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Extending the Effects of Addiction Treatment for Adolescents: An Interview with Mark Godley, PhD and Susan Harrington Godley, RhD

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Introduction

Over the last half century, the treatment of adolescent substance use disorders (SUDs) has evolved from abusive resocialization regimes (often depicted as "tough love") to a clinical folk art to a growing menu of science-guided helping interventions. Drs. Mark and Susan Godley have helped lead the movement toward science-based addiction treatment of substance-affected adolescents and their families. One of the great honors of my life has been the opportunity to work with Mark and Susan Godley on various research studies over the past 25 years. In the fall of 2012, I had the pleasure of interviewing them about their careers and some of the lessons that can be drawn from their work. Please join us in this discussion of adolescent addiction treatment and recovery in the United States.

Early Careers

***Bill White*:** How did you each come to specialize in research on adolescent addiction treatment?

***Mark Godley*:** Two early experiences shaped my decision to pursue a career in addiction treatment and research. The first goes back to the late 1960s where I learned firsthand about the good, the bad, and the ugly sides of alcohol. Had I been a teen in contemporary times, there is a very good chance that I would have been court-ordered to treatment where well-intentioned counselors would have worked hard to convince me I was an alcoholic and should never again drink alcohol. Four years later as an undergraduate at Stephen F. Austin State University, I worked for a professor with a behavioral psychology background

who taught coursework and did research on alcoholism. He enlisted me in a videotaping study of students in drinking situations, which taught me about the subtle but undeniable effects of social learning on drinking behavior in social settings. I recall wondering at the time, "Could social settings contribute to pro-social behavior too?"

So, from my early "fieldwork," I decided to pursue graduate studies in alcoholism assessment and treatment. I enrolled in the Worden School of Social Service at Our Lady of the Lake University of San Antonio, and although the practice instructors were largely neo-Freudian, they gave me great latitude to pursue my interest in behavior therapy. It was the golden age of behavior modification and therapy, and I had been reading many innovative and exciting articles by Dr. Nathan Azrin and his colleagues at the Behavior Research Lab located on the grounds of Anna State Hospital in southern Illinois. In 1974, I read two articles that had a profound effect on my career. The first, by Israel Goldiamond, made a compelling case for broad spectrum assessment of all life health areas before arriving at a treatment plan, and the second was A Community Reinforcement Approach (CRA) to the Treatment of Alcoholism by George Hunt and Nathan Azrin. These early papers continue to influence the work of our institute.

Susan and I were married that year and the following year she and I set our sights on getting to southern Illinois – she to enter SIU-Carbondale in their behavior modification program and me to start my career in addiction treatment while (hopefully) working with Nate Azrin on the Community Reinforcement Approach.

***Bill White*:** Susan, was your path to specializing in research on adolescent addiction treatment similar?

***Susan Godley*:** My doctorate was in Rehabilitation, specifically as it related to vocational rehabilitation. I was always attracted to the research, statistics, and program evaluation courses. I thought I would end up teaching at a university that had master's degrees in vocational rehabilitation. My first degree and job was in orientation and mobility, which is the method of teaching those who are visually impaired how to get around with a cane. After a master's in behavior modification, I ended up working in job placement for those with disabilities, so pursing a doctorate in rehabilitation was a natural path for me. I had always seen myself in the "helping profession," but specifically was interested in being able to study how effective attempts to help were –regardless of the human problem that helping professionals were attempting to help ameliorate.

After finishing my doctorate, my first job was as a program evaluator at a community mental health center. This center served a county in Southern Illinois, and it was comprehensive and included services for those who had severe mental illness, substance use problems, were in crisis, and for children and adolescents. In my doctorate, I had learned an approach to program evaluation that included measuring inputs (processes), intermediate outcomes, and outcomes to evaluate different programs. In my job, I put in place indicators for all these different programs and would give regular feedback to the executive and program management. I was fortunate to be in a place where I learned about the treatment trends for all these problems and also indicators of quality treatment, since the center was one of the first to receive JCAHO (Joint Commission on Accreditation of Healthcare Organizations) accreditation.

With minimal funding, I decided to work with the mental health program, and we devised a randomized clinical trial to evaluate what might roughly be called a type of case management. During that time, de-institutionalization had not taken place to the degree that it did later, but there was already a lot of emphasis on keeping individuals out of the state mental health facilities (or state hospitals as they were called then). The study was ultimately called "paid friends for frequent recidivists," and the experimental intervention consisted of pairing individuals with SMI (serious mental illness) with a college student who would spend time with

them engaging in what we now call "'pro–social" activities in A-CRA (Adolescent Community Reinforcement Approach).

I particularly remember how painful it was for the director of the mental health program to go through the process of randomizing participants to condition because she wanted everyone to receive the "paid friend." Ultimately, we were able to publish this study and did find that those individuals in the "paid friends" group reported more physical activity, more independent living skills, achievement of more vocational/educational goals, and better medication compliance. We also found that those who were hospitalized were likely to have a substance use problem. My work with this population also led me to read about Assertive Community Treatment (ACT), which was being developed by Test, Stein, Bond, and Witheridge.

***Bill White*:** Was there much preparation for this area of specialization provided by your respective doctoral programs?

