



BETHANY HAYS, MD: INSPIRING HEALTHY LIVING THROUGH RELATIONSHIP-CENTERED CARE

Interview by Frank Lampe and Suzanne Snyder • Photography by Josh Hays

Bethany Hays, MD, is a cofounder and the medical director of True North, an organization in Falmouth, Maine, whose mission is to change healthcare and inspire individuals to live healthier lives through integrative care, education, and research. She is a graduate of Wellesley College, Massachusetts, and the Baylor College of Medicine in Houston, Texas, where she completed her residency and a fellowship in perinatology. Dr Hays has practiced obstetrics and gynecology and now functional medicine, over a career lasting 34 years. In May 2008, she was presented the Linus Pauling Award at the 15th International Symposium on Functional Medicine. Dr Hays is a contributor to the Textbook of Functional Medicine and teaches nationally and internationally on women's hormones, birth, and functional medicine.

Alternative Therapies (ATHM): What led you to medicine?

Bethany Hays, MD: I became interested in medicine when I was 7 years old. My brother was chasing me through the house, and I ran through a glass door. It was a swinging door with glass panels. I pushed on it with my hands and the glass broke, and I ended up on the other side of the door with my left arm opened from the wrist to the elbow, down to the bone. I looked down and saw the inside of my own body. I was horrified and fascinated at the same time.

In that experience of going to the hospital and having the arm sewn up and recovering from an ulnar nerve injury, there was a clear switch in my mind that led me to a fascination with the human body. I went into medicine for a different reason than many people do. Many people go into healthcare because of a genuine desire to help people. I have to admit that I went into healthcare because I was fascinated with the human body. I've just always wanted to understand how it works. Basically, I went into healthcare so I wouldn't be bored.

I've learned that I also went into healthcare because I wanted to do something heroic. I was always the heroine of my own stories as a young person. Healthcare has suited my need to have

Opposite: Bethany Hays, MD, photographed on Mackworth Island, Maine, believes that people ultimately need to take responsibility for their own health and that a strong physician-patient relationship is vital in helping them do that.

a job that, at times, feels heroic. Between those two things, I ended up in medicine. And I have not been disappointed on either of those scores.

ATHM: What led you to study perinatology, obstetrics, and gynecology?

Dr Hays: I trained at Baylor College of Medicine in Houston, Texas. At that time, we had our obstetric rotations at Jeff Davis Hospital, which was the single largest maternity hospital in the country at one point. During my fellowship, we did 18 000 deliveries a year in that one hospital. During my residency, the labor room was one big room with 13 beds in it. It was kind of chaotic and wild. The medical students got to do a lot of the work. I did my first delivery as a first year medical student. I was so excited! I called home and I said, "I just delivered a baby!" And my mother said, "No. No way." I said, "Oh, yes. I did." Of course, I didn't deliver a baby. A woman pushed a baby out into my hands, and I managed not to drop it. But I thought I had done something really extraordinary. I was totally taken by that. Then I took the hardest courses I could. I took nephrology, ENT, and others, looking for what I was going to do for my specialty. Finally I reached a point where I said, "If I'm going to do this for the rest of my life, I want it to be fun."

There were two courses that I had taken that I thought were fun. One was the obstetrics part of ob/gyn and the other was the neonatal part of pediatrics. I thought I could do those two parts all my life and be happy. A mentor of mine said, "Oh, so you want to be a perinatologist." I said, "Peri-what?" He said, "You know, a perinatologist. That's high-risk obstetrics and newborn pediatrics." I said, "Yes. That's what I want to do."

I asked, "How do I do that?" He said, "Well, first, you have to go through an ob/gyn residency." So I signed up for the ob/gyn residency. I was the first woman that program had trained in over 15 years.

I wanted to be the very best obstetrician. And at that time, I thought the best was the person with the most information. The most information in this case resided in the fellowship that dealt with obstetrics—that was perinatology. I went through the fellowship and learned everything I could learn about obstetrics, and I had a couple of babies of my own—which was really a better education than the residency was. I got through it, and I thought, "This is nuts. All my patients are sick, all my babies are

dying, and I'm not the best obstetrician anywhere. So, something's wrong with my theory."

I began looking around for who had the best outcomes. It didn't take me very long to figure out that midwives had the best outcomes. I apprenticed myself to some local midwives who were entertained by the fact that there was a perinatologist who wanted to hang out with them and understand what they were doing. Graciously, they allowed me to join them and learn what they were doing. That was the first big "left turn" that I took in my career: I began to learn and understand midwifery, which at Baylor at that time was something of a complementary and alternative thing to do.

ATHM: Was it considered witchcraft or voodoo back in those days?

Dr Hays: Yes, there was a fair amount of that way of thinking. I can tell you a story about a midwife who brought a patient into Jefferson Davis from a home birth. The midwife had been trying to convince the patient to come into the hospital for several hours. The patient refused to come. Finally, the midwife talked the patient into coming. The ambulance attendants put the patient on a stretcher and tied her down lying flat on her back, which the midwife knew was not a good thing, but she couldn't get the paramedics to allow the woman to lie on her side. The mother and the midwife knew that the baby had died in the ambulance. They knew it.

When they got to the hospital, a resident delivered the baby and brought the dead baby in and threw it at the midwife and said, "See? That's what happens when you go to a midwife!" Later I heard that same resident say, "'Good' and 'midwife' don't belong in the same sentence." My take on that whole story was that the resident was completely in the wrong, both in his understanding and his knowledge base and that the midwife had done an extraordinary job in a very difficult situation and did not deserve the kind of abuse that she was getting, but I was very much alone in that opinion.

ATHM: It seems that you needed to be under the radar in order to be able to do the work that you've done.

Dr Hays: Yes, in order to be able to do the work that I did and to learn what midwives did and to practice midwifery in my practice I had to be under the radar. I was always flying under the radar, as much as I could because if you stuck your head up too much, it would be chopped off.

ATHM: During what years were you going through your residency?

Dr Hays: I was in residency from 1974 to 1978, and I did my fellowship from 1978 to 1980. I delivered my first baby at Baylor in 1971. That was a long time ago.

ATHM: In terms of the evolution of integrative medicine as we know it today, it's sort of like emerging out of the Dark Ages into the Renaissance.

