality issues in Gibraltar. The territory struggles with air pollution primarily due to dense traffic and industrial activities on a densely populated peninsula. The main pollutants are nitrogen dioxide (NO_2) and particulate matter (PM10 and PM2.5). which mostly come from vehicular emissions and industrial processes.

Edward writes, "Just because your patient doesn't smoke, doesn't mean the air they're breathing is safe. Ask them questions about their occupation, their home-environment and their lifestyle and you'll get a good idea of the amount of second-hand pollution and smoke they are exposed to every day. In Nadia's case, perhaps those bike rides around city traffic weren't such a healthy activity after all.

Statistically more than 4 million people die every year globally due to air pollution – while individual smoking kills nearly twice that number. But Hawthorn was quick to point out that though smoking kills more people, severe air pollution endangers the well-being of everyone – no matter what their behavior.

It's insidious. Small toxic particles from polluted air are inhaled and get into the blood stream where they damage and infect healthy tissue. This results in an inflammatory response within the blood vessel wall, which may propagate swelling and clogging of the arteries. Suddenly, air pollution becomes a major factor in heart health – up there with diet and fitness. This is why studies suggest when a regional peak in air pollution is detected, a higher incidence of reported local heart attacks.

In typical Hawthorn fashion, Edward left wise words for future doctors and cardiologists:
"Air pollution and stress may be unexpected (and sometimes overlooked) risk factors for heart disease, and due to the "above average effect", it may be hard for patients to realize that their lifestyle is not as healthy as being perceived."

Chapter Nine
-Jamie Toth-

One of the most poignant diary entries in The Archive Tom found was about Dr. Hawthorn's bar buddy, Jamie Toth. The case taught Edward a hard lesson about adherence that deeply affected him.

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Patient: Jameson Milton Toth   DOB:07/17/1970     File Number: 57459-1
Marital Status: Divorced       Children:0         Sex: Male    Age: 54