***Susan Godley*:** I would say that the research, statistics, and program evaluation classes provided a background for the skills I needed in those areas. My exposure to treatment for those with mental health and substance use problems through my work at the community mental health center and the contract work I did helped me understand some of the needs and challenges of work across multiple areas of human service. For example, I later led an evaluation of a multisite project in Illinois implementing services for those with mental illness and substance abuse. The evaluation included both quantitative and qualitative components, and the need for integrated treatment approaches for individuals who have major mental health and substance use problems was abundantly clear. The field still struggles with these issues today over 20 years later.

The department where I received my doctorate had a special emphasis in substance use treatment, but I don't think I took any courses in that area. Most of what I knew about substance use treatment came from living with Mark and interacting with staff that worked at the program he was directing at the time and from my interactions with the program at the community mental health center where I worked. I'm very glad that many of my professional experiences were so close to those in actual practice – rather than solely through a research track – as I think it provided me with a very valuable perspective.

***Mark Godley*:** My clinical and research interests were set in my undergraduate and MSW curriculum. My doctoral studies did not include coursework in addictions. My curriculum was primarily focused on acquiring the research skills to prepare me for a career as a research scientist. I was very fortunate to study in a program with several accomplished statisticians who had written textbooks in research design, multiple regression analysis, and nonparametric statistics. My most productive coursework was in program evaluation. This course integrated research design and statistical analysis with different theories of program evaluation. Since I was working in the alcoholism treatment field and pursing my PhD at the same time, I was able to extract data from case records or conduct program evaluation projects at work and then analyze the data for my coursework. It was a great learning laboratory and made my coursework both meaningful and exciting at the same time. I was busy but full of purpose and discovery, and I quite enjoyed it. Combined with my clinical experience and MSW degree, it really prepared me for my career at Chestnut.

***Bill White*:** Mark, you referenced your early work with Dr. Nathan Azrin on what came to be known as the Community Reinforcement Approach (CRA) to the treatment of alcoholism. Could you describe that early work and how it has informed your subsequent research interests?

***Mark Godley*:** In southern Illinois, I interviewed for employment with two people – Floyd Cunningham, Administrator at a community mental health center in two

southern IL counties, and Nate Azrin. Floyd hired me to direct the mental health center's alcohol treatment programs, and Nate suggested we form a research partnership to study CRA with alcoholics admitted to outpatient treatment. By late 1975, Dr. George Hunt was training me on CRA. Soon after, we started working with Nate and others on an outpatient research study on CRA. In 1976, I hired Bob Meyers, who had not yet completed his BSW but was full of energy and turned out to be a CRA natural. Bob went on to work with Bill Miller at the University of New Mexico, and today, Bob is the premier interpreter and trainer on CRA and its application to working with family members who want to get help for a loved one. During my 11 years at the community mental health (MH) center, I picked up valuable clinical and program management skills.

One early CRA experience I'd like to share involved several of us, including Susan, Bob, and our colleagues, John Mallams and Bob Sisson. Through the goodwill of the Carbondale Park District, we acquired at no cost the use of their community center on Saturday nights, where we operated the United Club –a social club for recovering alcoholics. I had seen from videotape how students drinking cued drinking in others. At the United Club, I learned how positive behavior by one or two participants could have a similar cascading effect. Now, imagine a dance floor full of relatively shy, newly recovering alcoholics dancing to Waylon Jennings and Jerry Jeff Walker music. Susan can tell you more about this as she accepted all invitations to dance. By day, we practiced CRA in our offices and in patients' homes; on Saturday night, we observed CRA in action (see Mallams et al., 1982).

Many people wonder about the name – Community Reinforcement Approach – what does it mean? Even before it became an acronym, the meaning was obscure. It is derived from operant learning and essentially means that the therapist works with the patient and those in the patient's immediate community to create an environment that is sufficiently dense with positive activities (reinforcement) to compete with alcohol and drug use. Returning to use would result in time-out from positive reinforcement.

My work on the Azrin outpatient study of CRA and Disulfiram (Antabuse) treatment along with the work on the United Club project taught me a valuable lesson – one that has, for me, become the cornerstone of my career in community-based outpatient treatment. It can be summed up as follows: our patients need a lot of encouragement to try new things, and counseling is at best about one-third of the role of a good clinician. Being a coach and a cheerleader may be more important. We learned that opening a social club and posting announcements in the clinics wasn't sufficient. By the time we were achieving a full house on Saturday nights, we were not only offering live music and coordinating a potluck dinner, but mailing flyers out, making phone calls to our patients to encourage them to attend, and we even had volunteers driving passenger vans to pick up those who needed transportation. We ended up doing pretty much what the evangelical churches do.

In CRA, this is now known as the "systematic encouragement procedure" and without it, not only would the social club have failed, but so too would untold numbers of new reinforcing activities that our patients "agreed" to do but couldn't quite do without a kind therapist providing systematic encouragement both in and outside a session. Today, with text messaging, there are so many more opportunities to check in and provide systematic encouragement. I hear lots of stories from CRA therapists we train about how they do this. It can be a great aid to increasing pro-social activities that compete with substance use.

Pretty much everything we do through Assertive Continuing Care is derived from either a) Susan's early work to provide support to the severely mentally ill; b) Test and Stein's seminal publications on Assertive Community Treatment; and c) CRA and the systematic encouragement procedure. For example, we decided to do home visits because we learned that there are way too many obstacles to adolescents

reliably attending clinics. Rather than countenance myriad dropouts, we decided to encourage continuing care (CC) by meeting them at locations convenient to them such as school, home, parks, or even take them to their probation officer for a check in and have a session in the car. We also do a lot of behavioral rehearsal (role playing) with clients as a way of practicing a skill so that they will be more likely to use it in their upcoming "homework" between sessions. This is another feature to systematic encouragement.

