Integrated Medicine

I plan on talking to you about integrating behavioral health into an internal medicine practice. First I would like to introduce myself and give a little background before I get into the body of my talk. I want to thank you for giving me this opportunity to talk about something that I am passionate about and feel that I was born to do. I identify myself as a Doctor, Parent, Husband, Son and Runner. I am grateful that I have always had a supportive family and feel despite the psychiatric genetic burden in my family that I won the genetic lottery. At times I am a legend in my own mind. I had a grandfather with Schizophrenia, an uncle with a severe borderline personality disorder and an aunt with a severe bipolar illness. I was an outstanding student in my early years of high school and was one of 7 of only 450 kids to be in all of the honor programs. However when I was 15 years old I had a dramatic decline in my scholastic achievements and I recall a terrible junior year of high school. I went from an A student to straight Cs. I would often pretend to be sick to skip school. My father is an excellent clinical psychologist and every other member of my family was in therapy and yet I do not recall any family intervention. I guess I just got lucky, because after my Junior year I decided I could never have another year like that, and I started myself on a rigorous physical training program which I have continued to this day. It has now taken me through college, med school, 28 years of marriage and family, and 31 years of medical practice plus 64 marathons including the last 16 Bostons. I am so grateful to a very patient, kind and understanding wife and most importantly I have never suffered from depression since. What was

happening to me between age 15-16? Was it just adolescent angst, or perhaps it was an early phase of a bipolar illness? I certainly, in full retrospect, suspect that this was probably an early phase of some significant mental illness. Running was my therapy and overall despite some hypomania I have functioned and thrived. So life went on and I was very happy practicing good medicine as a Nephrologist, and a gerontologist and general internist. However I thought we could do better for our patients. So in 2002 after seeing these unfortunate diabetic patients being referred to me to start dialysis I decided I needed to do more. Their internists did not want me to take care of the patients. They just wanted me to "put them on dialysis." They would take care of the rest. I was a subspecialist, a nephrologist – a kidney doctor, so I was expected to limit my care to kidney related issues. The worst thing you could do was step on your referral's feet by stealing the patient. For if you decided to really take care of the patient often what would happen is the patient would only want to see you and then you would lose your referral base. I was told that if you really cared for the global needs of this referred patient it would be economic suicide. I just wanted to be a good doctor, so I decided the best approach to care was to try to arrange an integrated set up for diabetics, and the dogma be damned. My thinking was if I could get to diabetic patients early enough maybe I could even avoid all of the long term complications.

So I plunged in. I secured a 20,000 sqft building and decided to build a comprehensive medical home for the treatment of patients with Diabetes. I was certain that if I would build it they would come. As it turned out, at least about that, I was right. Over the period of 3 years we quickly grew to having 20 or so health care providers. Diabetes is

often a disease of behaviors so early on I hired a dietician and put in a full gym with a physical therapist. Medicine is important but diet and exercise are really the cornerstone in the management for those with diabetes. My patients saw a nutritionist and were given knowledge about what to eat and were strongly encouraged to exercise. People who couldn't walk a block began to start to run. We hired an endocrinologist and taught people how to use insulin pumps and how to adjust their insulin and other medication and follow their sugars. We hired cardiologists and did thorough cardiovascular testing as many of these people came to us with preexisting heart disease. We would have been remiss if we had just thrown them on the treadmill without due diligence. Sometimes we had to intervene with more invasive approaches such as cardiac catheterizations and coronary artery bypass grafting (CABG). Fortunately at our admitting hospital we had and still have an exceptional cardiothoracic service and we had and still have an excellent working relationship. We did this electively as opposed to emergently and patients did well with only short hospital stays. We hired 2 vascular surgeons to help manage our patient's preexisting vascular disease and ideally preserve our patient's limbs. We had a podiatrist regularly checking everyone's feet and providing basic podiatric care. We went as far as trying to establish an outpatient wound clinic. On top of this we also had an in house ophthalmologist, as visual loss is a major problem with diabetes. In house we maintained a comprehensive lab. We were all under 1 roof. We shared 1 chart, this is before electronic medical records, so everyone knew what the patient's meds were and everyone was involved in the overall care of the patient. This really facilitated communication between all of the healthcare providers and it eliminated a lot of waste and error. So so