Overview: A British local truly believed that lifestyle changes alone could negate
the need for drug therapy, but despite his best intentions, he was wrong.
```

Jamie Toth came to the clinic after Doctor Hawthorn struck up a conversation with him at the Clipper, a local tavern. The big Englishman was well-known as an avid sports fan, often gambling on everything from horse races and cricket, to professional tennis and golf. It was Premier League Football that took most of his wagers, especially his hometown heroes, Manchester United.

The former dock worker had a puffy face, a veiny red nose, and an unkempt appearance that gave away his evolving alcoholism – a consequence of a work injury that put him on disability payments a decade ago. The resulting depression destroyed his marriage, wrecked his health and fostered his gambling addiction. Still, he was often brilliant, funny and charming in public, so the barflies loved him and so did Edward. But he could see a disaster in the making.

After a long, liquid conversation one evening, the cardiologist convinced the boozer to come in for a proper evaluation at the clinic. When the doctor saw the man's test results he was alarmed. He sat Toth down and told him in no uncertain terms that his health was precarious, his lifestyle was dangerous and he was at risk for a major heart event.

Records show Toth's first visit he had a BMI of 33 kg/m^2, a blood pressure of 160/90 mmHg, a LDL-cholesterol of 158 mg/dl and a total cholesterol score of 250 mg/dl. His resting heartrate verged on tachycardia at 99 bpm, his oxygen was low (SpO2 90%) and his BGL was 180 mg/dL.

Hawthorn wrote that the gentle giant teared up during the consultation. Jamie admitted to drowning all his feelings about his ex-wife, his job loss, his disability and his money issues in a sea of booze, bad pub food and reckless gambling. The big man quietly broke down and cried, and Edward thought they had made a real breakthrough.

Jamie seemed ready to turn over a new leaf, but he was oddly opposed to medication. When pressed about it Hawthorn discovered Jamie's little brother had died in childhood from birth defects brought on by Thalidomide given to his mother. His distrust of medicine was generations deep and decades wide.

Still, he believed his doctor and seemed very motivated, he didn't want to die. He figured by drinking less, exercising more, eating better and reducing stress, he would be out of the 'danger zone' in months, so he dismissed the idea of daily medication. By the end of the visit a handshake sealed his promise he would really change, but the good doctor wrote him the prescriptions anyways, in hopes he would literally have a change of heart.

Hawthorn wrote in a sidebar: "*Patients often tell me how serious they are about changing their lifestyle, and therefore they simply do not need medication. But how realistic is this solution in reality? Is a physician expected to trust the health of their patients on the promise that they'll radically alter their personal behavior? I think not, and yet, what choice do I have?*"

In notes from a follow-up visit, Jamie purchased a new exercise cycle. He proudly 'selfied' his first ride for his friends, posted it online, and even had a beer to celebrate. It turned out to be his last ride, and now he hangs laundry on the cycle in his living room.

Toth also told Ed that he went to a trendy fitness center where a gorgeous workout model got him a "great deal" on a year-long gym membership (even as she rejected his offer of a date!) She also

convinced him to hire the club's 'personal trainer' for his initial workouts, and after his first session Jamie was definitely feeling it. The following morning his body was so stiff and sore he decided to wait a few days to recover before returning to the gym.

He never did.

Jamie mentioned a popular new diet that a bar buddy recommended, so he shopped at an organic market to stock up on healthier food. A mobile app instructed him which grains, fruits, and proteins to buy and how to pick out lean meats and fresh vegetables. But at the checkout he got a shock - his grocery bill was so high it affected his credit score! Even so, he decided that this was simply the price of proper food and bought a week's worth of healthy fare.

He gobbled up most of the rabbit food in a couple days – he figured portion control could come later. By the weekend he was back for another visit to the gourmet grocer, and that's when he realized he couldn't really afford this level of healthy cuisine all the time - it was affecting his "drinking money".

Later, when his bar buddies asked him how the new diet and fitness plan was going, he said "Great!" and lifted his pint to toast his success with them. But after that, Jamie stopped going to the Clipper so much. Ed Hawthorn heard the barfly rumors that Jamie's rampant online gambling was to blame, while others said he changed pubs to avoid scrutiny of his unchanging lifestyle.

At Jamie's most recent clinic appointment, records show his four months of 'sacrifice' didn't substantially affect his vitals, and his health wasn't improving much. The Englishman acknowledged his lack of progress but cited excuse after excuse for his failure. Yet, he vowed to carry on and by the end of the checkup Toth had even agreed to take the essential medicines Hawthorn had prescribed six months earlier.

But when Nurse Riley checked a week later, the script was still not picked up. She tried calling Toth for several days without success. After a week there was still no sign of him, so the Royal Gibraltar Police were called to help. A 'welfare check' requested by the Hawthorn Centre found a lifeless Jamie Toth unresponsive in his living room, the victim of a massive heart attack.

Hawthorn was devastated, and blamed himself for believing Toth's empty promises. He felt he should have been more aggressive about ensuring his adherence and wrote:

"In reality, science doesn't lie, but people do. One must remember major studies at Harvard and UCLA report failure rates of up to ***95%*** *for dietary lifestyle changes in the first year. American gyms report over half their new recruits quit in the first six months, even after paying for a year of access! Other studies statistically suggest that most hardcore lifestyle changes are just too difficult for most people, no matter how earnest the individual, no matter how dire the situation."*

Jamie discovered the hard way that changing everything in your daily routine maybe too much. Life events, work commitments, and social obligations can derail even the best-laid plans. Mental health issues, stress, and self-doubt can also be major impediments, even among the highly motivated. Misinformation about diets, proper exercise and food nutrition is also a factor – recent history proves not all individuals crave the most reliable information. Unlearning bad habits from ingrained behavior is simply hard - that's why support groups like Weight Watchers, Smokefree UK and Alcoholics Anonymous exist.

Edward also noted that people expecting quick results are often disappointed when they don't see immediate changes, so they get discouraged and abandon their efforts. Additionally, some patients like Jamie won't have the important support network of family and friends required, making real change all the more difficult. Moreover gym memberships, personal trainers, and healthy food choices are often expensive and will be financially out-of-reach for some of his clients.

Another sidenote *"On a more optimistic tone…all cardiologists have seen a few examples of patients who improved their health habits so much they ultimately didn't need medication (or needed less than anticipated). Unfortunately, these success stories are rare even though there is clear scientific evidence that more exercise, less stress, proper weight and better food can be extremely effective in preventing cardiovascular disease, especially stroke. The problem is people simply don't stick to it."*

Hawthorn remembered the DASH program from the 90s as an example of progress. In the last 25 years, the DASH diet (Dietary Approaches to Stop Hypertension) has been proven to both lower high blood pressure and reduce the medication required for good health maintenance.

Ed also cited evidence from the InterHeart Study from 2007-2015, one of the most cited research projects in the medical field. This clinical study showed that an astonishing 90% of heart attacks are directly associated with unhealthy lifestyle choices. These include a poor diet (devoid of fruits and vegetables), smoking and drinking, a stressful lifestyle, severe obesity and the absence of exercise. Data indicates adopting a healthier lifestyle reduces the chances of a heart attack by the same astonishing 90%.

Similar research about cerebral infarctions (CVA) also showed that 90% of strokes are associated with these same personal choices. Most people think that a stroke is a matter of bad luck, but these studies showed scientists a completely different picture.

Life's Essential Eight

Based on the research described above and other important studies, the American Heart Association has shifted its' focus from disease treatment to positive health promotion in recent years. With this paradigm shift, the AHA came up with 'Life's Essential 8' – a health index score which helps determine risk factors and outcomes for individuals. These factors include diet, physical activity, nicotine use, sleep health, body mass index, blood pressure, glucose and lipids levels.

Unfortunately, an ideal score for Life's Essential 8 is only present in less than 1% of Americans! Moreover, research suggests only 4% of older Americans have even five (60%) of these risk factors under control. With respect to a healthy weight, an impressive 45% of adult Americans are obese now, with a BMI higher than 30. In Europe, the thinner population is faring a bit better with respect to BMI, but new statistics from the UK shows that more than a fourth of British adults are now 'substantially overweight' as opposed to ten years ago.

Scientific data clearly tells us adopting a healthy lifestyle is the most powerful weapon to prevent cardiovascular disease, but adhering to it is notoriously difficult. Therefore, it is always the best option to take any prescribed medications ***and*** work on a healthy lifestyle at the same time!

Edward summarized it like this: ***"****Whenever patients suggest that they would rather try to get healthier first, I propose a two-track solution which includes both prescription medication* ***and*** *improved lifestyle choices. Team up with patients and share the goal of 'less medication' with them. Remind skeptics that adopting a solid wellness regime can help to lower the number and dosage of heart medications in the long run."*

Chapter Ten
-The Investigation-

Tom and Sophie's new flat on Queensway Road was a dark, sad and empty excuse for a home. Furnished with a few stools from the clinic, some cardboard boxes to eat on (and trip over), and a squeaky air mattress for sleep - the apartment reminded them of college days and thrifty ways. The couple quickly decided Sophie needed to fly back to the UK soon to deal with the reality of moving a houseful of possessions into a one-bedroom apartment.

Nurse Riley had helped access the good doctor's medical chart and they studied it together. Records revealed that Hawthorn had been prescribing himself the maximum dose of statins since 2001. Tom recalled that even back in school Ed wanted to keep his bad cholesterol level under 30, much lower than the guidelines of the time.

He was on Metformin due to an HbA1c level just above 6, and in 2022, notes show he started taking semaglutide on his own. Not that he really needed it, he just wanted to keep any extra fat from his belly trimmed away for his demanding wife. Moreover, he had been taking ACE-inhibitors for mild hypertension regularly so his BP was well controlled, and aspirin tablets were included after the discovery of some calcium deposits in his coronary arteries.

It was obvious from Ed's chart that the cardiologist was meticulous about his medications. Yet according to Nurse Riley, Hawthorn's memory issues required the staff to intervene more and more often as his memory issues continued. By the time he retired, the staff had made Dr. Hawthorn's drug regime just another daily ritual in the practice.

When Susan took over Ed's care after his forced retirement, she also took over the responsibility of picking up his medicines from the pharmacy and giving him the meds he needed every morning and evening in a timely way.

Sophie's research revealed the Columbus Hospital pharmacy had the dispensing records for Ed's meds until June 8, 2024 when his last prescription was picked up by Susan Hawthorn: months before his death in November. Later, Tom found a blood panel taken right after his mentor stepped down in July, revealing that his bad cholesterol level was 204 and HbA1c was 7.6, something unimaginable with maximum doses of statins. Nurse Riley was alarmed and recorded her concerns in Dr. Hawthorn's chart, but what else could she do?

Slowly, Thomas and Sophie began to suspect that Susan had been hiding, depriving or even replacing Edward's vital heart medicines with a placebo. But they dare not go to the authorities or even question the 'black widow' about their suspicions without proof.

In response, the clever reporter looked deep into Susan Peacock's past for context. Her reporters credentials got her into the ACRO Criminal Records Office website, which revealed Susan's 1985 shoplifting conviction in Birmingham. Before that, there were sealed juvenile records from the early 1980s that required personal access. Turns out Susan Peacock was quite the wild teenager, surprise, surprise.

Chapter Eleven
- Mercedes Sánchez -

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Patient: Mercedes Ann Sánchez  DOB:06/02/1965    File Number: 57459-1