The Lighthouse Institute

***Bill White*:** Could you share the story of your both coming to work at Lighthouse Institute (LI), the research division of Chestnut Health Systems?

***Susan Godley*:** Basically, as part of a two-career marriage, I moved to central Illinois with our two children after Mark had begun his work at LI. Initially, I did contract work and in that capacity, worked with some other government entities (local health department and the mental health code department for Illinois). For example, for the county health department, I led a primarily qualitative evaluation of a home visiting project for young unmarried mothers. For the state, I worked on a system of care grant that they had for children and adolescents. At the same time, I was doing contract work for the fledgling Lighthouse Institute, which at that time had about 3 employees – you, Mark, and a part-time assistant. As I recall, my work included some statistical analyses of a survey of substance use treatment professionals, and at one point, I worked on a proposal to evaluate a multisite project to evaluate a MISA project (which we won). In those early days at LI, we were casting a pretty broad net to bring in program evaluation projects in the substance use and mental health treatment fields. If there was an opportunity, we pursued it and often won projects that defined our next area of work. I would say that at a certain point, we wanted more control over what research questions were being addressed, and how projects were carried out, and this eventually led us to write our own project and research proposals.

***Mark Godley*:** After 10 years as a program director in a community-based alcohol treatment program and having received my doctorate, I was interested in opportunities that would allow me the ability to do more research. Toward that end, I had conducted a limited search for employment in Illinois. I had actually gotten pretty far with Southern Illinois University-Carbondale to head up their growing addiction studies program, but that fell through when they rejected my idea to combine my teaching position with my current program director position in order to create a clinical and research training lab for students. This was in 1986 and at that time, I was also serving on the board of directors of the Illinois Alcoholism and Drug Dependency Association. After one of our meetings, I was sharing with one of my fellow board members, Russ Hagen, how I was interested in a position that would allow me to conduct addiction treatment research. I was completely unaware that he, along with you, Bill, had started a research and training institute at Chestnut Health Systems.

Over the course of the next several months, Russ and I would get together after board meetings – once in Chicago's Union Station, another in an airport – to get to know each other better and to discuss our mutual ideas about the fledgling institute. In earlier years, I had brought you in to my organization to do some staff training, and I was impressed with your breadth and depth of research and so I was excited thinking about the possibilities of joining both you and Russ at the new institute. My career started with "ground floor" opportunities as an undergraduate, continued that way as a clinical program director in southern Illinois, and now I was about to join Chestnut's fledgling Lighthouse Institute. It seemed just perfect. I accepted the position of Director of Research & Development late in 1986, and it seemed like forever until I finally started in April 1987. Once at the Institute, it took time, but slowly we built up a practice conducting project evaluation studies on different

federal grants and for state and local organizations. Ten years after joining the institute, we began conducting randomized trials of both primary treatment and continuing care interventions funded by NIH and SAMHSA.

***Bill White*:** Mark, what was the state of continuing care following adolescent treatment in the United States when you first began your research?

***Mark Godley*:** Susan and I started our research on adolescent continuing care in the early 1990s and at that time, there was very little research on what was then referred to as "aftercare" on adults and nothing in the way of controlled trials for youth. The Project MATCH study contained an aftercare study arm, and there was an important chapter in Miller and Hester's books on alcoholism treatment by Donovan and Ito (1986) and Donovan (1998) that began to argue for the concept of continuing care rather than aftercare, but the work on adolescents was limited to a couple of observational studies of outcomes showing that youth with aftercare services seemed to do better. Unfortunately, such studies are very weak on causal inference because clients who are most likely to do well are also those who follow therapeutic recommendations and move to aftercare.

In our early work, we observed that fewer than 40% of youth discharged from residential treatment were receiving aftercare services, and when we expanded this study to evaluate linkage to continuing care in three different states, we consistently saw linkage rates around 35%. Thus only about 1 in 3 patients (youth and adults) received continuing care in actual practice. So much has been learned about ways to improve continuing care initiation over the past 15 years. Work by Steve Lash and recently by Maxine Stitzer's group at Hopkins points to the value of "inreach" (i.e., continuing care counselor meets with client before discharge from primary treatment episode) and minimizing the time to first appointment after discharge. This approach can double or better the rates we observed in typical practice.

In our research with adolescents, we have chosen to follow an "assertive" approach to continuing care, which involves counselors doing home or school visits in order to reach youth. With this approach, we can initiate CC to more than 90% of youth discharged from primary treatment (regardless of type of discharge). The vast majority of these youth are linked within 2 weeks of discharge; thus meeting the Washington Circle continuity of care performance standard. Our work with Bryan Garner showed that regardless of type of discharge, youth randomly assigned to an assertive condition vs. usual referral to continuing care were more likely to be linked to CC within two weeks of discharge and more likely to have full symptom remission at 3 months post-discharge. I am confident that research has established some highly effective approaches to improving continuing care initiation rates. In so doing, we can greatly improve care continuity, which is likely to lead to longer periods of remission, shorter relapses, and improved recovery outcomes. Now we puzzle over how to make these methods acceptable and reimbursable in actual practice. To date, there has not been much progress on this front.