important and so significant b/c it presaged what has become a best practice/required practice. And, you make it sound easy whereas so many practices have struggled to make this happen. Care which had been so fragmented became much more whole and directed. Patients also appreciated this, as they no longer were being told by multiple doctors to do different things. Also so important to emphasize since "patient satisfaction" and "improving the experience of care" is one of today's critical quality measures. To further keep care reasonable and understandable all of my patients continued a tradition that started since my internship 31 years ago. After every visit I would give them a copy of my note with a list of their diagnosis, meds and an assessment and plan. Patients really loved this. Again, something that is now a quality measure. The practice really grew and patients did flock to us, because it was really 1 stop shopping, all done in a coordinated fashion. There was only 1 problem. We had only 1 tax ID and since we did all of our billing in house, if a patient was seen by multiple providers on the same day we would only get paid for 1 service. More often than not, we were only reimbursed for the least expensive service. So as the practice bled money discord in the practice grew. Despite a very large altruistic streak in many of us, we still had families to support. We sought outside consultants to straighten out the finances. Things only continued to get financially more strained so over time more and more of the practitioners jumped ship. It was a painful experience and it taught my wife and I valuable lessons. If we were to successfully provide optimal care we needed to be financially viable. The medical home was a great idea and we had tremendous results. Patients who had been repetitively hospitalized or frequented emergency rooms stayed home and functioned better. Again, this is today's primary goal,

and so important to let audience absorb how prescient you were. Insurance companies did extremely well but it was just not a viable financial model at that time for our practice. We were a bit discouraged but we carried on and our practice recovered. However little did we know that our fun was just beginning?

Now I want to tell you why I am really here. My wife and I are here because we had the unfortunate opportunity to experience for ourselves what a torturous tortuous maze mental health care is. Our son Daniel developed a persistent psychotic disorder before his 16th birthday. He was already seeing a psychiatrist, so you would have thought it should have been a system that was going to be easy to navigate. It was no such luck. He was quickly started on an antipsychotic and soon looked like a small Frankenstein. He remained psychotic and he could barely manage to lift his legs to shuffle along. So what happened next, another and then another antipsychotic were added. Daniel remained psychotic and now could barely open his eyes. We knew there had to be a better way. We read voraciously and it quickly became apparent to us that he had a very resistant form of Schizophrenia. It was abundantly clear to us that he was on the wrong medicines, including 3 concomitant anti-psychotics, and that the only medicine that would offer him any hope was clozapine. We therefore asked our psychiatrist to start Daniel on clozapine. She said she never uses it. It was just something she was not comfortable attempting to do. We subsequently went to 4 other Psychiatrists all of whom came highly recommended, and yet despite the writing on the wall no one was willing to take this evidence based, but difficult and clearly necessary step. Finally we contacted the esteemed Lou Opler, and he referred us to a Psych pharmacologist MD/PHD. We were sure

clozapine was right around the corner. Again it was not to be so fast. It took another year of struggles. My son still floridly psychotic declared himself to be transgender. Our psychiatrist told us he would be "agnostic" on the issue and sent us to a Transgender Psychologist. When this "expert" agreed with my son's assessment of his sexuality and missed the fact that he was still quite psychotic despite us giving her a thorough history documenting the persistent voices, rituals, and delusions we were floored. Finally his youngest sister became so upset that she developed anorexia and required a long hospitalization. We finally after much persistent prodding convinced Daniel's psychiatrist and Daniel now 18 months into full blown psychosis having failed 4 antipsychotics finally began clozapine and began his recovery. Here we were my wife and I highly trained physicians with nearly unlimited resources living in a mecca of Psychiatry and this was the best that we could do. The system had failed us miserably at every turn and convinced us that we needed to change the way things were done.