Marital Status: Widowed        Children:2/grown  Sex: Female  Age: 60

Overview: A local Spanish woman must change her lifestyle completely and start taking
medication, but her headstrong ways and bad attitude threaten her treatment regime.
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The meeting was weird for both the patient and the doctor, but Sophie's mother finally saw her son-in-law, the cardiologist, for a medical appointment. When Mercedes Sánchez arrived at the Hawthorn Centre, she was shaking, despite her daughter Malvina walking her in with reassuring words.

Mercedes was truly frightened, always avoiding checkups and dodging doctor visits. The fear likely stemmed from childhood trauma and her spouse's prolonged death in the late 90s. After her husband Bernie got Type 2 Diabetes, the next three years were a blur of hospitalizations, blood draws, dialysis treatments, infections, and ultimately hospice care. This traumatic period put Mercedes off medicine, and she hadn't seen a doctor in 20 years.

Bilingual Nurse Riley helped during the exam, walking the nervous patient through the routine exam, family history, stress test, blood draw, and finally the ultrasound. By the consultation time, the hard part was done – now was the moment of truth.

Tom, Malvina, Mercedes, and Nurse Riley sat in a conference room overlooking the front of the clinic. Sophie joined last minute just as Thomas was about to speak – with Nurse Riley translating.

Dr. Narstra explained that although there wasn't any obvious heart damage, her vital statistics were still in the high-risk category and daily medications were needed. Mercedes had to start some kind of exercise regime to get her heart rate up, her weight down, and her muscles toned.

To that end, Thomas and Sophie gave Mercedes a half-year membership to Ladies Elite, the nicest fitness center in town. The monthly membership was a four-digit figure, and gifting it meant putting off buying a house for a while.

The Sánchez family menu needed to change dramatically. While Mediterranean cuisine is generally healthy, not all traditional Spanish food is good for you. Thomas gave Mercedes a special dining pamphlet detailing trouble spots in the local diet, including all the usual unhealthy suspects.

The booklet suggested cured meats like chorizo (cured ham), salchichón (cured pork), morcilla (blood sausage), and bacon (all high in salt, fats and calories) could be replaced with broiled fish, steamed shellfish, grilled tenderloin, and baked seafood dishes. Unhealthy traditional stews and soups like Fabada Asturiana (bacon bean soup) and Caldo Verde (potato bacon chowder) could be replaced with better alternatives like Gazpacho (cold tomato soup), Caldo Gallego (turnip bisque) and Sopa de Ajo (garlic egg consommé).

Fried foods like churros, croquetas, chicharrónes, and patatas bravas were off the table for good, as were desserts like Crema Brûlée and Bunuelos. Healthier replacements included poached pears, yogurt honey, and Tarta de Santiago.

This time, Mercedes took these suggestions calmly and asked meaningful questions while taking notes. During the whole ordeal, she was quiet and respectful, with none of the earlier drama. Sensing the moment, Sophie slid a new cookbook across the table towards her mom, a Spanish bestseller entitled "**The Family Meal: Home Cooking with Ferran Adrià**" which focuses on healthier versions of typical Spanish fare. The woman seemed genuinely grateful; maybe she really could turn over a new leaf with their help. Only time will tell.

Chapter Twelve
– London 2025 –

Sophie's return to Britain a week later was inevitable, as the bulk of the Narstra's household goods and furniture were still waiting for their thousand-mile journey to the Iberian Peninsula. The ace reporter was also ready to expose Susan Peacock, and her sixth sense told her the answers could only be found on the ground in England. With Thomas overwhelmed at the clinic, it seemed like a good time to handle these details while getting to do a little sleuthing on the side.

Back in London, the intrepid reporter got to work immediately on both the big move and her murder investigation. She tapped an old news colleague in Birmingham, Beth Newborn, to scan the widow's police report from 1985 (as Susan Peacock) and email it. Beth then filed an archive records request with the West Midlands Police for her sealed records, who then directed her to the Records Office on Stephenson Street. After several days of wrangling, including a personal visit to the magistrate, Beth was ultimately able to get all the records they requested and more.

Meanwhile, Mrs. Sánchez-Narstra was coordinating with the moving companies for the long trip south. She decided on Pickford's International and spent a whole day on the paperwork: shipping permits, customs forms, travel documents – the bureaucracy seemed almost Dutch in its diligence.

At night, Sophie turned her attention back to her dark research.

Susan's 1985 arrest report mentioned Dennis Aaron Pike Jr. as a possible accomplice in a side note. She kept this in mind as she scoured the now unsealed 'master file' that documented *all* her transgressions from age 15. Buried in Susan's late car registrations, noise complaints, parking tickets, mugshots, fingerprints and jury summons was a hand-written note in an envelope from Winson Green Prison. Sophie smiled when she saw it was signed by nonother than inmate #3875, Mr. Dennis Pike Jr.

The one-page letter was written in 1999 and basically claimed the convict had information about the death of Myron Meese and was ready to make a deal to testify. However, beyond the intake stamps dated July 10th, police seem to have ignored it completely and simply filed it into Susan's dossier as a matter of protocol. Though the hour was late, the reporter called the warden's office and left a message with her intention to visit the next day as part of a murder investigation involving Dennis Pike Jr.

Meanwhile, in the waiting room of the Hawthorn Centre was the familiar face of Barbara Cole, the charismatic bartender at the Clipper Pub, which was not more than a block from the practice. When Thomas came across her chart he noticed she had not been in for a very long time, so when he saw her at the tavern, he encouraged to come in so they could get to know each other as the new physician in town. She finally obliged so this was just her second visit, and the first since Ed's passing.

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Patient: Barbara Sue Cole      DOB:03/27/1970    File Number: 51419-7
Marital Status: Separated      Children:1/teen   Sex: Female  Age: 54

Overview: A local bartender with a teenager can barely make ends meet in
upscale Gibraltar, so how will she afford your expensive heart medications?
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It was nice to see Ms. Cole outside the pub, and when the nurse called her up Thomas noticed she seemed shorter - now that she wasn't behind the bar! The pudgy woman in her fifties had the same easy manner and quick smile that made her a popular barmaid. Barbara was married but you'd never know it, her sailor husband hadn't been around in years after a stint in the Royal Navy that ended with a dishonourable discharge. Since then, she has been struggling financially with no help raising her demanding 14-year-old daughter.

Although she was here for a follow-up, Dr. Narstra read her file with great interest. After her electrocardiogram (ECG) in 2021, Ed had diagnosed her with nonvalvular atrial fibrillation (AFib), which he explained is a type of irregular heart rhythm. It occurs when the upper chambers of the heart (atria) beat erratically, leading to an irregular and often rapid heartbeat. This condition can cause palpitations, shortness of breath, dizziness, and fatigue—and Barbara suffered all these symptoms and more. She was glad to get the diagnosis and was prescribed Xarelto to reduce the risk of stroke and systemic embolism. She was also given Savaysa (generic: edoxaban) as an anticoagulant and Tenormin (atenolol), a beta blocker used to control heart rate.

Her blood draw showed Barbara had a BP of 155/85 mmHg, an LDL-cholesterol of 156 mg/dL, and a total cholesterol of 246 mg/dL. Her resting heart rate was not great at 90 bpm, and her BGL was 180 mg/dL. Oxygen levels were normal, BMI 32 kg/m².

After a stress test and an echocardiogram (heart ultrasound), it was clear Barbara wasn't much better than when she first came to the clinic years ago. Thomas noticed that since 2021, five appointments had been missed or cancelled, and Nurse Riley's text messages and emails went unanswered. It had been four years since her last exam! What was going on?

Once in the exam room together for the consultation, Dr. Narstra revealed his concerns. He explained her risk for disaster had actually increased since 2021 and wondered about increasing the dosage or changing her current medications. He was even considering catheter or surgical ablation. Suddenly there were tears in the exam room, and Ms. Cole had a terrible confession to make.

It seems that after her visit in 2021, she only took the prescribed medicines for a few months but then had to stop because they were just too expensive. It was a shameful admission, but it explained why so little progress had been made controlling her heart health. She confessed that living in Gibraltar with a teenager in private school took almost her entire income. As a result, Barbara rolled the dice and suffered with the fatigue, sleep apnea, and heart palpitations in silence.

After the crying stopped, Thomas considered her situation. He remembered from a medical journal that Janssen Pharmaceuticals had lost their patent to Xarelto a few months ago, and that rivaroxaban was now available as a generic. This moved the price point from 18 euros per pill to 2 euros per pill, a price anyone can afford for a lifesaving drug. Likewise, with the anticoagulant Savaysa, which costs around $400 for a 30-day supply, the generic is less than $100 a month.

Thomas also let Barbara know that some drug manufacturers have special programs for uninsured or indigent patients who can't afford their medicines, most prominently the Merck Patient Assistance Program and Pfizer's 'RxPathways' initiative.

Once these adjustments to her medications were made, Barbara was a grateful woman, and soon to be much healthier. She promised Dr. Narstra's crew a free round at the Clipper at the next happy hour.

Tom wrote in The Archive that this wasn't the first time a patient or even a staff member had complained about the price of prescription drugs, so how should a physician respond? Are medications really that costly? Tom's mentor provided a fine explanation to get the discussion going.

"To start, it is best to look into the cycle of drug development for approved medications. To get one drug on the market, pharmaceutical companies have to go to great lengths to finally get official market approval. Let's have a look at the steps that are needed to get a medication ready for market.

First, during the drug discovery phase, researchers comb through nearly 10,000 candidates to produce one drug that will be approved by an official governmental agencies such as the FDA in the US, MHRA in the UK, and the EMA in Europe.

This initial stage may take up to 1-2 years to complete, at a cost of up to half a million euros per candidate. Before formally submitting each application, companies engage with various drug approval agencies (FDA, EMA etc.) to understand the regulatory requirements and official submission processes required.

The second stage consists of preclinical testing of about 250 drug candidates that were the result of the drug discovery phase. The preclinical testing is done on cells in petri dishes at first, and then with lab animals towards the end. Unfortunately, there are no reasonable alternatives to testing potential medications in lower mammals, predominantly mice.

In the third stage there are three clinical phases as the candidate drug is evaluated in humans.

In phase one of a clinical trial, the safety of the candidate drug is evaluated in a limited number of human volunteers.

In phase two, the efficacy of the drug is tested in a small randomized clinical trial of a few hundred patients. If the candidate drug performed well in these first two phases, a large clinical trial must be conducted to get a definitive answer to the effectiveness and safety of the medicine.

In phase three, thousands of patients will be randomized to either get the standard treatment or the standard treatment plus the candidate drug.

It is not difficult to imagine that it takes at least 10-12 years before a drug can be put on the market. It is also not difficult to understand that it is a very costly process for the pharmaceutical industry. On average, the total cost for a new drug to reach the market is a stratospheric 2.3 billion dollars!"

Edward explained that the patent on a new medication will only be granted for 18 years, depending on location. If one subtracts the time it takes to develop the drug, clear all the regulatory hurdles, then test, manufacture and market it - pharmaceutical companies only have about 7 years to earn back what they have invested in innovative drug development.

So what happens after the patent on a specific drug has expired one might ask? Other drug makers suddenly have access to the previously protected domain of making the drug, and start to copy the drug. Edward wrote:

"The consequence is that these 'generic' or 'copycat' drugs will be sold at a much lower price to patients. This means in the end; all patients worldwide benefit from the immense investment done by the pharmaceutical company that invented the drug in the first place. Only in the first seven years after clinical approval, can pharmaceutical companies really make money."