***Bill White*:** How did the Lighthouse Institute come to specialize in what happens after addiction treatment and how to extend and amplify the effects of addiction treatment?

***Mark Godley*:** As a clinical director of treatment programs for adults and adolescents with SUD in the early 1980s, I was concerned that too many of our patients experienced a return to use after they left treatment. I created a position for an aftercare counselor whose job it was to follow-up with patients after discharge, train relapse prevention skills, and provide supportive counseling. Years later, as our research group at Chestnut was beginning to develop focus and establish our main areas of interest in the mid-1990s, two areas of expertise clearly emerged. It is interesting

that our senior staff came to these interests based on different experiences and interests: 1) aftercare or continuing care studies, which came largely from Susan's research to support patients with severe mental illness and my clinical work in the areas of aftercare and relapse prevention; and 2) patient tracking for longitudinal follow-up studies. It is also true that in the first federal grant Susan won, she included an aftercare component because the individual who was the clinical director of the adolescent program at the time that application was submitted said this was a need that was not adequately addressed.

The Recovery Management Checkup (RMC) studies led by Drs. Michael Dennis and Christy Scott grew out of an earlier project in which we were developing the GAIN biopsychosocial assessment with a 90-day patient monitoring (GAIN M90) follow-up system. This led to 14 consecutive years of NIDA funding and longitudinal studies establishing that quarterly RMCs resulted in better treatment utilization and improved recovery outcomes for adults. In collaboration with engineers at the University of Wisconsin-Madison, the next iteration of RMCs will be smartphone-based and result in RMCs improving from quarterly to multiple times daily! Even more exciting, patients using these smartphone apps learn their statistical likelihood of relapse based on results of their brief daily assessment and can access several intervention apps, including one that allows them to speak to a counselor.

We are already seeing the innovative use of smartphone technology to help people lose weight and tap into a social network to get support for their efforts. There is reason to believe that the same can happen for those with substance use disorders. Of course, for patients with significant impairment in multiple life-health areas in addition to addiction, we believe that face-to-face assertive approaches that combine patient advocacy, linkage to needed services, skill building, and the development of multiple reinforcing pro-social activities networks such as mutual support groups will continue to be important.

***Bill White*:** Mark, you have often referenced the importance of a 1994 LI retreat in shaping LI's research agenda for the coming years. What decisions were made at that retreat that were so crucial to the future of LI?

***Mark Godley*:** Your question references a watershed event in the organizational life of LI. From the time you started our institute in 1986 to 1994, our research was limited to conducting 3rd party evaluation studies of other investigators' federal and state demonstration grants. Even before we came to Chestnut, Susan and I were committed to continuous quality improvement of programs by monitoring key program performance indicators at regular intervals, meeting with stakeholders to discuss the findings, and then moving to a discussion of what needs to happen to improve performance. This is a kind of formative evaluation that is talked about a lot, but it does not seem to happen that often in practice. When we came to LI, we were committed to putting this kind of evaluation into practice to improve program implementation, which in turn should lead to better program outcomes. What we learned during those early years was that even when we were producing the data and facilitating program evaluation and improvement meetings for other organizations, only a few programs took advantage of the opportunity. The obstacles were numerous and included issues like insufficient management time devoted to managing a time-limited project, staff turnover, a lack of experience in using data or a preference for discounting the data and relying on clinical intuition, and so on. At times, we felt as though we had a bigger investment in program improvement than the project directors.

Largely born out of this frustration and belief that we needed to have more control over implementing the actual intervention as well as the evaluation, we evaluated our strengths, honed these into research themes (e.g., adolescent treatment, longitudinal patient follow-up, recovery management/continuing care, and patient assessment) and then set our sights on

investigator-initiated grants through NIH. That was the major outcome of our 1994 retreat, but getting to the point of winning an NIH grant award took another two and half years. It seems that our proposal – to evaluate a continuing care intervention for adolescents – was not "an easy sell." After our first submission of the grant, our assigned project officer at NIAAA, Dr. Bob Huebner, invited Susan to attend an NIAAA-sponsored workshop conducted by seasoned investigators on how to write competitive grants for NIAAA. We had one of the mentors subsequently review a 2nd version of an Assertive Continuing Care proposal. After his review, he told us it was a worthwhile proposal, but that it just wasn't the sort of study that would get funded by NIH. We did have more work to do, and it took a third submission, but we did get it funded! This is an example of the perseverance one needs to attain NIH funding and for us, it was especially difficult since our early mentoring did not include working closely with NIH-funded principal investigators who could help shape our proposals. Ours was on the job, trial and error experience, with some outside encouragement combined with determination. In 1997, we won our first NIH grant and along with grants from SAMHSA and private sources, we continue to pursue research on the themes developed at the 1994 retreat.

In 2006, we adopted another theme, implementation science research (see for example, Garner, 2009; S.Godley et al., 2011, Flynn, et al., 2012; Titus et al., 2012). Because Chestnut's mission is to improve the quality of life through excellence in service, our institute operationalized that mission as "improving the quality of service through research and training." Because of our community-based roots and mission to improve practice, we commercialized three of our products that have been found effective: 1) the GAIN family of instruments for screening, assessment, and research; 2) A-CRA, and 3) ACC. In fact, we became interested in and pursued implementation science research based on our approach to disseminating and implementing these evidence-based practices in hundreds of organizations across the U.S.A.