Dr Hays: You have to remember that I didn't really know much about the complementary and alternative medicine situation at that time. Back then osteopathic physicians shared a board with the allopathic physicians, so there was an MD/DO board. But *our* opinion of even osteopathic medicine was very negative. We were so encased in our "ivory tower" that at that time, it was a stretch to talk to midwives. There would have been no way I would have talked to or gone to a massage therapist, talked to or gone to an osteopathic doctor—God forbid to even think of going to a chiropractor. And, anything further out than that, they weren't licensed, so . . . not a chance.

ATHM: Were there any mentors along the way that helped shape your career as an MD?

Dr Hays: Yes. My mother was a mentor because she taught me that it's important to make the patient feel like you've got all the time in the world. She taught me that if I didn't touch my patients, even on rounds at the hospital, just lay my hand on their foot at the end of the bed, that I wasn't going to have the same effect. And she taught me to not leave behind my feminine side. She wanted me to sew lace on my white coat.

I never sewed lace on it, but I did go and find the white coats that had a feminine cut to them. They were usually lab-tech coats, but I always went out to find a coat that was cut right for a woman and that maybe had a softer collar. She taught me a number of really important lessons. And, as she has grown older, her experiences in healthcare have taught me a lot about how the system is broken.

ATHM: She's not a medical professional?

Dr Hays: No. She's a Unitarian-Universalist minister. She became a minister at the age of 65, so she's quite an extraordinary person. She's 85 now and going strong—a good person to be able to look up to and follow.

I had a teacher who was the chief of perinatal medicine at Baylor, Clark Hinkley. Clark was brilliant. He was also extraordinary in the way he taught residents: he really allowed you to jump in and slog your way through the swamps. As long as you had thought a problem through or had some literature to back up what you were doing, he would back you up.

This was a "see one, do one, teach one" kind of program. This was back before any staff had to be on-site, so the chief resident was the staff person at a hospital where we were doing 18 000 deliveries a year. We had faculty members on call—that is, you could call them on the telephone. Clark was the person you most wanted to have on call because he could give you more help by telephone than most of the other staff could give you when they were on-site.

He was also a brilliant surgeon. He had been trained in oncology, and he really knew surgery. And he was an obstetrician who really appreciated women. He thought that when a woman became pregnant, she became bigger than life; she

became something more important. I really loved that attitude that he had that pregnant women were special.

ATHM: As opposed to pregnancy being a disease condition?

Dr Hays: As opposed to being fallible and diseased females who presented annoying situations like having to wake up in the middle of the night. Clark was really quite amazing.

Another one of my mentors is Christiane Northrup. Chris was the person who introduced complementary and alternative medicine to me and who appreciated that I already had an understanding of it from my interface with midwifery. Chris is brilliant. She really is an amazing mind. Her mind ranges far and wide, and she is a synthesist. She has an amazing way of bringing ideas together into coherent patterns and teaching those patterns. She's a brilliant teacher.

I model a lot of my lecture-giving after Chris. I learned from Chris to put interesting slides up and not just lists that you read and to try to put some philosophy into what I am doing. That has come easily for me, as I was a philosophy major in college. Chris has been a real mentor.

The other big mentors in my history are my patients. I've had a few patients who had the courage to call me out on my behavior or my therapy or my treatment. When a patient does that, it's horrifying, of course, and it makes you feel awful and first you think, "She's going to sue me," and then you think, "She'll hate me forever," and then you think, "No, this is a person who really cares about me, cares about me enough to want to make me a better doctor."

These patients are willing to take a big risk because confronting a doctor, for heaven's sake, is a dangerous thing to do. We are arrogant, and we're trained to believe we know exactly what's right. And when we have to admit that we don't know everything and that our patients sometimes know things that we don't know, particularly about themselves, a lot of doctors are not willing to learn that lesson. So I am immensely grateful to the handful of patients who came back in and said, "I have to talk to you. When you did this, it really hurt me," "When you said this, it undermined my trust in my own body," "When you did this, it made me feel small." That's a kind of mentoring that I've found very useful.

ATHM: In terms of your area of specialty, what changes have most impacted your work from the time you became licensed to the present day?

Dr Hays: The thing that has provided the most joy and the most pain has been the swing back and forth in obstetrics. It's gone

back and forth at least one full cycle, from women understanding the preciousness of pregnancy in terms of its ability to be a shortcut on a spiritual journey and to want to get everything they can from that experience and then swinging back to turning that experience over to the medical profession because it looked painful or difficult or scary.

When I came into obstetrics, patients were medicated and given anesthesia without their permission. They were tied down to the table to deliver. We had leather straps on the delivery tables in Jeff Davis Hospital. This was after we had begun giving saddle blocks rather than twilight sleep—patients were completely aware, but we still tied their arms down. We weren't doing twilight sleep at all. We weren't giving scopolamine anymore, which is what the restraining straps were all about.

We pretended it was in order to do sterile technique, so the mother was not allowed to touch the baby because her hands were not sterile—like her vagina was! The babies were taken away from the mothers. If the nurse had time, the mother might get to hold the baby. And here is the really crazy part: at Jeff Davis Hospital, because of the volume of patients and the size of the hospital, the mothers were discharged at 24 hours. But the babies were not discharged for 2 or 3 days because the babies had to have 2 days of formula so they could do the PKU tests.

They told mothers that if they took their babies out against medical advice, the baby could become retarded. So mothers would leave their newborn babies in the hospital, where sometimes there wouldn't be enough nursing staff to feed the babies.

ATHM: It really does sound like the Dark Ages.

Dr Hays: It kind of was the Dark Ages. I'm telling you, when you finished that residency, you had seen everything twice. I had seen everything there was to see—almost. We used to sit around in the residents' room wondering if there was anything we hadn't seen. We'd say, "I've never seen an amniotic fluid embolus," and one would roll in the door. "I've never seen a ruptured uterus." We'd have 3 in one week. One night as a junior resident I delivered 4 sets of twins. I did 3 internal version extractions. After that I said, "Hey, I can do this procedure." If you get to do 3 in one night, you get pretty good at it. I don't understand why people can't reach in and get the second baby when the first baby comes out vertex and then the second baby's not vertex. Doctors freak out now and do a c-section. I say, "You just reach in there and get it. What's the problem?" But they don't train people to do that anymore because

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there isn't a place where you can train people to do it.