Tom appreciated his mentor's candor in his academic explanation. This reality contradicts the widespread notion that all pharmaceutical companies are inherently evil and greedy, and offers a bit of context for the situation. Hawthorn continued…

"To put this in perspective, the cost of atorvastatin in the Netherlands is about 3 euros a month or 9 euros per quarter. Previously known as Lipitor, Atorvastatin is one of the most powerful drugs to decrease LDL-C cholesterol. Subtracting the storage, transport and pharmacy costs, just 3 euros are paid for 90 pills of this very important and effective cardiac medication."

Dr. Narstra realized that this example proves that older off-patent drugs ("generics") can be prescribed to patients at a lower cost. The additional advantage is that these medicines have already been used for a long time, which decreases the risk of unanticipated and unexpected side effects. Large pharmacy chains have already tapped into this generics market. For instance, Amazon offers off-patent versions of many well-known and well-established drugs at below market rates. Patients should be encouraged to ask their pharmacists and health care providers about low-cost alternatives.

Hawthorn finished Barbara's chart like this: *"Patients may hold the belief that medications are expensive, by default. However, the generic variants of some drugs are a great affordable solution for patients who cannot afford much. Doctors should explain the differences to our patients, and whenever appropriate, suggest the most economical medication. A proven low-cost intervention is better than no intervention at all."*

Chapter Thirteen
-HMP Birmingham-

The drive to the Winson Green Prison in the West Midlands was long, nearly two hours outside London. Sophie started out at dawn, driving her rented Audi through the misty countryside before the morning rush could assemble on the main carriageways to delay her.

Two hours later she was in the intake room of the penitentiary, now renamed 'HMP Birmingham', and going through the laborious task of providing IDs, paperwork and explanations to justify her visit. When she was finally escorted to a meeting room, her good looks and press credentials got her lingering encounters with every guard along the way. Luckily, she wasn't exposed to the general population, thus spared the inevitable cat calls and unwanted attention provided by Britain's finest criminals. Still, even a hardened inmate like Dennis Pike stood up when the beauty entered the room.

"Wow, you're a breath of fresh air, ain't ya!" he announced, his Brummie accent out of place with his tidy appearance. At 60, it was hard to believe the tattooed silver fox before her was a career criminal, now serving a life sentence for a 1980s arson that resulted in the death of two crack addicts.

But Sophie's mind was all about her investigation, as Pike's mind was all about revenge.

In truth, Dennis Pike believed that he wouldn't even be in prison except for Susan Meese, and for the last 37 years he's waited for the opportunity to take her down. He knew it was her anonymous call in '86 that fingered him for the unfortunate 'arson', a crime he confessed to her in intimacy because of the guilt he felt about accidently killing his drug buddies. Police arrested Pike literally the day after Myron Meese died, and since then the inmate has been waiting for sweet revenge.

Now it was within his grasp.

The reporter sat down with him at an empty table in a featureless room accompanied by a single staff member in uniform. Sophie set up her laptop, a small micro-recorder, an ashtray and a notebook on her side. She slid convict Pike a new pack of Marlboro's across the table and waited while he unwrapped them and bummed a light from the guard.

Sophie then thanked him for the interview, and explained why she was there. Then they went over the immunity agreement while Dennis drew hard on his cigarette, closing his eyes briefly to savour the flavour. With the swearing in and a signature, the semantics were out of the way and Sophie wasted no time starting the recorder. After confirming his name, the date and the people present, the reporter started the interview in earnest,

"Tell me about your relationship with Susan Meese, from the very beginning." she asked, her pen readied to take notes despite the recorder. For the next fifteen minutes Dennis detailed how he had met Susan in Birmingham while in jail for a petty crime charge back in May of 1985. The two were barely adults, and bonded quickly over drugs and sex. The first few months of their relationship was a blur of street crime and crack cocaine, but when Dennis got arrested for burglary, Susan took the opportunity to get away from the situation.

Six months later when Pike was released, the two reconnected in bed but their former romantic spark was now a dying ember. Between their drug binges Susan explained she had been grifting a 'wealthy loser' named Myron Meese who owned a couple comic book shops in Birmingham. She bragged the middle-aged fat man was 'totally in love' with her and thrilled to be dating the hottest woman he ever knew without an hourly rate.

In reality, Susan was plain without make-up, though her body was disproportionately curvy in all the right places. Myron's 'curves' were just the opposite – he was enveloped by large fat rolls of pale cellulite easily weighing over 20 stones (150 kilograms) on his five-and-a-half-foot frame. In fact, Myron Meese was medically obese, a heavy smoker, a daily drinker, and perhaps the least active lover Susan had ever had. Dennis referred to him as 'Jabba the Hutt' and he wondered how Susan could even stand him. Of course, for the femme fatale, it was all about the money,

Before long, Myron was wrapped around Susan's wedding finger, and his money provided a constant supply of pricy jewellery to flaunt, designer clothes to wear and credit cards to max out. Susan's paramour Dennis stayed in the shadows, with only an occasional rendezvous involving selfish sex and crack cocaine.

The inmate turned a bit angry in recalling his dying relationship with Susan and described her loudly, in the harshest of terms, while pounding on the table. He stood up suddenly and Sophie stopped taking notes as he paced around, ranting and raving. The guard broke character and told him to 'chill the fuck out' after the outburst and took him to a bathroom to get some water.

After the break, Sophie returned with a mug of terrible prison coffee while Pike lit another fag. Sophie flipped on the recorder again and pressed him for more details. But now the witness had become defensive and agitated, desperately pointing out his only sin was providing injectable 'Pheno' (a street term for liquid barbiturates) to Susan on the promise of splitting Myron's fortune later. Throughout, Pike *claimed* he didn't know what the syringes were for, but Sophie wasn't buying it.

According to the prisoner, the plan was to have Myron's own sins be the end of him – with a little help. His testimony was that the temptress had spilled all these nasty secrets to him over a wretched 3-day cocaine bender in the summer of 1986.

Pike explained that Susan had learned a lot from the half dozen books on heart disease, cardiovascular health, barbiturates and poisons she got from the Handsworth Library. A week later, she began replacing his heart medicines with look-alike placebos, mostly vitamins. The felon revealed how Susan also tried to keep Myron constantly drunk at home, always ready to do a shot or bring him a beer. In bed, she became a super demanding lover, often pushing Myron way beyond his body's ability to keep up with the strumpet. But perhaps worst of all, Susan did all their cooking - serving up three square meals of death every day.

The dark diva curated the worst diet possible. Oversized portions of pork and beef were accompanied by salty buttered potatoes and deep-fried side dishes – all served with expensive wine and oily Italian bread. Susan's house menu represented the very worst of British cuisine, so it was only a matter of time until a catastrophe occurred.

Of course, Myron Meese's doctor was rightly concerned about his morbidly overweight patient. For years he pleaded with Myron to change his lifestyle and lower his stress level as he was prescribed all sorts of ACE inhibitors and beta blockers. But reckless Myron didn't take his medications consistently or responsibly, and often included narcotics or alcohol in the mix.

Based on his behavior alone, Myron seemed almost suicidal, but apparently his demise wasn't fast enough for Susan. She complained to Dennis that she was anxious to cash out his multiple life insurance policies so "the pig had to die," according to this witness's testimony.

It was at this point, while crushing out his third cigarette, that the convict shifted forward in his chair, changed gears and reiterated their agreement – "that anything said here was protected under attorney client privilege and therefore inadmissible in court."

"We're not after you, we're after HER" Sophie confirmed as Pike ignited another cigarette. His next testimony was slower, more considered and genuinely concerning. The prisoner paused a second to refocus on Sophie, then looked her straight in the eye and with a resigned expression he confessed the truth.

Dennis Pike testified that Susan had poisoned her husband with 'Pheno', the junkie term for Phenobarbital. It's a powerful barbiturate that lowers the heart rate and causes breathing problems, which yields lower oxygen levels to cause even more cardiac strain. Dennis had acquired several syringes of it and Susan had bragged about injecting it into Myron's food. Things like Twinkies, cheese fries, burgers, and donuts were all inoculated with the compound, with the intent of causing a heart attack which would appear as a natural death.

While Pike knew about the plan, and could have stopped it, he didn't really believe it would work. But as an 'insurance policy' he made sure to collect her empty syringes after each dosage – this was evidence and Susan was careless. He couldn't take any chances.

He confessed that around seven o'clock on the night of May 12th, 1986, Susan Meese had called him after dinner all excited that "it was happening" - Myron was literally having a heart attack in their living room during the conversation. Pike could even hear the poor man over the phone as the delighted murderer let it all happen. She didn't render aid and she didn't call the emergency services because she didn't care – her cold, cruel demeanor even disturbed Pike, by then a hardened criminal.

The inmate testified that after her call he was numb at first, then frightened – not of the authorities, but of Susan Meese! He had good reason to fear her, because later that night she had a change of heart about their 'partnership' and decided an anonymous call to Scotland Yard about a certain deadly housefire might keep him out of the picture for a while. The cops raided his flat the next morning and booked him for arson and double homicide later that day.

The reporter leaned back to take a hard look at Pike, but she felt he was telling the truth.

The revelation was shocking, but how could you prove it? Sophie posed that same question to the convict, now on his sixth cigarette. He took an overfolded paper from his pocket and pushed it towards the investigator. His explanation became slow and deliberate, he had thought about this.

"When I got arrested they collected all my personal possessions." he said, "wallet, keys, lighter, pocketknife – all put into a plastic bag that probably still sits in the property room in the Lloyd House Police Station. Do you know what else is in that bag? Two syringes – one with Susan Meese's fingerprint still on it I'll bet. They'll also be Pheno traces still in the needles."

He reclined the prison chair back on two legs and seemed pleased with himself.

Sophie's mind was racing when she unfolded the scrap of paper – it was an actual police prisoner property receipt from 1986 for Mr. Dennis Pike Jr. – saved for all these years. Clearly listed on the faded official paperwork dated May 13th were 'two small syringes' amongst his pocket contents. This could be a smoking gun if you could prove it, but how? Her train of thought was broken when the guard announced the end of the session. As the reporter prepared to leave there was time to ask just one more question.

"How do you know Susan betrayed you? I mean, for sure, without a doubt?" she asked as the door was unlocked.

"It's who she was," Dennis said quietly, "and it's who she is. Be careful with this one, Miss."

After Sophie returned to the Audi for the long drive back, she almost immediately got on her cell phone. She first called the Lloyd House Police Station in Birmingham to see if they still had the prisoner property bag from 1986 – of course they didn't. Then she was on with British Telecom for a frustrating 45 minutes, being passed around the bureaucracy until she finally just left a message, emphasizing her press credentials and that it was about a murder investigation.

When she returned to her hotel hours later, a veteran BT employee called back to confirm that yes, they had some records for calls back in the 80s, but none that were residential. Finally, she called the Handsworth Library and asked about if client accounts were kept indefinitely – was it possible to prove Susan Meese had checked out those books? Sure, but you'd need a warrant and to come check personally. That required time Mrs. Sánchez-Narstra didn't have. Frustrated, she realized all she really had was an old receipt and a likely story, and that just wasn't enough

Chapter Fourteen
-Liam Whitaker-

Dr. Narstra was hitting his stride at the practice and looking forward to the patients coming in. Today he saw Liam Whitaker, an old Irish expat with a file in The Archives.