Bill, I'm sure you'd agree that we are all deeply indebted to the Chestnut board of directors, in particular, Vic Armstrong, Sr. and Dr. Judy Smithson and to the vision of CEO Russ Hagen, for their willingness to provide the early investment of funding for these efforts. It is extremely rare to see a research and training group of our size in a community-based organization, and yet it makes so much sense. Our research and publications are deeply influenced by this relationship.

***Bill White*:** Mark, for readers unfamiliar with LI, could you give a brief overview of the scope of activities at LI today?

***Mark Godley*:** Sure, we are interested in studying ways to simplify but extend what we think are active ingredients of the Adolescent Community Reinforcement Approach. Toward that end, we are about to start our latest continuing care trial. We will be evaluating the effectiveness of telephone-based continuing care with adolescents that will focus on them setting short-term (weekly) goals to engage in pro-social activities and with positive friends and family members after they come out of residential treatment. Similarly, we are starting up another study to train mentors working with youth who have a substance use disorder and are in the juvenile justice system. Mentors will be trained in these same A-CRA procedures, and we will study their ability to form relationships with the youth that lead to more engagement in pro-social, recovery-oriented activities and outcomes.

Institute scientists Christy Scott and Michael Dennis are also studying the application of smartphone technology to conduct rapid self-assessments with the ability to instantly access a suite of interventions up to and including speaking to a counselor – all of this available 24/7. This is a very exciting, cutting edge continuing care study, and we are hoping to win NIH funding to expand this into a clinical trial. This work has great potential to intersect with your writings and research on recovery

support, management, and recovery communities. In other areas, our research on assessment has now resulted in a suite of instruments known as the Global Appraisal of Individual Needs, or GAIN. The GAIN instruments now come in the form of a Short Screener for rapid screening of substance and mental health disorders, a quick assessment version, and extended assessment versions that support patient placement in the correct ASAM level as well as extensive treatment planning support. The assessment versions also have 90-day monitoring versions to facilitate clinical outcome monitoring and research. Today, there are nearly 200 published studies in the literature using one of the GAIN family of instruments.

Our work on implementation science continues to grow, and we have conducted studies on our dissemination and implementation work on the Adolescent Community Reinforcement Approach, Assertive Continuing Care, and the GAIN instruments. This work has also led us into studying the process of competency development by clinicians and its relationship to counselor turnover in the field in studies led by Bryan Garner. Since it is a fairly expensive process to train counselors in evidence-based practices, we need to better understand where and how to invest training dollars to promote cost-effective dissemination of EBPs. We also need to study strategies of how to sustain and prevent EBP drift over time – and just as important – when drift might be in better service to the patient as opposed to diluting treatment effectiveness.

Finally, we continue to expand on our mission to disseminate evidence-based practices. We are in the process of signing three-year agreements with several states to begin competency-based training on the GAIN, A-CRA, and ACC. We will start by training two provider organizations in each participating state and then in years 2 and 3, work on expanding to other organizations, using a train-the-trainer approach with support from our institute. We also hope to engage these organizations and clinicians to participate in our implementation research. One of the problems in conducting implementation science research is having enough participating organizations to make statistical analysis meaningful. We now have over 100 organizations in our database, and with this new project, the number will further increase, allowing us to more effectively test theories of dissemination and implementation.

Early Adolescent Treatment Studies

***Bill White*:** Susan, your work in assertive continuing care with adolescents began with an Office of Treatment Improvement Grant in 1989. Could you describe that study and how it set the stage for much of the later work of LI?

***Susan Godley*:** Yes, an RFA was issued by the Office of Treatment Improvement, which was later to evolve into the Center for Substance Abuse Treatment, or CSAT. This RFA was clearly for a "demonstration project," and there was a lot of flexibility regarding the project that could be proposed. I met with the individual who was then the director of the adolescent treatment program. Her name was Joleen Baum. I don't remember if the specific RFA was targeted at adolescent treatment – I don't think it was, but for some reason we had decided to target adolescents. By this time, Chestnut was already well respected in the state for their adolescent treatment program. Like most adolescent treatment in those days, it was primarily long-term residential and was enhanced by the involvement of professionally trained clinicians and work with a PhD clinical psychologist who had taught at a local university (Al Sodetz). I'd have to say that at that time, I believe that residential treatment was available for adolescents who today would be referred to outpatient treatment. These were days before the ASAM level of care criteria and the Illinois state mandate that required the use of ASAM criteria in deciding what level of care adolescents should be recommended for.

I asked Joleen what she thought was missing in the current service array for

adolescents with substance use problems. She emphasized two areas in her answer. First, she noted that there were a lot of young people who needed treatment, but who never engaged in treatment. These were young people who might make it to an assessment appointment, which determined they needed treatment, but never actually entered treatment. She also noted that Chestnut's residential program pulled from a large geographical area in the state of Illinois. She felt that they were doing a good job treating adolescents while they were in residential treatment, but she was concerned about what was happening to them when they were discharged back to their home communities. In many cases, these were very rural areas, and she knew that "aftercare" services or mutual support groups for teens were non-existent. Further, they just did not know what happened to these youth after they returned home – unless they ended up back in treatment after a run-in with law enforcement.