I'm the only person I know of that probably could still do a classical Kielland application. Kielland forceps application is a type of forcep used for mid-forceps rotations; the classical application is a particular way to apply the forceps that they just don't teach anymore. It's very useful. There are times when being able to put on a pair of Kielland's and get a baby out of trouble probably saves the baby some brain cells. There were only 2 people that I knew of in Portland (Maine) who felt comfortable doing vaginal breech deliveries, and we've both retired from obstetrics, so breech delivery is not a possibility in this neck of the woods. I hear there's somebody out in Bar Harbor doing breech deliveries.

And then, of course, there are the home-birth midwives, some of whom will do anything. They're doing breech deliveries, but I'm not sure that's who you want to have deliver your breech. They haven't had enough experience. I did 3000 deliveries in my career—that's quite a few breech deliveries.

A home-birth midwife is going to do maybe 50 deliveries, maybe 100 if she's a really busy midwife, and maybe 10% of those will be breech. She's going to turn some of them around. The rest, she probably isn't going to be able to talk the parents into having a home breech birth, but she might. But still, the experi-

ence is just not there. One of my areas of sadness about obstetrics is that there are skills that I think are useful that aren't being taught anymore.

ATHM: When did True North open, and how did it come about?

Dr Hays: We opened the doors in January 2002, but we began the conversation in 1996. Three nurses who had taken a holistic nursing course came back and said, "How can we get more holistic nursing care at Mercy Hospital?" They called a meeting and about 20 people showed up from all over the hospital. They began meeting regularly and one of them said, "Bethany, you need to be coming to this meeting." I finally went to the meeting, and it was right about that time that they had decided to use "circle process," which was described in Christina Baldwin's book, *Calling the Circle*. And I had been in a women's spirituality group that used circle process, and I found it transformative, so I thought, "There's a group of medical people who are going to use circle process? I have to see this."

We began sitting in circle every week, and we started by asking critical questions, such as "What is healing?" and "Who knows how to do it?" and "How are they trained?" We began



"For me, functional medicine has opened up the possibility that there is an explanation for and a solution to every complex problem that comes in the door. Whether I can find it is another question, but I know it helps my patients to know I believe their problems are solvable."



"What I love about functional medicine is that it is a structure that's big enough to encompass everything I've learned up to this point, so it's not just the biochemistry, it's that there is a place in that structure for the psychosocial and spiritual."

inviting healers from the community. Anybody who somebody in the circle thought was a healer got invited. People were coming to these meetings from the community saying, “We can’t believe there’s a hospital that is actually having this kind of a meeting and that would invite us into the hospital to hear what we have to say.”

We spent a lot of time researching different complementary and alternative medicine practices, how the physicians were trained, whether they were licensed, what they did, and how they viewed healing. It became pretty obvious to us that the healthcare system was broken. One of the things healers knew that was applicable to the healthcare system was to start by asking, “What’s right about the patient?” instead of, “What’s wrong with the patient?” “What’s right about the patient, and how can we take that spark and fan it into a flame?”

If you apply that thinking to the healthcare system, it doesn’t take long to identify that what’s right about our healthcare system is that there are still good people killing themselves to keep the system afloat under incredible duress in impossible situations with very little money, but they’re still in it. So we asked, “If you were dealing with a complex, evolving system, such as a human being or our healthcare system and you wanted



“What we learned from the human genome project is that your life isn’t written in your genes. It’s written in the interaction between your genes and the environment. I can’t change your genes, but I can help you change the environment if you’re willing to make the changes.”

to heal it, how would you go about doing that?”

We decided that you would get the very best people, the people who were called to the job of healing, who didn’t see it as a job, who really saw it as a calling, who were willing to sacrifice, who were willing to do whatever it took. You would create a place where those people got to do their best work. Because if you created the place where those people did their best work, you would never even have to ask about the patients. The patients would always be “held at the center of the circle.” We began to think about what that would look like, and that is where True North came from, that concept and our attempt to create a place where the very best healers can do their very best work.

ATHM: How did it proceed from there?

Dr Hays: We asked questions such as, “What do those people need to do good work?” They need an environment—not only a physical environment, but a place to go that is calming for both patients and the practitioners. It needs to be a beautiful space that makes a statement. This is the *feng shui* issue that is often talked about.

It also needed to be an environment where human beings behave differently toward each other. We were discovering that circle process created that kind of environment. Everyone who has worked at True North has said it’s an unusual place to work because it has an emotionally intelligent group of people. We address interpersonal problems head-on, and we address them in circle. We’ve created a place where after people have been in circle for a while, they will have seen what we call a “wobble,” which is where something throws the circle into chaos or threatens the circle or the organization or an individual.

Then they will have gotten to see how the circle deals with a wobble. Once they’ve experienced a wobble, people come out of the experience saying, “Okay, this is a safe place. This is a place where I can work. This is a place where I am going to be heard, and my idea may not take precedence, but I’ll be heard and people will treat me respectfully. I don’t have to be afraid that they’re going to look at me like I’m crazy.” People really grow and blossom in that environment—if they can handle it.

There are people who just don’t like circle, can’t handle it. They really want somebody to tell them what to do; they can’t reach that level of emotional intelligence. We’ve had a few people leave because of that. We’ve had a lot more people leave because they grow so much in that environment that they either go back to school, or they get a more powerful job, or they go on to the next stage of their life. It’s one of those places where people come and grow and sometimes move on. We’ve got a pretty steady crew right now, and it’s a good group of people to work with.

ATHM: Is the center affiliated with Mercy Hospital?

Dr Hays: It’s not. Right about the time that we began working on opening the center, the hospital came and said, “We can’t have you be affiliated with the hospital.” That was quite horrifying for

me because I had just been able to raise a bunch of money because we were affiliated with a hospital. But we have a saying in the circle: we try to be in reverent participatory relationship with everyone we deal with, not just our patients, but with each other and with other organizations and individuals that we interface with.