```
Patient: Liam Scott Whitaker   DOB: 10/9/1947    File Number: 56209-2
Marital Status: Widowed        Children: 3/grown  Sex: Male    Age: 78

Overview: This older Irish expat is in good general health but in need of
preventative care but resistant due to age, trust issues and outdated ideas.
```

Notes indicate Mr. Whitaker first came in several years ago as a referral from Dr. Palmer, a local GP who cited 'chronic asthenia' (persistent fatigue) and 'peripheral pedal edema' (foot swelling) as concerns. When tests for CKD (kidney disease), liver issues, and hypothyroidism proved negative, CHF (congestive heart failure) was considered and an appointment at the Hawthorn Centre was made.

Nurse Riley's personal interview revealed the Whitaker had no family history, no drug history and only a little excessive drinking; the occasional Irish Stout to wet his whistle. He claimed to have never taken a single prescription medication in his life and joked that his health regimen consisted of "hard work, fresh air, and Martha's cooking!" The Irishman prided himself on his resilience and the fact that he had made it this far without the crutch of modern pharmaceuticals. In his mind, if it wasn't broken, why fix it? .

Hawthorn's examination yielded more fruitful results, noting that *"Liam is in remarkable shape for his age; however, there are a few things we need to monitor. He has mild hypertension (high blood pressure), and his cholesterol levels are concerning."*

Later, Mr. Whitaker's EKG revealed a sporadic arrhythmia (irregular heartbeat), in this case an upper chamber "Afib" (atrial fibrillation) which can cause blood clots to form, travel to the brain and cause a stroke. Yet even when presented with this evidence, Liam gave his doctor a lot of pushback, although it was funny at first.

"You're saying I have a 'fib' in my heart? I don't lie, doctor, my heart is pure!" declared the old man.

"No, no!" Dr. Hawthorn chuckled, *"AFIB is 'doctor speak' for an irregular heartbeat. The condition can cause a stroke if left untreated, and lots of other problems."*

"But I don't feel bad, Doc, there's nothing wrong!" complained Liam. *"Look, I know you mean well but at 78, I'm too old to start taking drugs. I have had a good life without medication, why should I start now?"*

Edward tried to explain the reality of the situation. "*I understand your reluctance, Liam, but these medications can help you maintain your quality of life. It's not just about living longer; it's about living better."*

The rest of the notes were related to convincing Mr. Whitaker to accept the drug regime. Afterward, Hawthorn wrote an essay, likely destined for some future textbook.

"With the aging population, we will hear these arguments as health care professionals more and more in our conversations with patients. It is totally understandable to come up with this type of argument. But is it sensible to ***not*** *use medication when there is a substantial risk?"*

Hawthorn then wrote, *"In general, the longer risk factors are present, the more they impact health. For example, slightly high LDL cholesterol for one day won't cause heart disease. But if it's high for many years, it greatly increases the risk of heart problems."*

This means as people age, the chances to develop cardiovascular disease, such as coronary atherosclerosis (clogging of the arteries that supply the heart with blood) increase. This was confirmed in the MESA trial, where 6000 patients from different ages and ethnic categories were subjected to CT imaging of the heart. From this data, it became apparent that at the age of 50 years, only 6% of the population had a high 'Cascore' (a clinical score used to assess plaques buildup in the arteries). The higher the Cascore, the more damage is present, and the higher the risk of a heart attack in the future.

However, at the age of 80 years, 51% of the population in the study had an elevated Cascore, and thus more of a chance of suffering from a heart attack. In other words, at an advanced age the risk of developing heart disease and having a heart attack is much higher compared to younger people.

To put it into perspective, a person who has reached their seventies may still have several good years ahead. For example, a 78-year-old man has an average life expectancy of 8 more years, while a woman of the same age can expect to live an additional 10 years. It is important to maintain good health during these years and to prevent heart attacks and strokes. Consequently, taking cholesterol-lowering drugs, such as statins, in combination with aspirin, may still provide benefits for those diagnosed with atherosclerosis.

This is known as secondary prevention and has been shown to benefit the elderly. When there is no existing disease, taking medications to address risk factors is called primary prevention. The effectiveness of primary prevention with medications has shown mixed results. Therefore, it's important to accurately determine if you have atherosclerosis or any other heart disease before concluding that no disease is present.

Now let's get back to Mr. Whitaker. Hawthorn wrote: *"This patient suffered from atrial fibrillation, the most common arrhythmia in the elderly. Above the age of 80, 25% of my patients suffer from arrhythmia. The patient reported no complaints, likely because, in older individuals, this particular arrhythmia does not cause the ventricles to pump blood at a high frequency. However, due to the condition, the atria of the heart do not contract properly, resulting in stasis of blood. Whenever blood does not flow sufficiently, as is the case of the atria during atrial fibrillation, the chances of developing a clot become substantial. And if such a clot breaks loose from the heart and reaches the brain, a major stroke can occur."*

It is estimated that from the 800,000 individuals who develop a stroke every year in the USA alone, in 160,000 patients the cause of the stroke is atrial fibrillation. This is exactly the arrhythmia this patient is having. It is important to note that the higher the age, the bigger the chance of developing a clot, and a subsequent stroke. In this case, the man was 78 years of age, which meant that he had a high chance of a stroke due to Afib.

"But is there good medication to prevent the development of a clot during atrial fibrillation?" Hawthorn continued, *"Yes, indeed, a new class of drugs, the so-called 'direct oral anti-coagulants' have proven to be very effective in preventing such a clot. Previously, patients on anti-coagulant drugs had to use* ***Warfarin****, for which tight control of the impact of the drug was needed. This was quite cumbersome. With the emergence of the direct oral anti-coagulant drugs, no such control is needed anymore. My research indicates these novel drugs are very effective, safe, and easy to use."*

The good doctor concluded with this: *"As people age, the risk of developing heart disease increases compared to the younger population. If there is a reasonable life expectancy, taking medication can certainly help to have more and better years in good health. Liam may feel there is not much to gain from taking these medications. However, it should be explained that the risk in the elderly is greater due to the long-term impact of even mild risk factors. It's also important to emphasize that they could still have many more years ahead, so it's important to make them count."*

As a side note, Thomas noticed a handwritten addendum attached to Whitaker's chart in the hand of Nurse Riley. dated two days later:

"*It should be noted that Mr. Whitaker and his caretaker appeared back at the practice the next day and left the clinic with prescriptions in hand. Dr. Hawthorn recognizes sometimes even our strongest patients need help so that doesn't make Liam any less resilient, only wiser.*

Dr. Narstra thought about this for a moment and became emotional, he missed Edward, his dear friend. He stared into space, taken aback for a moment. His nose was stinging and a single tear struggled free before being wiped away by his open hand as he returned to his rounds.

Later that night, Thomas returned to the new apartment to find Sophie was back from England with several suitcases filled with more clothes and essentials. Upon seeing her familiar face, his love for her overtook him and he spontaneously hugged her tightly, sweeping her feet off the ground with a little swing. Afterwards, while making the evening meal, Sophie filled Thomas in on the shipping and moving details, but saved the most exciting part of her trip as dinner conversation.

Over the diner and into the night, the reporter relayed all the new developments that could bring them much closer to actually making Susan pay for her crimes. Once she was done, Thomas was so turned on by her intellect and resourcefulness that their visit to the bedroom didn't end until the following morning when Thomas was understandably late for work.

Chapter Fifteen
-The Meeting-

The following afternoon Thomas took time from the clinic to meet up downtown to discuss the Hawthorn matter with a local Interpol case officer, Inspector James Howard. The couple explained their suspicions and discussed all the possible scenarios around bringing the widow Hawthorn to justice. Luckily, Mr. Howard had also been a patient of Dr. Hawthorn's and knew him personally, as both a model citizen and a talented physician. He was doubly motivated to help in any way he could and considered the case strategically.

Thomas remembered the name from The Archive and pulled his file before their meeting.