Building on my earlier "paid friends" study (for those with SMI) and what I had learned about others' work with ACT, we decided to add "case managers" who would work with youth during their screening and assessment process, during residential treatment, and also when they were transitioning back to their home communities after being discharged from residential treatment. We researched what had been written about typical case management activities and these consisted of assessment, planning, linking, advocacy, and support. Thus, during the pre-admission phase – the case managers did outreach at schools, juvenile justice, and other settings to try and screen and engage youth who had substance use problems during residential treatment – they attempted to maintain a therapeutic relationship with the youth, and after residential, they either tried to link the adolescents to "aftercare" services in their home communities or provide aftercare groups in the absence of any local services.

One of the early lessons we learned was that many of these youth came from very challenging environments. We knew intuitively that they were going back to environments where they had developed their substance use problem and that would have several triggers for relapse, but we learned even more about how different the residential environment was from their home environment. Besides sometimes being from homes that were impoverished, many of their family members and peers had substance use problems or were not really around to support the adolescent's recovery.

***Bill White*:** Mark, one of the more important adolescent research projects of recent decades was the Cannabis Youth Treatment Study (CYT). Could you describe this study?

***Mark Godley*:** In 1997, the Center for Substance Abuse Treatment put out an RFA to conduct a randomized clinical trial for adolescents with cannabis use disorders. Chestnut Health Systems won both the coordinating center and a research center. With 600 youth in two study arms, testing five manual-guided treatments, this was and remains the largest randomized clinical trial of outpatient treatment for adolescents with substance use disorders ever conducted. Dr. Michael Dennis of Chestnut Health Systems was the research coordinating center director, and he facilitated the design and research support among the research centers in Illinois (Susan Godley, P.I.), Florida (Frank Tims, P.I.), Pennsylvania (Guy Diamond, P.I.), and Connecticut (Tom Babor, P.I.). Each enrolled and randomized 150 youth to either Multidimensional Family Therapy, Adolescent-Community Reinforcement Approach, Motivational Enhancement Therapy/Cognitive Behavior Therapy 5 and 12 session models, or Family Support Network therapy (which also included MET/CBT 12). Each arm consisted of 3 therapies, with the 5 session version of MET/CBT in both Arms. So, one arm compared MDFT, A-CRA, and MET/CBT5; the other arm compared MET/CBT5, MET/CBT12, and FSN (which also included MET/CBT12). MET/CBT5 was a brief therapy that was considered a minimal treatment condition that would probably not perform as well as the others. Overall, the results demonstrated that all conditions were

associated with significant improvement in substance use outcomes and this was especially interesting since at least one of the conditions (FSN) was quite intensive. Results of the cost-effectiveness analysis were suggested that both A-CRA and MET/CBT5 were the most cost-effective.

The Cannabis Youth Treatment project was significant for a number of reasons, but chief among them was the fact that CSAT published all five manuals as effective practices and made them widely available to the field. To date, there are more than 100,000 manuals circulated to providers. As important as this is, CSAT also learned that making manuals available is necessary but not sufficient to promote effective dissemination of evidence-based treatment. CSAT subsequently funded several rounds of discretionary grants, resulting in funding to more than 130 provider organizations to implement MET/CBT 5 or A-CRA, the two CYT treatments that were found to have the highest cost-effectiveness.

***Bill White*:** Susan, you led the A-CRA arm of this study. Could you describe the A-CRA approach in more detail?

***Susan Godley*:** Let me begin by explaining that the CYT study was a cooperative agreement. This meant that each of the four site/treatment PIs that were ultimately funded came in proposing an intervention to study. We decided to propose to adapt CRA, which Mark was familiar with because of his earlier work with Azrin & Meyers, for adolescents and to ask Bob Meyers and Jane Smith to help us with the adaptation and training. About the same time, we were also submitting yet another proposal for the ACC study, and we thought that adding this adolescent version of CRA to ACC case management would provide much needed clinical skills to the repertoire of the case managers who would be providing the continuing care.

Anyway, once the four CYT sites and the coordinating center were funded, the five Principal Investigators got together to arrive at the final design for the CYT study. Now, this study is fairly well known and recruitment and follow-up went remarkably well considering the short timeframe for the study, but in that early planning period, it was a fairly painful process to arrive at a design and the interventions that were going to be tested because each of the PIs felt very strongly about the intervention and research design they had proposed in their original application. Mike Dennis, who was the coordinating center director, deserves a lot of credit for ultimately bringing the group to consensus. Since many of the originally proposed treatments stayed in the final design, the study had the strength that each of the interventions evaluated was implemented and monitored in the strongest way possible, which is not always the case when a researcher is comparing an intervention he or she developed with another intervention.

Basically, CRA is a behavioral approach to treatment. It has a heavy emphasis on skills training, so that participants have skills that compete with substance use. Many of the skills taught are similar to ones taught in CBT approaches, like problem solving, communication, how to increase involvement in what we call pro-social activities. The theory underlying the skills training is that individuals have learned to use alcohol or drugs for many reasons. For example, because it has a way of "escaping" from the problems of everyday life or because it has become the way they have fun with their peers, and they have not learned alternative ways to solve problems or to have fun. So, we try to teach them other ways to deal with life stressors and increase other ways that they can access reinforcement.

There are some procedures that are fairly unique to the approach, or I should say that are labeled in CRA, like "systematic encouragement." This is probably a technique that many skilled clinicians use, but in CRA, it has been operationally defined, and what it means is that while in a session, shaping is used so that a participant actually gets closer to completing a goal. Maybe they want to start working out at the YMCA. So, the therapist would have them

look up the phone number for the YMCA, actually call them in session and get information about hours and costs, and then spend time talking about the details of when and how they will go and then problem solve regarding any barriers that might get in the way of them completing a homework assignment to go to the Y in the next week.