I was sitting in the office of the CEO of Mercy Hospital with the chief of medicine, who had been a real supporter of ours. In fact, they had both been supporters of ours. And they were basically telling me that the thing that I had just raised a bunch of money for was not going to happen. I swallowed hard and thought, "Somehow or another, I am not in reverent participatory relationship with these people. How do I get there again?"

I said, "So what relationship do we have with Mercy Hospital?" Reminding myself about reverent participatory relationship, I thought, "Well, we have some kind of relationship, so I'll let them define what that relationship is." I sat back and let them define it. When they finished defining it, we were clearly affiliated but not financially, which turned out to be one of the best moves that we made.

They said, "You're going to regret being an affiliate because you're going to spend all your time and money getting ready for JCAHO to come by and do your certification." I thought, "Boy, they're right about that, and we do not want to spend all our time and money doing that." So we disconnected from Mercy Hospital at that point. That was one of the better things we did because I saw, literally, dozens of integrative centers go down when the hospital or the university that was supporting them decided they couldn't support them anymore and pulled their financing. Because we never had that kind of financing, we never had to worry about that happening.

ATHM: Do you still serve as a director for the center?

Dr Hays: I am the chairman of the board of the Hygeia Foundation which is the 501(c)(3) non-profit, and I am the associate medical director. I'm working to download my medical director job and go back to practicing medicine because that's what I always said I was going to do. I was willing to do whatever it took to get this organization up and running, but eventually I wanted to be one of the people who got to practice in an environment that supported my practice.

ATHM: You haven't been practicing recently?

Dr Hays: I've been practicing half time and spending about half the time as medical director, which, by the way, is *not* a way to make a living. In obstetrics, you spend the first 3 days of the week paying for your overhead and the last 2 days of the week you take home. If you're working 2½ days a week, well, you do the math. And if you're the medical director of a non-profit, you don't make a lot of money there, either (laughs).

ATHM: In 6 years of operation, in what areas would you say True North has been most successful?

Dr Hays: Our success relies largely on word of mouth, so we try to be sure that each person who comes in has a good experience. That's an impossible task because these are sick people, and they're not having good experiences, and they don't trust the medical profession. We have several doors that they can enter: the door of complementary and alternative medicine because they don't trust allopathic medicine. Then we have people who come through the door of allopathic medicine because they don't trust complementary and alternative medicine, but they know there's something there that maybe they should hear about or experience, and they're looking for a safe way to do that. If they have a good experience at True North, they'll come back. And they'll tell their friends.

Word of mouth is probably the most important thing we should be protecting. It has taken us 6 years to get a reputation in the community for being the place that's safe to go to if you want to do complementary and alternative medicine and for being a legitimate healthcare practice—and for being the place where you can go and actually be listened to, where people take the time to hear your story.

As the healthcare situation gets worse and worse in terms of the experience people have at their doctors' offices and as the money gets tighter and tighter so that more and more people either have high deductibles or no insurance so they're paying out of pocket anyway, more and more people are discovering that if you're going to pay out of pocket anyway, you might as well have a good experience and have a doctor that takes enough time with you. You get more for your money.

ATHM: What else does True North do that is unique among integrative centers?

Dr Hays: One thing, which is coming up October 15-18, is our annual conference. I think we put on one of the best conferences

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in the country, and by the way so do the people who have attended it in the past. After the first conference, David Reilly said, "You are doing the only conference that is focused on relationship and healing. You should keep doing what you are good at." We really took that to heart, and each year we work to not only gather interesting speakers of national reputation and local speakers of extraordinary talent, we work to give the participants an experience of community and circle during those 3½ days. We work hard as an organization during the conference to be warm hosts, and of course I love to take people by surprise with the gifts, music, spirituality, and fun that are always a part of a True North conference. And it is in Maine in the fall—how can you beat that? People who are interested can find out more about the conference on our website: www.truenorthhealthcenter.org.

ATHM: It has been noted that the center is financially stable and on the road to sustainability. Is that primarily due to the fact that patients pay for their care out of pocket?

Dr Hays: No. We have a couple of major donors. If you're going to do a project like this, especially as a non-profit, you really need to have some committed donors who are willing to take you through to financial sustainability. One of the things I wish I had known more about is fundraising. Our model relies on the center being full of practitioners who pay rent and services fees. It has taken more time than we expected to fill the space. Some people would call ours a condominium model, but it's really not because there are pretty stringent criteria for becoming a practitioner at True North.

For instance, to be a practitioner at True North, you have to go through the credentialing circle. It's a very rigorous credentialing process. It's the most rigorous one I've ever gone through. You have to spend 1½ hours a week in one or another circle, and that's your time. Nobody pays you for that. You have to spend 10% of your care fee-free or for-time dollars. We have a commitment to accessibility. And you have to participate in outcomes research. If you're not willing to do those things, don't come to True North; you won't like it. If you are committed to these kinds of things, then it's a really great place to practice.

After that, you pay a rent and services charge for the time you spend at True North. You don't have to pay rent on time that you're not there. The rent and services fee is graduated, depending on how much you charge per hour for your services. There are 3 levels of rent and services charges, which solves the problem of whether you charge the same amount to a practitioner who can bill \$250 an hour vs someone who can bill \$60 an hour. Should they be paying the same rent?

Once the space is filled, we're a totally sustainable organization. Right now, we still rely on our major donors, but the amount that we're relying on them is going down progressively. We have a goal to get to self-sustainability without major donors by 2011. Once I got a real handle on the financial part of this project, I said, "What are those other centers out there doing? How are they making it?" Because you can't make it on doctor-

patient interactions. You cannot make it on seeing patients. I calculate that it costs about \$700 an hour per practitioner to keep a center like ours open, and patients aren't paying \$700 an hour, and the insurance companies aren't paying \$700 an hour for patient care, so how are these centers making it?

Our executive director said, "They're making it on ancillaries." And I said, "Oh, so that's why they have the laboratory and the x-ray department and the MRI machine and why they're pressed to order unnecessary tests and x-rays and MRIs." He said, "Exactly." He said, "There was a group in South Carolina that looked at how many minutes a doctor could spend with a patient in order to break even just using doctor-patient encounters and they figured it would be 2½ minutes." I replied, "My patients can't even get undressed in 2½ minutes."