```
Patient: James Sidney Howard   DOB: 10/9/1972    File Number: 57717-1
Marital Status: Married        Children: 1/grown  Sex: Male    Age: 53

Overview: Without symptoms or complaints, thoughtful patients sometimes
question preventative drug treatments.
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The notes indicated Mr. Howard was referred by his GP because of some concerning cholesterol levels found in the lipid panel from a routine blood test. Dr. Hawthorn went further and took into account his personal health and family history before determining Howard's current risk level. Taking all his risk parameters into account, a preventative drug regime was proposed and to everyone's surprise steadfastly refused by the patient.

James Howard argued simply, *"I have no symptoms, and no complaints, so I will be taking no drugs you prescribe unless you can convince me otherwise."*

This argument is what doctors, including cardiologists, all over the world often hear from their patients. Even if their blood pressure is high, and their cholesterol levels are through the roof, patients often hesitate to take medication, especially if they're having no trouble with breathing, pain or motor control.

Hawthorn wrote that *"We, as doctors, certainly understand this argument. The medications we prescribe to prevent heart attacks and subdue risk factors sometimes have unfortunate side effects. This means that the meds we select could make an asymptomatic individual experience a bad drug reaction, suffer new symptoms, or even have an 'adverse event' as the lawyers call it – all due to an essential but voluntary drug therapy."*

He used the next couple pages to break it down for what seemed to be a future textbook for cardiologists.

First, large scientific studies have shown that in 50% of heart attack cases, no warning signs were present before the attack. The big takeaway is that waiting for complaints to motivate a medical intervention is not only unwise, but also dangerous. Why? Because half the time a heart attack is the first and last manifestation of the disease. Similar observations have been made for strokes as statistically only half of all stroke cases are preceded by a TIA.

Second, convincing evidence shows that clogged arteries don't happen in weeks or months but rather takes decades to develop. Dr. Hawthorn cites the 1987 ARIC study of 15k US patients, the 75-year long Framingham Heart Study from 1948, and the 2010 ASPA study of adolescent autopsies from car accidents, which consistently revealed evidence of atherosclerosis as early as age 15.

Third, the median age for most people's first heart attack is 54, which means there is a 20-30 year window to start treatment and prevent it. Hawthorn suggests that because a heart attack often signals narrowing coronary arteries, and given the time lapse between the disease onset and its consequences, the best approach is to proactively stop the progression of atherosclerotic lesions when detected. This strategy reduces the risk of severe outcomes, ensuring better long-term cardiovascular health.

This time lag advantage allows for potentially life-saving treatment before disaster strikes. Evidence shows that cholesterol-lowering drugs like statins significantly reduce the chances of minor lesions becoming dangerous blockages. These drugs can be combined with aspirin or clopidogrel to prevent clotting and in patients with hypertension, these meds are crucial for lowering blood pressure as well.

Doctor Hawthorn summed it up for health care providers like this**:** *"Please understand that taking medication without having complaints is quite a hurdle for many patients, so your role in compliance is critical. It's crucial that you explain what could potentially happen when doses are skipped, if the medication is stopped suddenly, or rejected altogether. It is also important to let the patient know that waiting for complaints to occur is NOT an acceptable strategy."*

Apparently, once all this was explained to Mr. Howard, the cardiologist's patient saw the light. It wasn't too surprising that logic and reasoning would win the day, as Inspector James Howard was actually a case officer for Interpol, the international criminal police organization. And right now he was standing in front of Thomas and Sophie Narstra with some bad news.

Once their teas arrived they all sat down and the investigator got straight to the point. After reading all their 'proof' they brought him, Howard determined that there just wasn't enough evidence of either crime to bring charges – although the 1986 case came close. What was needed was Susan's actual confession on tape, which seemed unlikely to happen.

Then the couple presented a shady but innovative approach. Could they trick Susan into talking about the murder on tape by pretending to have all the evidence they needed?

For example, while the critical 1986 property bag was gone and there were no damning fingerprints or DNA, Susan Hawthorn wouldn't know that - if it was presented as fact. Same for the library archives. There was no record of her damning phone calls either, but the grieving widow could be told a lie. Perhaps if Susan was convinced that Pike had turned state's evidence and discovered Tim Hawthorn now had witness testimony about Meese in 1986, she might slip up and reveal herself on the phone or even confess.

In a cautionary tone, Howard was compelled to mention that England's Police and Criminal Evidence Act of 1984 specifically prohibits misleading suspects in this way. Fortunately, Gibraltar's Legal Code has no such restriction, but still Inspector Howard was hesitant to use this deception until he spoke with their lawyers.

Of course, if private citizens spearheaded the ruse, *that* was a different matter, and it could get the cold case moving. Howard implied as much as they finished up the meeting. Tom and Sophie had to get home as a text indicated their shipment had arrived from England. That was an understatement.

As the couple pulled up to their apartment's parking lot, they found a 2-ton metal shipping container taking up four parking spots in front of their flat. A curious neighbour was pacing around the box and had lots of questions for the bewildered couple when they arrived. They looked at each other in disbelief about how to even deal with the situation when Sophie's cell phone rang, it was Inspector Howard.

He indicated he'd spoken with their house attorney and although he couldn't officially suggest that they gaslight Susan, his office was prepared to deal with the aftermath. Lying itself, in conversation, isn't illegal – but if it motivates an action it can be, especially if that action is criminal. Since Susan's reaction can't be known, there's no crime unless *she* does something illegal. The liar might then be in trouble, but the defendant would still be responsible for any crimes, regardless of motivation.

The Narstra's took this as a green light, but it didn't lighten the burden of getting this metal dinosaur out of their parking lot. The main problem now was: How would you get all this information to Susan Hawthorn without suspicion?

For that, Sophie Sánchez-Narstra had a plan.

Chapter Sixteen
-The Plan-

Tim Hawthorn was surprised to get the call, but when Sophie presented the devious idea he loved it immediately. Not only was he angry that Susan allowed his brother to die, but she had also swindled Hawthorn Manor from the family and changed Edward's will to shut him out of everything else! His birthright taken away, Tim Hawthorn had plenty of reasons to want to harm the black widow, so he agreed to play along to the best of his ability (which turned out to be quite impressive!)

Who knows? Maybe she'll pay up and he'll get some of his millions back as well.

A few days later the call was arranged from Tim's house with the help of Bud Freedman, a private investigator, who set up the digital phone tap. Before pulling this stunt, everything had to be anticipated, including Susan's inevitable call to her beefy boyfriend, Bennie Shell, after the extortion attempt.