It was at that time that we really started our journey in how we could change the process. We quickly learned what a life changing drug clozapine could be. We also learned why Psychiatrists were so reluctant to prescribe it. Honestly we find their logic unfathomable and the underuse of clozapine is one of psychiatry's biggest errors. More on that later but for Daniel clozapine was not the whole answer but just a component of a complex solution to a complex problem. Major mental illness devastates people's lives in so many ways. It came as no surprise to us that what we needed was an all-encompassing formulation. Daniel improved as we became more and more involved in his care. We quickly put aside the old adage that you should never treat your own family. Being so emboldened we molded his therapeutic regimen with only 1 goal in mind. Daniel would have a robust recovery and a full life. I love this and would love to have audience have a moment to let this sink in and appreciate this. So began our adventure into taking care of people with serious mental illness. I am not a psychiatrist, and at first this made me rather cautious and guarded but for the last 2 years we have been seeing more and more patients with psychotic illnesses. My initial reluctance to do this, because again I am an internal medicine subspecialist and I am not a trained psychiatrist, soon turned to enthusiasm. The results we keep getting have been incredibly gratifying . So many of these people have been lost in the wilderness for such a long time and we have been told time and again they have finally found a home. We are presently treating over 40 patients with PSMI and I have managed over 25 patients on clozapine.

Let us fast forward to today. Why do I think an integrated care model will work now? Well the world has changed and our practice has changed with it. We now live in a world that recognizes that health care is fragmented and mental health care is like Jim Croce's Bad Bad Leroy Brown a jigsaw puzzle with several missing pieces. Accountable Care Oraganizations (ACO) are now a reality. An ACO is a multidisciplinary system built on collaborative care principles, performance is measured against quality measures, and financial rewards are given based on cost savings. As such the ACOs provide an excellent opportunity and make a collaborative model financially viable. At Montefiore, which I collaborate with, 1/3 of patients have a behavioral health diagnosis on top of a medical diagnosis and these patients have a 50 to 60% higher cost utilization than people without a psychiatric diagnosis. Chronic kidney disease patients show the greatest value, other high value opportunities for integration saving include Congestive heart failure and diabetes. There have been 23 recent studies looking at how an integrated medical-behavioral model impacts those with persistent serious mental illness and cost of care. The three largest studies the Pathways, Impact, and Missouri study found typical cost savings of 5-10% using this approach. More importantly In the Missouri health study(where Missouri established community mental healthcare centers for Medicaid patients with SPMI, comorbid medical issues, and substance use disorders) they not only showed cost savings of 8.1% but independent living increased by 33%,vocational activity by 44%,legal involvement decreased by 68%, and psychiatric hospitalizations decreased by 52%.

Just like diabetes mental illness affects every aspect of the patient's life, only more so. Now we are not a voice in the wilderness. Everyone is talking integrated care. Just this past April I sat at a NAMI lecture where two psychologists from the Psychiatric institute at Columbia described their collaborative attempt to bring an internist into a Psychiatry clinic. They talked about the dismal medical care most patients with major mental illness receive. People with defined major psychiatric disorders (Schizophrenia and Bipolar Disorder mostly) live on the average 25 years less than the general population. Approximately 30 % of the death comes from suicide and the rest from medical illness more often than not secondary to manifestations of the disease and it's treatment. Cigarettes have declined in the general population in the US to 19% of adults. In patients with serious mental illness the rate is over 40%. Cigarettes have been estimated by themselves to account for 20% of the premature mortality robbing people on the average of 14 years. Behavioral factors including a poor

diet and a lack of meaningful exercise leading to a high incidence of obesity are other major ingredients in a toxic brew. Finally if you also factor in substance abuse, including alcohol and other drugs, all of these behaviors account for 40 % of the premature mortality. People's life spans are also determined by several other factors. Genetics accounts for 30%, social factors 10- 15%, the environment 5- 10%, and health care 10% it certainly seems like our focus to provide optimal health is a bit whacked. Presently in the US only 5% of our health-care budget is spent on optimizing behaviors. This is certainly not proportional to the need. Though death is the ultimate loss what is even more heart breaking to me is that many of the people with mental illness never really get to live. The bar is set so low. Only 10 % of patients with Schizophrenia are working at competitive employment 10 years after diagnosis and only 20% are doing any kind of work.