The economics makes you understand why people have the experience that, for example, one of my patients had, which was getting an unnecessary test (a CA-125), which led to an unnecessary biopsy, which led to an unnecessary ultrasound, which led to another unnecessary test, which led to an unnecessary minor surgical procedure, which led to another unnecessary test, which left her with permanent lymphedema in her arm. All of the tests were negative because the first test was a bad screening test that shouldn't have been done to begin with. She ended up being billed something like \$14 000 for unnecessary and potentially dangerous tests that left her with permanent lymphedema in her arm. But everybody's happy. That is, all of her doctor's business-people were very happy.

She wasn't so happy because she spent the rest of the summer trying to deal with the lymphedema in her arm, which was also expensive. But all of the doctor's practices were happy because all of those unnecessary tests supported the office visits—which may not have been necessary either. This is a classic story about the healthcare profession right now.

True North doesn't have the big ancillaries. We have a small supplement store, whose profits go back into the 501(c)3, and we have a laboratory where we draw blood. And apparently we're the only functional medicine practice around that actually returns part of the margin to the patients. The lab can't understand why we're doing that. We're doing it because we're committed to lowering the cost of healthcare.

When people come in and say, "It's really expensive to go to True North," I say, "No, it's really not expensive to go to True North. At your doctor's office down the street, you're paying about \$700 an hour to see the doctor. Here you're paying \$250 an hour. When you use insurance to pay your bills, you're also paying for the insurance company, and the CEO of the insurance company is making several million dollars a year, and you may be paying for a lot of unnecessary tests. You're not paying for any of those things in my practice."

It's cheap healthcare. The patients just happen to know what the cost of the healthcare is because they're paying it up front instead of paying a co-pay and having the real costs disappear until they get the bills from their insurance companies. Then what happens is a lot of griping about how the cost of

insurance keeps going up, and employers griping about the cost of healthcare. Or they're going out of business because they can't afford it. Or they're operating with less-than-ideal numbers of employees because they can't afford more employees because of the health insurance situation.

ATHM: How did you become exposed to and embrace functional medicine as a guiding principle?

Dr Hays: Functional medicine was the third big "left turn" I took in my career. It came about because I kept seeing patients with pelvic pain who were referred to the gynecologist because it was pelvic pain so obviously it was gyn in nature, but they actually had gastrointestinal problems. I would send them to the gastroenterologist, and the gastroenterologist would scope them up both ends and say, "Everything's normal" and send them back. And I would say, "He said everything was normal, but what did he say about your having diarrhea every day?" And the patient would say, "Well, he didn't say anything about that. He said eat more fiber."

I thought there had to be a better answer than this. One of my colleagues at Women to Women was doing functional medicine and had become a devotee of Jeff Bland's, but she couldn't really explain to me what she was doing. There was a disconnect. There wasn't enough information there to satisfy me about whether there was science behind what she was doing, and what she was doing was rather different from what the gastroenterologist down the street was doing.

I had heard Jeff Bland in lectures at the American Holistic Medical Association, and I thought, this is probably the guy to go to to get the science behind this. And as has often happened in my career, a flyer showed up on my desk inviting me to the Applied Functional Medicine in Clinical Practice course. It was really expensive and 2 weeks long, and I didn't know if I could afford to do it, but I didn't think I could afford not to do it anymore. So I went off to Seattle to take Applied Functional Medicine in Clinical Practice at the Institute For Functional Medicine (IFM).

I was entranced. I had what David Jones (president of IFM) called the "Jeff Bland psychedelic experience." My head felt like it was going to explode every evening. It was the first place that I had ever been in my medical career where I would raise my hand and say, "But if that's true, then that means that this and this and this should happen." And Jeff would say, "That's a really good idea. Let me check that out, and I'll come back to you." He would come back the next day and say, "You know, there are 14 articles on that topic. I think you're onto something."

My prior experience had been that I would raise my hand and say, "But if that's true, that means this and this and this . . ." and everyone in the room would look at me and sigh and say, "Why did we ever teach her to read? Obviously, she doesn't get it. We're all going down this path here, and she's headed off in some bizarre direction." I would feel really stupid. This was such a different experience that when I went up at the end of the course to thank Jeff, I burst into tears. I said, "This is the first

time in my career that I actually have felt like I could use my brain and not be put down for it."

At that time, no part of the course was on women's hormones. But obviously, a lot of people were interested in that because women make up a much larger portion of the people coming for healthcare. So Jeff Bland called an extemporaneous afternoon session. He asked, "Does anybody know about the Postmenopausal Estrogen/Progestin Interventions (PEPI) Trial?"

I had just presented the PEPI Trial article at a journal club, and I knew it front and back. "It was the first trial that actually has ever used bio-identical progesterone and there were 5 arms to the study, and it was a randomized, placebo-controlled, double-blind study of pretty good volume, and it showed this, this, this, this, and this," I said. I looked over and David Jones, who runs the educational programs, was standing there with his arms folded, grinning.

Before the course was over, David had slid into the seat next to me and said, "We'd really like you to give a lecture on women's hormones." I was so excited about the possibility of just getting to hang out with these guys because I was so impressed with what they knew and the level at which they were teaching and the way the course was being taught, so I said, "Oh, yes. I'd love to do that."

I went home and thought, "What have I done? I don't think I know enough. I don't think I can teach at that level." I must have spent every spare hour I had for the next 6 months putting together a talk that, in retrospect, wasn't very good. But I learned a lot about hormones.

I read everything I could get my hands on. I gave my first AFMCP talk, and they liked it. They kept letting me come back, and that's how I got involved with functional medicine. Because I got to teach, I got to go to the functional medicine courses pretty regularly and learned from the real experts in functional medicine.

When we started True North, I wanted to stop doing obstetrics because I couldn't keep getting up in the middle of the night and delivering babies and also midwife the beginnings of True North. So I stopped doing obstetrics and began focusing my practice more on functional medicine.

ATHM: How do you feel functional medicine has changed your practice?

Dr Hays: For me, functional medicine has opened up the possibility that there is an explanation for and a solution to every complex problem that comes in the door. Whether I can find it is another question, but I know it helps my patients to know I believe their problems are solvable. What I love about functional medicine is that it is a structure that's big enough to encompass everything I've learned up to this point, so it's not just the biochemistry, it's that there is a place in that structure for the psychosocial and spiritual.