That is why Sophie Narstra had been following Bennie much of the day, an exhausting task that had started around noon when he finally left the Hawthorn's beach house to run some errands on his scooter. Sophie felt like a TV detective, following him around in her little Kia, ducking and hiding as so not to be seen.

After visits to a barber, a hardware store and the post office, Bennie finally landed at the Clipper, not far from the clinic. Sophie followed him in discreetly and took a seat, winking at Barbara Cole at the bar. Not long after he arrived, a friend joined him and they got some beers to watch an afternoon football game together. The reporter phoned Inspector Howard with the update and then called Bud Freedman and Tim in London to start the performance.

James Howard got settled in a stakeout car near Susan Hawthorn's place with a good view of the driveway. With everything set to record, Tim placed the call at precisely 3pm CET, 2pm in London.

PRIVATE CALL TRANSCRIPT FEB 10 2025 2:59 CET INTERPOL CASE #589-JH2 J.HOWARD

[UK BT telephone ring]

S.H.- Hello, this is Susan Hawthorne

TIM - Hello Susan? This is Tim Hawthorne. I'm sure you remember, Edward's younger brother, you know, the one you cut out of the will.

S.H.- And a lovely day to you too, Sir, what can I do for you? You've got 60 seconds.

TIM - Well, you can pay me a million pounds so you don't go to jail.

S.H.- I'm sorry?

TIM - Yeah Susan, it's all over. I know about everything. I know about how you killed Myron Meese and I've got the testimony and evidence to prove it. I'm working with your old loverboy Dennis Pike. You might remember him too, you know, the one you sent to prison for the rest of his life.

S.H.- You're crazy. This call is over.

TIM - Oh I don't think so, and unless you want the police knocking at your door you'll listen to what I have to say.

S.H.- I don't have to listen to shit from you, we're not even related anymore!

TIM - I've got a syringe with your fingerprints on it full of Phenobarbital that says differently.

S.H.- What. . . What are you talking about?

TIM - Oh I think you know damn well what I'm talking about - specifically the events of May 12th, 1986. See I've been talking to your boy up there in Birmingham Prison and he told me a crazy story I recorded on tape, but it turns out that story has checked out on every front.

S.H.- From a criminal…

TIM - I've got the library records of you checking out books about cardiovascular disease. I've got the syringes you used with traces of Pheno and your fingerprints on them. I've got a British Telcom log with the calls you made to Dennis that night, as well as the call to the police the next day about that arson you reported.

S.H.-(Interrupting) You mother..

TIM – And...I've got an hour-long audio recording of a material witness who's willing to testify in court because, trust me, as bad as I wanna screw you over, Dennis Pike wants to freaking kill you. Have I got your attention now Susan?

S.H.- I don't know what the hell you're talking about, but you're gonna hear from my lawyer. This is an outrage! Harassment!

TIM - Oh I don't think so...now let me make this perfectly clear to you...

When you called the cops on Dennis and he got picked up the next day, guess what he still had in his pocket? Yeah, one of the many syringes that you used to poison Myron Meese - was logged into evidence as personal property! Guess what Susan? It was still in the bag all these years later! What are the odds?!

S.H.- Zero. I don't believe a word of this. What are you play'in at?

TIM - I'm playing hang man, bitch, and you're three letters in already!

S.H.- Eat shit you liar...

TIM – Really? I have in front of me a request for the disinterment of your poor ex-husband's body – is that a problem? Let me dumb it down for you – we're gonna dig up old Myron and find traces of that barbiturate you killed him with, and that's pretty much gonna put you in jail forever. So unless you like prison food, a tight schedule and wearing the same outfit every day, you're gonna pay Dennis and I a million pounds of that fortune you swindled from my family – Got it?

S.H.- You weasel, you can't prove anything. And there's no law says I have to help someone who's dying. . . he was killing himself! Myron died of natural causes idiot, read the autopsy report. N A T U R A L C A U S E S!

TIM - You injected his food with poison, over and over. That's murder you psycho.

S.H.- I don't know where you got your information, or what the hell you're talking about, but you're gonna be sorry you ever made this phone call. I'm not paying shit, except paying my lawyer to fuck you up if you even dream about sharing this nonsense.

TIM - Well, if you're sure you want to do that – but before you go anywhere you might wanna check outside to see that man in the car across the street from your little beach condo.

[Movement sounds, a monkey growl (?), footsteps]

TIM - You see him? He's also a buddy, a bouncer really. I put him there to make sure you behave, but he's already on board with all the evidence I have. He's just waiting for my order to turn it all over to Interpol Gibraltar. Now if you'd like me to LOSE that proof forever, you need to wire me £1,000,000, otherwise. . .

S.H.- (Interrupting) You little bastard, I've got MONEY you asshole, and you've got a family, a nice one. I can use my money to make you and your whole family disappear. You're not gonna do shit because I will have you freaking killed; "Got it"!?

[Background movement, monkey yelp]

I know people, MY people, not nice people, so you'd better call off this crazy blackmail scheme you and Dennis cooked up, because otherwise I'm gonna wipe you ALL out, including your retarded kids!

TIM - You're upset, Susan, I get it. I'll give you 24 hours to calm down then I'll e-mail you my bank routing instructions because you won't hear my voice again unless it's in court. Are we clear?

S.H.- You've lost your freak'in mind Tim, and you need help. And if you're as full of shit as I think you are, you're gonna be real sorry. Right before you die.

[receivers click] [UK dial tone]

Chapter Seventeen
-The Pursuit-

Immediately after hanging up the call, Tim got up and did a victory lap, but the private investigator Bud Freedman chastised him angrily for revealing the stakeout and the Interpol connection. Tim explained he got caught up in the moment, but acknowledged that he went too far by revealing the car near the house. Bud insisted Team Gibraltar needed to be notified immediately, this reckless act could endanger the whole investigation, not just the life of an Interpol Case Officer.

Back in Gibraltar, Susan dropped the receiver right after the extortion and instantly had a meltdown. She was charging around the flat, talking to herself, grabbing suitcases and dumping in piles of jewelry, make-up, designer clothing and toiletries. She also texted Donna Rice, to have her arrange something and finally called Bennie Shell, as Team Gibraltar hoped she would. She explained little, instead texting him a location for them to meet up near St. Michael's Cave.

About the same time Tim Hawthorn called Inspector Howard to report he completed the 'faux extortion call' and sent them the audio recording over the internet – failing to mention his blunder. Inspector Howard got the file on his cell and listened in the car. He decided a warrant was justified but he had to leave the stakeout to present the case to a judge. By nightfall a subpoena was issued for Mrs. Hawthorn as a 'person of interest' and the police were informed.

The logic was that even if they can't use the audio in court, maybe it can get her into an interrogation room so they might pry the truth out of her. (Remember, she'll still think they have all this real evidence, so who knows what she will say?)

Once it was clear Susan was implicated in several felonies, Howard issued an Interpol Red Notice which shut down the entire city. The only road to the mainland (also the airport runway) was now blocked off by police so the temptress couldn't escape justice. In minutes, Interpol had her name and likeness on every TV in town, and soon Susan Hawthorn was in a panic mode, exactly as planned.

The Gibraltar Police went back to the Hawthorn's beach villa to serve the warrant, but she had already fled, probably the moment Inspector Howard broke cover. Cops entered her house looking for evidence but the safe and her closets were empty – and her clothes, money and monkey are gone.

A half-hour later Gibraltar Airport Police found her car abandoned near the runway, full of new merchandise, boxes of bling and an empty wire cage.

Unable to hide elsewhere on the tiny peninsula, Susan decided to escape through the caves beneath the Rock of Gibraltar. The Rock's main entrance was locked and under surveillance, so the vixen coordinated with Bennie Shell through text to meet at the St. Michael's Cave entrance where they could escape together through a secret World War II tunnel they had discussed earlier.

Meanwhile, Bennie was still at the Clipper Pub when he got his lover's text. Sophie saw the big guy finish off his Guinness suddenly after checking his mobile and she knew the game was afoot. He walked through the narrow side streets of the old town with Sophie in pursuit. After going down Irish Town Road he turned onto Main Street. The reporter followed

him towards the entrance of the Rock of Gibraltar, the famous labyrinth of ancient caves and caverns within a huge limestone monolith.

Sophie tracked Bennie creeping along the side of The Rock's parking lot, apparently to avoid the CCTV. He stayed in the shadows and steered clear of the cave's main entrance, now closed for the night. Instead, the big man skulked around to a side entrance hidden into a wooded area, a couple hundred meters below the public ticketing area.