We also recognized that a very important environment for adolescents is the one they share with their parent(s) because most adolescents, including ones with substance use problems, still live with their parent(s). That relationship has often become very strained because the adolescent has begun to have problems in school or with the law due to his/her substance use. We decided to adapt the CRA couple relationship skills for use with the adolescents and their parents. So, for example, we teach communication skills and have a "Daily Reminder to be Nice" procedure, which are basically used to improve the home environment. It is interesting that when parents tell us what they like best about the treatment, what they mention over and over is that they have better communication in the home and rediscovered some positive aspects of their relationship with their child. A-CRA can be classified as a procedure-based treatment, and there are a set of 17 procedures that a clinician is required to demonstrate competency in to achieve full certification.

At the time, one of the ways CRA was different than treatment as usual was the total lack of confrontation related to the interaction with adolescents. Much of "usual treatment" with adolescents had evolved from Therapeutic Community approaches, and clinicians often used a fair amount of confrontation when talking to adolescents about their substance use and related problems. Usual treatment approaches were also often very prescriptive, and adolescents were told, for example, that they could no longer use any alcohol or drugs (or they would be kicked out of treatment) or that they had to go to a certain number of AA/NA meetings – even when there might not be meetings appropriate for adolescents. Given adolescents' developmental stage, neither confrontation nor prescriptive approaches are well received. In contrast, A-CRA therapists were taught to use open-ended questions and the Happiness Scale to drive treatment planning and to let adolescents determine what their homework would be and what their commitment would be to stopping substance use. So, for example, there is a sobriety sampling procedure, which is basically a negotiation between the therapist and the adolescent to try out abstaining for a certain period of time to find out what it is like not to use.

There is also an acknowledgement that the clinician cannot make adolescents stop using merely by saying if they use, they will be kicked out of treatment. (We don't find adolescents that want to be in treatment.) There is also an acknowledgement that other contingencies might have an impact on further use – like a probation officer and urine tests or school requirements or parents. However, during procedures like a Functional Analysis of Substance Use, adolescents are helped to see the antecedent behaviors and consequences to their use in the most important life areas (i.e., with family, friends, at school, etc.).

***Bill White*:** How would you compare A-CRA with other approaches such as motivational interviewing or CBT?

***Susan Godley*:** There are a lot of similarities between A-CRA and both MI and CBT. Some of these similarities are not surprising because Bob Meyers, who was one of the early developers of A-CRA, later worked with Bill Miller, who was a primary developer of MI. Like MI, in A-CRA, there is liberal use of open-ended questions and an absence of confrontation. Like in MI, clinicians use techniques that have come to be labeled as MI techniques, for example, rolling with resistance and supporting participant choice in therapeutic goals. Other techniques modeled by Bob Meyers include the "Colombo" approach to pointing out discrepancies, and "Affirmations" – noting what the client is doing well or progress they have made, and summarizing. The approaches differ in that in A-CRA, we do

not teach clinicians to emphasize "change talk" and instead, put more emphasis on skill training. The skills training procedures always include a short explanation of the skill, a demonstration of the skill, having the client practice the skill, arriving at homework assignments out of the session to practice the skill in real life, reviewing possible obstacles related to the homework and problem solving to overcome these obstacles, and then reviewing the homework in the next session to see what lessons can be learned.

***Bill White*:** Describe the process through which A-CRA has been replicated in the U.S. and in other countries.

***Susan Godley*:** The primary purpose for the CYT study was to develop and test models that could be disseminated in real practice. I remember being impatient about when this was going to happen because for a while, all that happened was distribution of the manuals we had written. I thought that successful dissemination of the models would require more than just writing the manuals and having them distributed for free by the federal government.

Again, Randy Muck provided the leadership to start the dissemination process. In 2003 and 2004, he developed an RFA that ultimately funded 38 community-based organizations to implement MET/CBT5. I was involved with Dr. Susan Sampl in some of the early trainings that were held for the first group of sites that won this funding. I learned a lot from that experience. One lesson I learned was that it was much more difficult to train clinicians to competency in an evidence-based treatment (even a brief one) across such a large number of sites than it was in the CYT study, where there were only 4 sites implementing MET/CBT5. In the beginning of this initiative, there was not a scalable way to ensure that those clinicians who were trained in the approach actually became competent in the approach. Even after several components were put in place to support the training and certification of the MET/CBT therapists, there was variability in the training and certification process because so many different contractors were involved. It was also clear that it would be challenging for the individual organizations to sustain the treatment after the initial training since the funded sites had high rates of turnover.

We had the opportunity to develop a large-scale dissemination strategy when CSAT (under Randy Muck's leadership) decided to fund organizations to implement A-CRA followed by ACC. In 2006, 15 sites were funded. In 2007, 17 sites were funded. In 2008, 14 more sites were funded and 8 were for transition-aged youth and then in 2009, another 34 sites were funded under initiatives called "Assertive Adolescent and Family Treatment." When we learned that CSAT was going to fund a number of sites to simultaneously implement A-CRA, we once again partnered with Bob Meyers and Jane Smith. This time, we worked with them to develop a unified approach to training clinicians and supervisors in A-CRA. We also wanted to take advantage of existing technology to facilitate the process.