I believe that if your DNA is not expressing the human being that you really wish you could be, you've got to put your DNA in a different environment. The "environment" is in 1 of 4

areas: It's the actual environment—the air you breathe, the water you drink. Or it's the part of the environment you literally, as Chris Northrup says, wrap yourself around when you eat—the food you eat and the bacteria that live with you. Or it's the intercellular environment, of what you eat, what gets in and circulated and across the cell membrane to the nucleus and bathes the DNA. Or it's the psychosocial/spiritual environment.

Functional medicine encompasses all 4 of those types of environment, so when I have somebody who doesn't like the way their body is functioning, I go looking for where we need to change the environment. What we learned from the human genome project is that your life isn't written in your genes. It's written in the interaction between your genes and the environment. I can't change your genes, but I can help you change the environment if you're willing to make the changes. Much of what I do is keep people engaged long enough for them to change the environment of their genetics. If I can get them engaged in that process, they will eventually find the right environment.

ATHM: Was functional medicine a concept that you wanted to bring to the center from the beginning?

Dr Hays: Yes. I was so intrigued and excited about the functional medicine course that I told my colleagues about it, and several of them took the course. The midwife that I was working with went and took the course. She thought it was fabulous. One of the other physicians that had been a long-term member of the circle took the course. Then we met some other practitioners. I met the psychiatrist we have at True North at a functional medicine symposium. A naturopathic doctor who had already taken the course joined us.

Pretty soon, we had 6 people who had taken the Applied Functional Medicine in Clinical Practice course. And I talked 3 of our family doctors into taking the course. Now we have a fourth who is brand new, so he hasn't taken the course yet. The course changes you. It changes how you approach patients, and it changes how you practice. We now are one of the "nodes" of functional medicine practice in southern Maine.

ATHM: As a founder and a director of the center, what advice would you give to the medical community in terms of the impact functional medicine has had on the success of the center and how you practice medicine there?

Dr Hays: For a good physician who understands the psychosocial/spiritual aspect of what they're doing, it reinforces the importance of that. It also gives you the biochemical underpinning that many patients are looking for. They want the science. That's what they think they're coming to get. If you can give them the biochemistry behind what's going on in their bodies and a solution to that, you can keep them engaged while you teach them to change the environment they're putting their DNA in. Or change their diet and lifestyle. Or change their attitude about their body and about health.

If you have people who come in the door with, "I have broken biochemistry, and nobody's been able to figure it out" or "I'm just broken, and no one can figure it out," and you can give them an understanding of what's going on in their bodies and some keys to getting better pretty early on in the relationship, then you're going to get them engaged in the process of self-healing, changing their diet and lifestyle, becoming responsible for their healthcare or for their health.

ATHM: What is your assessment of the state of women's care in medicine today?

Dr Hays: I have more hope for women's care in medicine than I do for men's care in medicine. I think health-

care as we know it was designed by men to treat women. In that regard, it doesn't do a very good job of treating women, and it does an impossibly poor job of treating men. Men only come for healthcare when they're incredibly broken and willing to go "one down," as Anne Wilson Schaef used to say, meaning they have to let the doctor win, be more powerful in the relationship than they are. Men don't like to go one down with each other. They much prefer teamwork. You can get men to engage with each other in a relationship if it looks like a team sport, and healthcare doesn't look anything like a team sport. It looks like "the doctor is on top, and I have to 'go one down' and be weak because I'm broken." Men don't like that, so they don't go to their doctors until they are really in trouble.

Women don't really like what's going on either, but we're way more used to going "one down" in order to make the relationship happen. My mother, for example, wants to make her doctor happy. She had to go for a test, and I said, "Why are you going to get that test if you're not going to have the surgery?" She said, "Well, the doctor has an idea about what he's doing to help me get better, and I am getting better, so I don't want to break his

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train of thought. I don't want to refuse to let him do what his idea is that's going to get me better." I said, "But this test is not necessary, and the only reason he's doing it is because that's how he makes his money, and it's a potentially dangerous test." She said, "But, I want to do what my doctor says." I said, "Okay, you've had informed consent. Go do what the doctor said."

Women have changed since that generation was young. Younger women are less likely to be subservient to their practitioners. They are more likely to have gone to the Internet and read about their condition and gotten more information. Women often make the decisions for the whole family—what doctor, what hospital, how we are going to approach this, what food we eat. Women have a lot of control, and the medical profession has begun to figure that out and has made more women-friendly kinds of offices spaces and understands better how to deal with women.

There's still more holdover of "the doctor makes the decision, and the doctor is responsible" than I would like to see though. For instance, I was at a seminar given by the malpractice carrier here in Maine on risk management, and one of the case presentations that they gave was a case where a man had a chest x-ray in the emergency room and had upper lobe pneumonia and was treated and then referred to his primary care doctor who examined him and said, "We need to repeat this x-ray after a couple of weeks after you've finished the antibiotics to make sure that the infiltrate goes away."

But the doctor did not transmit the request for a return visit to the front desk staff, and the patient did not make the appointment and did not come in and in fact, didn't come back for a year, at which time he was having more symptoms. They did an x-ray and found a small-cell carcinoma of the lung, which he died from. It wasn't in the same area of the lung, so it was completely new pathology that had not been there a year before, but nevertheless, the lawsuit came about because of the fact that the doctor didn't make the patient come in for the 2-week visit. It's the doctor's responsibility to make sure the patient does their follow-up or has the x-ray or gets the lab work done. And malpractice insurance companies are buying into that. I adamantly believe that we need to be working to make it the patients' responsibility. It's their health. It's their bodies. It's their responsibility. I don't think we should be reminding people about their appointments. I don't think we should send a reminder out every year to come in and get your Pap smear or your mammogram.

I'm going to tell you what I think you need to do and why. For example: come back in 2 months so we can check this lump again. If you don't want to spend your money that way, so be it. I've failed. When people say, "Well, I haven't been in in 2 years." I

say, "Here's my philosophy about that: If you don't come in for 2 years, I assume you're taking good care of yourself. If you are, you don't need to come in. If you aren't, we should have a talk about why you're not taking good care of yourself. But I'm not going to yell at you for not coming in for 2 years. That's your job. I'm not the Pap smear police."