In the 1950s people with serious mental illness were warehoused in large institutions called asylums. There were 500,000 people so housed. When antipsychotics, the first being thorazine, were introduced the thought was people could be cared for in a much less restricted environment. So began the deinstitutionalization of mental illness. What was so full of hope has become a national shame and tragedy. There are presently approximately 50,000 chronic mental illness beds in the US and there has been a trans institutional shift of our mentally ill to the streets and the jails. For example there are estimated to be between 3-4 million people suffering with Schizophrenia for a variety of reasons less than ½ are getting any therapy. The biggest psychiatric providers in the US are the Los Angeles County Jail and Chicago's Cook County jail. In Miami it is estimated that 85% of the chronically homeless suffer from a major mental illness, mostly involving psychosis. How did this national shame happen? When the asylums were closed there were supposed to be community mental health centers that were to provide comprehensive care. Unfortunately the funding to create an adequate supply of these psychiatric homes never materialized. Also the homes created were often poorly run, underfunded and of limited use to the sickest in the population. There are some shining lights, but they tend to be the exception not the rule. Ann's and my personal experience started to form our thoughts on what needed to be done. As we have taken on the mission to provide care it has become clear that we are onto something. The entire psychiatric care paradigm has to change.

E. F. Torrey in his book Surviving Schizophrenia stated that it does not need to be a Psychiatrist that takes care of someone with Schizophrenia. It just needs to be a healthcare provider with a strong personal interest that is willing to go the extra mile. Specifically he said that an Internist with a strong interest and background in Psychiatry could be uniquely suited to be the primary captain of the bio psychosocial needs of those that suffer serious mental illness. Certainly a Psychiatrist with a strong medical background would also be a good choice. However we are who we are, so our model has the internist at the helm. I understand that I have, because of my personal life circumstances, devoted a bit more resources than most internists to learning psychiatry so ideally elsewhere a psychiatrist would be part of the team. Our goal is to provide a setting in which we can restore optimal health. What we mean by this, is we want to restore the body and the mind of the individual so that the individual has a sense of purpose and self. This will enable them to have the ability to form relationships and become a productive member of their immediate

community and society. We want it all. We want vital individuals with optimal physical functioning, pain free both physically and emotionally enjoying long and fulfilling lives. We want to restore hope.

So what do we do when someone first comes to us? The first step is getting to know the sufferer and hopefully also engaging their family, if available, at the same time. Forming this therapeutic relationship is the critical first step. Often these young adults are in a lot of pain. I try to use Xavier's Amador's approach of listening, empathizing, agreeing, and finally partnering with the patient. Even with the most burdened patients who have anosognosia, the unawareness of their illness, this approach often bears fruit. You need to make the patient feel safe and accepted. I am a bit touchy feely and depending on where they are in their illness as many actively psychotic patients do not want to be touched, my physical demonstrativeness helps show I really care. Hugs really do help. Being an active cheerleader and recognizing that the road to recovery will almost always have a few detours allows the patient to relax and know that even if "they screw up" you will never abandon them. Compassion really goes a long way. Once you have established a relationship, the next step is when medicine is needed, is to put the patient on the best medicine available for the condition. Next you have to be an excellent internist and not accept the "inevitable" side effects but work to minimize the side effects and augment the beneficial actions. This is what we first learned with our son and now have actively shown definitively with others. The clozapine could be managed so that the side effects were quite tolerable, and certain other medicines and modalities augmented his recovery. What we found uniquely important, almost a true magic bullet, was exercise. Before Daniel's psychosis was controlled he would

just break down when he tried to exercise but once his psychosis was controlled he became a running dervish. Daniel has now completed 4 1/2 Marathons. So since we have been able to maintain our gym and physical therapist in the office we have begun our patients on exercise programs. Daniel's weight went from 165 lbs at the start of clozapine to 140 lbs. We have replicated this experience almost universally in our population. It really is quite remarkable to see people who have not moved for years really pushing. They just feel better. The data on exercise and mental health is really robust and comes with only positive benefits. Of all the cognitive enhancers that we have used exercise is by far the most effective modality. We also concentrate just as we did before with our diabetics on diet. Comfort food to relieve stress is a way of life in the US. It is a bit depressing that a quarter of all vegetable consumption in the US are French fries. Our mesolimbic reward pathways get a dopamine surge when we eat food that we enjoy. Especially people that are stressed reach for chocolate or candy 65% of the time, and Ice cream at 56% is a popular choice. Only 14% reach for fruit and only 8% will eat vegetables in this setting. So it is not an easy sell that vegetables and fruit have to become the mainstay of your diet but repetition and persistence have paid dividends.