Unlike the slick tourist attraction above, this route was a crude series of unfinished pathways leading deep into a cavern in the Rock - called Lower St. Michael's Cave. The outlaws were seeking the so called 'Stay-Behind' cave, found in 1997. The WWII era tunnel offered a safe passage of escape through a previously undiscovered chamber, finally leading to the open sea.

As Bennie approached the hidden entrance, Susan Hawthorn emerged from the shadows and embraced him. She was supremely overdressed, wearing a ridiculous cocktail hat and high heels, with Quonk the monkey on a rhinestone pet leash. The fugitives spoke briefly, then fetched her many bags and approached the entryway. Bennie produced a crowbar to pry open the "Bone Entrance," and the gate snapped as the small lock gave way, allowing the two to disappear inside.

Sophie texted Tom about what was happening while her eyes stayed glued to the entrance. After a moment, she decided to follow, sneaking through the broken metal gate. She could clearly hear the lovebirds struggling in the dimly lit passage, which featured only a single string of bare lightbulbs.

Once inside, Sophie took a moment to rifle through her purse and douse herself with Chanel #19, a perfume that Tom had gifted her for their first wedding anniversary and every year since. Stalking the couple by their sounds, the reporter attempted to navigate the complicated network of passages. The labyrinth confused her at first, and she took several wrong turns. But she always returned to following their sounds, especially that noisy monkey, and she finally found her prey.

She tracked the couple to a deep grotto with a cave pool. When she caught up with the outlaws, they were arguing about Mrs. Hawthorn having to squeeze under a waterfall through the wet, narrow opening, which would soil her outfit and soak her to the bone. During the heated exchange, Sophie realized this was her last chance to stop them—once they got through the fissure, there would be no chance for her to follow! She tried to text Thomas again, but her cell signal was useless, buried under tons of ancient limestone.

She had to stop them. So, in a desperate move, she found some fingernail clippers in her purse and cut the strand of lightbulbs with a frightening spark. The whole cave was immediately plunged into suffocating blackness.

Except for some randomly dripping water, an eerie silence enveloped the cavern. After a tense pause, Sophie heard whispering and movement in the cave. Overlapping sirens could also be heard in the far distance, so Sophie checked her mobile out of habit—accidentally revealing herself with the light. Bennie torpedoed straight toward her while his mobile torch revealed his frenzied splashing, like an oncoming night train.

Sophie screamed involuntarily and tried to scramble away, dropping her cell in the darkness. Then she smacked her head hard against the rock and went down. Dazed, she heard the thug's heavy breathing close by. She froze and felt the warm blood pooling in her hair as she silently grimaced in pain. Bennie's searchlight whipped around the cavern, frantically trying to find her as the sound of men in the tunnels grew ever closer. A police dog barking in the distance set off Quonk, who began howling, filling the cave with yelps and attracting the cops to their location.

"Forget it, Bennie! They're coming! Let's go!" Susan yelled from the grotto, the phrase echoing throughout the chamber.

Just then, the thug's cell light found its mark, and a terrified Sophie was illuminated like a horror film victim. Bennie leapt toward her as she shrieked, his cell phone also clattering to the ground as his hands found her neck. He began to choke her in the dancing shadows as they scuffled, pressing down hard into her throat and crushing her windpipe. Her scream was instantly replaced by gagging and death throes.

Suddenly, the cave exploded with flashlights, and an angry police dog attacked Bennie, sweeping him away. The growling animal had a hold of his neck and began a death shake until a police officer strong-armed the vicious animal away—leaving the criminal choking and bleeding. Bright torches revealed more of the scene as James Howard and Thomas Narstra showed up seconds later with more officers. When the dog was properly leashed and contained, the disoriented criminal was searched, handcuffed, and arrested. Tom nearly knocked him over, racing toward his wife. Their tearful embrace lasted only a moment before the air was cut by a loud crackle of a megaphone.

With it, Inspector Howard was ordering Susan to give up as the Royal Gibraltar Police officers made their way carefully down toward her on the craggy pathway.

Quonk went even crazier with all the commotion and as the men approached, the monkey suddenly broke free of his leash and got lost in the shadows of the scene.

Then, without warning, Susan disappeared under a waterfall through a narrow fissure that went into the next chamber. The police dog was released to get her, but immediately attacked Quonk instead, who was now yelping and bouncing all over the walls of the grotto. The military canine chased the crazed monkey out into the labyrinth of tunnels, and this distraction delayed the policemen until the situation was brought under control. By that time, Mrs. Susan M. Hawthorn was long gone.

Not far, it turns out. When police finally squeezed into the next cavern it was pitch black. Flashlights found Susan unconscious at the bottom of a cliff with a severe head wound, bleeding profusely. It was a concerning situation, as her extraction would take precious time and tremendous effort. It was fully two hours until she arrived at Columbus Hospital, and by then she was in a full coma from which she might never recover.

Chapter Eighteen
-The Aftermath-

Six months later, the whole cave debacle seems like ancient history, and life for Team Gibraltar has returned to normal. Sophie's head wound healed nicely and left just a minor scar above her hairline that nobody noticed. What people *did* notice was Mrs. Sánchez-Narstra's large belly, with her pregnancy in full swing. And while Thomas still worked hard at the Hawthorn Centre, he was already pulling back on his hours to help prepare for the baby, due in late September.

To that end, the couple had recently *begun* looking for a new family home, and to the delight of the Sánchez clan, two houses in Marbella were under consideration. Malvina was thrilled to share the child-rearing experience with her sister, and the two bonded over motherhood. Moreover, after saving his wife's neck in the caverns, Sophie's mother was all-forgiving and embraced 'Tom the Gringo' as family from that point on. To her credit, Ms. Mercedes Sánchez remains on daily statins and HBP medications to this day.

Bennie Shell was incarcerated for about a month while he healed from a vicious dog bite, but beyond a common assault and battery charge, the Royal Gibraltar Police couldn't hold him for long, even with the addition of an obstruction charge by Interpol. It didn't help that powerful attorney Donna Rice flew down to represent him, so he was sentenced to time served and released as a free man. Apparently, that 'free man' thought Gibraltar was too small a place to recover his reputation and moved to destinations unknown shortly thereafter.

Nurse Riley became the new co-director of the Hawthorn Centre and, with Dr. Narstra, continues to provide the finest cardiac care in the region. She's transcribing 'The Archive' as the training manual Dr. Hawthorn envisioned, with plans to publish it by this time next year.

Timothy Hawthorn, while happy that Susan was apprehended, is now in a complicated legal struggle against her with—you guessed it—Donna Rice, as he attempts to recover some of the fortune he lost due to her actions. Unfortunately, Susan's marriage was legal, and her position as sole beneficiary of the trust remains intact, so it will be a long legal fight in civil court to prove financial abuse and inheritance fraud accusations.

Donna continues to fight for her friend in criminal court as well. She convinced the Crown Court to refuse to hear Tim's criminal complaint of gross negligent manslaughter against Susan, based on the theory she 'undermedicated' Edward towards the end. Inspector J. Howard flew in to testify but was dismissed during the hearing and left after the proceedings. He swears he saw Bennie Shell with Donna outside the courthouse but lost them in the London rush hour.

Speaking of case officer James Howard, he and Dr. Narstra have become fast friends and sometimes golf on the weekends. It helps that Thomas identified James's heart issue early on, so the bond between them was more than skin deep even from the beginning.

Life even changed for Quonk the monkey, who ultimately found his way out of the caves and into a clan of Barbary macaques that have lived on the Rock of Gibraltar for years. About 300 of the primates currently reside in the Upper Rock Nature Reserve near the top of the mountain.

But for Susan Peacock Meese Hawthorn, life hasn't changed in the Columbia Hospital NICU for the last six months. With a Glasgow Coma Scale rating of just 5, her prognosis is bleak. With no family to speak of, her husbands dead, and Bennie in the wind, her visitor's log has only one name by one visitor, once—Donna Rice.

And finally, Mr. Dennis Pike Jr., who, while essential to the current outcome, was only partially satisfied by Susan's permanent brain damage diagnosis. However, he does enjoy a new partnership with Tim Hawthorn to write a true crime book about the affair and received a stipend to do so. Today, the inmate spends his days committing his story to the page with the hopes it'll end up on television or even the big screen. It may end up being a clever online training manual for cardiologists and their patients in response to an international heart conference – the possibilities are endless!

End