That's the piece that neither of the presidential candidates is talking about. None of the high-powered people in places of responsibility are talking about revising the healthcare system in this way. Nobody is asking, "How do we get people to take responsibility for their own health?" Until we do that, we're going to keep spending billions of dollars and continue to be 35th among the countries in the world in terms of health.

We're going to keep spending a lot of money on unnecessary tests, some of which are dangerous. We're going to keep spending a lot of money on unnecessary drugs, many of which are dangerous

or at least dangerous in the context that they're being used. The only way we can turn that around is to make people responsible for their own bodies. This is really critical. I'm committed to collaborating with True North to think through that and to continue to support change. We want you to be responsible for your own healthcare.

ATHM: Please talk about your work in learning about how to balance hormones and the main hormonal issues facing women.

Dr Hays: There are a bunch of hormonal issues facing women. I learned about hormones when I first got a computer that had the capability of going to PubMed. Suddenly, the whole world of medical science was open to me, and I spent every spare minute between patients cruising the Internet looking for articles. I had two very different trainings, one in very conventional medicine and one in complementary and alternative medicine, and they were saying pretty different things about how women's hormonal problems should be treated. I wanted to know who was right. So I read the literature.

My take on hormone therapy came from the literature. Then I realized that the literature most doctors are reading comes from the drug companies. A lot of the literature that I was reading was coming from Europe, where they don't use the same hormones, so I was getting a different take on what hormones should be administered and when they should be administered. I was reading the articles and not having them interpreted for me by the drug companies, so I realized that I was getting a pretty different understanding than what was going on in the community of gynecologists.

There were some pretty interesting philosophical differences in the different camps. One of the philosophical differences

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that have come up in the last couple of years is, “Is menopause itself bad or is it good?” There are two camps. One says menopause is a deficiency state and needs to be treated as a disease. That was the standard of care in healthcare and why Premarin became the top-selling pharmaceutical in the country. We put women on hormone replacement because they had symptoms that went away when they were on hormone therapy, and this allowed the pharmaceutical industry to create a body of information that said you’re better off on hormones.

The literature said something different to me. The literature said that pre-menopausal women are hormone-toxic in order to have babies, and post-menopausal women have normal hormone levels. The problem was that they were lumping normally menopausal women together with surgically menopausal women, who were not normal. At one point when I first started practicing, over half of the women in America had had hysterectomies at an average age of 35. But all non-menstruating women were lumped together as menopausal regardless of their actual hormonal levels.

There were a lot of menopausal women who were hormone deficient—at least a quarter of them, if not more. The drug companies, by including all these women as postmenopausal, were able to say, “See? Menopausal women are hormone deficient, and they need hormone replacement.” The truth was that normally menopausal women are not always hormone deficient and 80% of them don’t need hormone replacement and in fact will do better without hormones. However, a lot of them need help getting through the menopausal *transition*. So how do we treat them?

I began asking, “Who *does* need hormone treatment?” and “What’s the best way to treat them?” The more I learned about hot flashes, which is the main reason women go to their doctors for hormone treatment in peri-menopause, the more I realized that we don’t really know much about hot flashes, so I read everything I could get my hands on, and I realized that hot flashes were probably only secondarily associated with estrogen, but they were actually caused by adrenaline or noradrenaline. Hot flashes were a symptom that was related to the adrenals more than they were related to the ovaries. Then I had to learn about the adrenals, and that was intriguing.

What I began to learn is that all these hormones talk to each other. They’re all in relationship with each other. If you don’t understand their individual and collective relationships with each other, you’re very likely to produce unwanted side effects with your hormone therapies.

That was a big philosophical change in my approach to hormone therapy. I was always very conservative because I learned in obstetrics that Mother Nature really does know what she’s doing. If you will sit down at the bedside and watch, you’ll learn. When you get into trouble, ask what Mother Nature would do in this situation.

Clark Hinkley used to say, “A good obstetrician has a fat ass and a long cigar,” meaning don’t jump in and do stuff right away—sit back and watch what’s going on. Boy, did that save my butt in obstetrics more times than I care to mention. I took that

philosophy into my understanding of women’s hormones and said, “What is Mother Nature doing when it’s normal?”

I began pulling out the literature where I could find “normals”—when there were placebos, for instance, which isn’t easy to find because the studies will often say menopausal, but they won’t tell you if they were surgically menopausal or normally menopausal. A different sort of picture began to emerge. That’s one big, important philosophical understanding I have gleaned: *normally* menopausal women are *normal*.

There’s a reason why women go through menopause, and it’s probably because once you’re too old—either psychologically or physiologically—to support a pregnancy, you “get off the hook” from the heavy burden of hormones that go along with being able to get pregnant and have a baby, and you get to go to a calmer, quieter place hormonally. Most women like it once they get through perimenopause to the calmer, quieter place.

The second thing that’s been a big issue recently is bio-identical hormones. People are so rabid on this topic that they sometimes can’t see the forest for the trees. I’m not at all interested in bio-identical hormones; I’m interested in the best hormones. I want to use the hormone that allows me to mimic normal hormone function. If a woman’s hormones are not allowing her an easy menopausal transition because of something she has done or something the medical profession has done, then I want to try to mimic Mother Nature.

For the most part, that *is* using bio-identical hormones. But there is a trap of becoming too rabidly in favor of using only bio-identical hormones. For instance, if Eleanor Rogan is correct in saying that the connection between estrogen and breast cancer is actually the 4-hydroxy estrogen metabolite that produces a DNA-damaging quinone and that explains why the more exposure to estrogen you have throughout your life, the higher your risk of breast cancer, then wouldn’t you want to ask, “Are there any estrogen molecules or substitute molecules that are not metabolized down that pathway that do the same thing?” The answer is there might be. It turns out ethinyl estradiol, which is the hormone in the birth control pill, is not metabolized down the 4-hydroxy estrogen pathway. At least that’s what Eleanor Rogan said in her lecture at the IFM Symposium 2 or 3 years ago. That brings up the possibility that ethinyl estradiol might be a better hormone replacement than bio-identical estradiol, particularly for women who have the cytochrome 1B1 polymorphism that increases 4-hydroxylation.