Recently we have had the opportunity to work with Montefiore Hospital. In 2011 we joined their ACO. It was 1 of only 32 Pioneer ACOs set up by the affordable care act. This ACO set up with CMS/MC as part of the affordable care act (ACA) put Montefiore at full risk. This meant that Montefiore could lose 10% as a worst case scenario, or be paid an additional 10% depending on their performance. As it turned out they have been the most successful ACO set up in the ACA. On average savings were over \$100/year/patient. ACOs overall across the US saved CMS over 80 million dollars in year 1, and over 92 milion dollars in year 2. My group was the single entity that did the best in the Montefiore ACO and we were rewarded by sharing in the cost savings. In 9/13 ago Henry Chung and Sally Rickett 2 psychiatrists that head up the Behavior Health of the ACO and Montefiore's Contract management Organization approached my group to work with them in a Behavioral health initiative. Henry Chung has spent much of his last 10 years exploring ways to integrate Behavioral Health into general medical practices. As part of an ongoing grant they have provided a psychiatric social worker to work with our older patients. They are specifically targeting people with depression and anxiety. We have been using the PHQ-9, which is a depression screen given to all of our patients on every visit as a screen to identify people that may be in need. We have been doing this since the start of 2014 and after a little initial reluctance on the part of the patients and other doctors this has become an integral and almost seamless way to identify and treat patients in need. In 4/14 a clinical psychologist started seeing patients in the practice. She had worked with severely ill, frequently homeless individuals in the past. She has been helpful and now has seen some of our sickest patients and is starting to make some headway. She has done mostly interpersonal therapy but I am happy to report, is trying to do some cognitive behavioral therapy as well. Dr Mandel, my wife, and I have also taken an online course on CBT and we are starting to attempt to use some of the approaches we learned.

So I am still in the process of putting together the resources that we need to provide a holistic encompassing, dare I say embracing approach. We are presently actively engaged with Montefiore to try to get a more full time psychiatric social worker and another social worker that could act as a case manager and therapist. The ACO continues to expand and now provides help with housing. If you do not have a stable place to put your head down on a pillow everything else is bound to fail. Sally Rickett, a clinical psychiatrist with a very strong internal medicine background who is the head of behavioral health for Montefiore's cmo which covers 250K lives has joined our effort to further expand. We still need to more engage our patients in cognitive remediation and provide life skill coaching. I dream of doing family therapy. An active supportive family is often the key for full recovery. They just need to be taught the correct approaches and often after struggling for so long they need to be given hope. Hopefully social workers will be assigned to assist with both educational and work opportunities. Drug counseling and testing, alcohol abstention, and cigarette cessation my wife and I already emphasize, and I hope our other practitioners will help. Social isolation remains an enormous problem and I hope that we can hire a recovered patient peer support specialist to help be a guide to recovery for our patients. My next door neighbors are called Bronx wellness and we have used their resources. They are avid practioners of Tai Chi, Meditation, yoga, massage therapy and acupuncture. Some of my patients have been referred to them with good results. I hope to team up with Fountain House or provide a similar working club house model to further help our patients overcome isolation and integrate back into society as fully functional contributing citizens. Finally we need to use Kendra's law, and for at risk patients that are showing the potential for harming themselves or others we need to use Assisted Outpatient Treatment so they do not end up on the street , in the hospital, in jail or worse. When all else fails we cannot be afraid to hospitalize.

In the future we hope to see a transformation in the way healthcare is delivered. We can and must do so much better. It is time to change the way medicine is taught and practiced. Our healthcare system is so expensive and so dysfunctional and the data on health-care disparities in different societal strata is increasingly disturbing. Another problem is the condition of our health-care providers. There are unprecedented rates of burnout and compassion fatigue, and the number of medical errors that occur is appalling. We need to take our technology and continue to improve upon our ease of communication; we need to bring the healers touch back. We need to stop being so reductionist and not treat disease but treat the person. We have to truly practice psychosomatic medicine and never ignore the social context, and finally we have to teach newly minted doctors that to truly care for your patients you need a fully integrated approach. If we do all of this robust recovery will be the norm and not the exception. With recovery stigma will start to melt away.