Now, you could pick the right group genetically and put that group on a different hormone replacement that would help them decrease their risk of breast cancer. But you’re not going to notice these issues if you’re rabid about bio-identical hormones because ethinyl estradiol is a synthetic hormone. What I’m really interested in is that we think through what we’re doing, that we ask the questions about what would be the best hormone replacement in women who need it. There is a subgroup of those women that we should be doing something different with.

That’s the kind of thinking I don’t see going on much in the literature. That’s the kind of thinking that I get to do at IFM.

They encourage me to think through these things and maybe even put them out there as theories, with some data to support them. I love getting to do that kind of thinking. It takes me back to my individual patients, and it means I'm not going to treat all patients the same.

I have to figure out who a patient is and what her genetics are and what her diet and lifestyle are like and whether I can change her biochemistry by just changing her diet and lifestyle, or do I need to give hormone replacement? And if I do, what other hormones am I going to disrupt? Why is estrogen low? Did she have her ovaries removed? Are her ovaries just normally doing what they are supposed to do, and are they responding to some other hormone that's out of whack? That's a very individualized form of medicine, and you can't do it in the "7-minute office visit."

ATHM: You have mentioned creating a model for integrative care that treats illness upstream, that finds better ways to train physicians and provides better end-of-life care. You also mentioned earlier your goal of making patients grasp that it's their responsibility to be responsible for their own health. Do these ideas form your vision for the future of medicine?

Dr Hays: Yes. Those areas are my personal mission. I've really only accomplished two of those areas in any significant way. True North is the model that we're trying to create of how to provide good healthcare. IFM is the organization that is retraining physicians in the way that I think they need to be retained. And hospice is the area that I'm interested in, in terms of helping people learn to die well. We spend 60% of our healthcare dollars in the last 10 days of life. It's part of why the healthcare system is broken.

We are in trouble in this country financially, in part because of the healthcare system. It's not the only thing that's wrong, but it's a big one. If we make the changes we have been discussing, things will get better. The piece about encouraging people to be responsible for their own healthcare is the standard that you can hold your healthcare policy decisions up to and say, "Well, if we do that, will people take more responsibility for themselves or less?"

Healthcare insurance, for instance: I believe the government should pay only for medical care that will, in the long run, decrease the cost of healthcare. In other words, the government should be investing in people getting healthier. Anything that decreases the cost of healthcare down the road, the government should take over, own, and pay for and make sure it is available to everyone.

The first place I would go with that is care, feeding, and stress reduction for pregnant women. The government should do that. Pregnant women should have dispensation from their work; they should be allowed to stay calm and happy, as much as possible; they should be kept safe from their workplace, their abusive spouses, their abusive families—whatever it takes, because we know that a 9-month investment will, 30 years from now, completely change the healthcare scene. We'll get rid of—or dramatically decrease—diabetes, hypertension, depression, obesity, cardiovascular disease. Voilà—and only a 9-month investment!

This is America, and we're always going to have people who don't want to pay any attention to where their money is going,

and it doesn't really matter because they've got enough of it anyway, and they can buy health insurance that will pay for absolutely everything, and they won't have to pay for anything. It will cost them probably more money than they'll actually spend on healthcare, but if that's the way they want to manage their money, hey, they've got the money to spend. It's okay. There are some people at the opposite end of the financial spectrum who need insurance as well. Children with birth defects, people with non-modifiable genetic disease (of course, there won't be as many of them if we care for pregnant women properly).

In between, we want to keep holding people responsible. They need to know where their money is going, which means they need to be holding the money, which I think is the medical-savings-account approach. There are going to be some hard consequence when you don't pay attention, you're not taking care of yourself, and you make wrong decisions: you have to pay for it. You smoke your entire life, you get lung cancer, gee, I'm really sorry, but that was your choice. What should the government be doing about that? Keeping cigarettes out of the hands of teenagers. Doing everything it can to get people to stop smoking. The government should pay for smoking-cessation programs. It should pay for the nicotine patch, it should pay for Wellbutrin, it should pay for whatever it takes to get people to quit smoking. The government should invest in that.

I think, ultimately, what is going to happen is that shortly after birth, you'll get your genome done. And then the healthcare providers are going to make recommendations: "You should be on this amount of methylated folic acid because you've got the MTHFR gene." "You should be doing prayer, meditation, yoga or HeartMath at least an hour a day because you've got the COMT polymorphism and your adrenaline is high." "You need to be taking indole-3-carbonyl because you have a cytochrome P450 1B1, and we can help you improve your estrogen metabolism and avoid breast cancer." "You should be avoiding this, this, and this. And if you follow those recommendations and you get sick, we'll take care of you. If you choose not to follow those recommendations and you get sick, you can pay for your healthcare, but the rest of society doesn't have to." But there are a whole lot of people who are going to be upset with that plan because they believe they deserve to keep killing themselves and have somebody rescue them at the end. The joke is, they're not really being rescued. The last 10 days of life comes, and they've spent all their money and all their family's money, and they really don't have anything to show for it.

ATHM: Do you see momentum toward this vision, or is it still far into the future?

Dr Hays: There are people moving in this direction. A lot of them come to True North. They come to True North and say, "I'm healthy, but I want to know how to stay that way." Or they say, "I come here for my annual exam because you always tell me new stuff. I come because I'm so curious to see what you've learned this year." And I tell them, "You're right. I learn something new every year, and I'm going to tell you about it, and by

the way, next year, the information could change, so look out. But I'll tell you what the latest information is and how I've interpreted it."

I realize this is not the "standard of care," but the "standard of care" is too low. People deserve better than the standard care they're getting out there. It's pathetic. I didn't go into healthcare to practice that way.

ATHM: Any closing thoughts?

Dr Hays: I still think the human body is the most intriguing thing I've ever encountered. But relationship is the glue, both for the organization and for the doctor-patient relationship. Without the relationship, you can't engage people in learning to care for themselves. That is the big hope for a healthcare system that we might be able to afford.

I wish I could still deliver babies. But I have a grandbaby coming. Maybe I'll get to be there.