We read the studies that Bill Miller and his colleagues had conducted to evaluate the best methods of training clinicians to implement an evidence-based approach. These methods included training workshops, clinical supervision/coaching by a model expert, and the provision of detailed feedback based on (in our model) actual therapeutic sessions. We also decided that we needed to figure out how we would assess a clinician as competent in delivering A-CRA. We decided to define criteria for a certification process after some rather lively discussions among our group of four. There were no other published certification processes for EBPs, so we were on somewhat new ground, but we also knew that there needed to be a way for the funder (CSAT) to know if clinicians, supervisors, and sites were making progress in learning and implementing A-CRA. So, we developed very objective criteria of what would have to be passed in order to demonstrate competency in each specific procedure and how many procedures would be required for certification. Dr. Jane Smith had been working on a very detailed rating manual that

could be used to rate each component of each CRA procedure, and a decision was made for her to complete the manual and for us to use it in this project.

We also decided to have two levels of certification. One was called Basic certification, and we identified about half of the A-CRA procedures that clinicians were expected to complete in six months' time. Our reasoning for dividing the certification process into two levels was to provide a goal for clinicians to work towards that could be reached within a 6-month time period. Then, we worked with programmers who had developed the GAIN computer application to develop a secure website that could be used to upload digital recorded sessions (we called these DSRs), service data, and also provide recorded examples of exemplary delivery of the procedures in real sessions. We also developed a pre-test based on the A-CRA manual, so that a clinician would come to the on-site training with some basic knowledge of the treatment.

Over time, we have developed a number of distance learning classes, which essentially shorten the length of the face-to-face training and in some cases, provide more details than we had been able to provide in the in-person session. An online CRA/A-CRA research course is an example of the former situation and an online A-CRA supervision course is an example of the second situation. Also, over time, we had to develop a cadre of session raters, especially since we set a standard that clinicians would receive feedback on their recorded clinical sessions in seven business days. We wanted to provide good customer service to the clinicians and supervisors we trained, and we thought good customer service included rapid feedback on a consistent basis. We selected clinicians and supervisors who had done well in the certification process and approached them about training to be one of our raters. They had the advantage of having gone through the process themselves and being practicing clinicians in community-based organizations, so they had familiarity with what the clinicians we were working with dealt with in their jobs.

I think that one of the most important components of our training process was that each clinician, supervisor, and site was assigned a coordinator from our team. These were people that trainees could contact regarding any question they had about the certification process or their rating feedback. My belief has been supported by qualitative work we have done: the number one positive comment from A-CRA-certified individuals relates to how positive they feel about their coordinator's support, and they also report it was clear our team wanted them to succeed.

***Mark Godley*:** The spread of A-CRA as well as ACC has been a shared journey with our collaborators, Drs. Bob Meyers and Jane Smith. Together, we gratefully acknowledge Randy Muck (now retired from SAMHSA), whose vision to bring evidence-based practices to the field of adolescent treatment over the past dozen years has taken hold across the U.S. and its territories. Planning our dissemination and implementation approach back in 2006, I think we realized it would be a challenge and certainly that has been the case, but the opportunity to put together a true competency-based learning approach and study its replication across hundreds of clinicians has been one of the most challenging and satisfying projects I have been involved in. And, I think this is the case because it is a manifestation of our mission: to improve practice through research and training.

One of the important lessons that we are learning with this project is a confirmation of what we thought going into it: leadership matters. First, it was important to see that SAMHSA leaders were willing to support dissemination that went far beyond traditional training workshops to include audio-recording clinical sessions with standardized scoring and feedback for competency development, supported by ongoing coaching. Second, leadership from the four developers was important, as they were willing to say to trainees that our models were not going to help everyone, but if you dedicate the time to learn and become competent, you will improve your practice

and outcomes for adolescents and their families.

Finally, we see over and over the convincing importance of leadership within the treatment organization. Those organizations that have it excel and those that don't flounder. So, what does this leadership look like? At its core, leadership in provider organizations sets the direction for the clinical team by saying, "this is the direction we are going in to improve treatment for youth and families. Everyone will be learning this new treatment, I know you can do it and along with Chestnut Health Systems staff, I will support you in learning the new model." These leaders also have the knack for either hiring more committed staff and building on that commitment or developing it among their staff. These leaders are able to maintain a focus on effective treatment as well as deal with the day to day duties that can often consume managers. It's very exciting and fulfilling to work with the leaders of such organizations. If I were to make a recommendation for future training work, it would be to start leadership institutes focused on creating clinical and organizational leaders committed to evidence-based practices and using performance data to help inform future decision making.

***Bill White*:** Susan, what lessons have you learned from this large dissemination effort?

***Susan Godley*:** We learned that it is important to have clear expectations from the funder about what sites (and trainees) were expected to do and to provide the project officer with objective data that measured progress for each clinician, supervisor, and site. To this end, we developed management reports, and these data were used by the CSAT project officers to help them manage the sites and were shared with each site's management so they knew exactly how their clinicians were doing. For example, each month, we would report how far the clinician had progressed in certification (e.g., 3 of 9), how many DSRs had been submitted for review, and what their attendance had been on coaching calls. Not surprisingly, we also observed that if there was an internal champion for implementing the EBP, then expectations were made clear to clinical staff and the implementation process went smoother.

We also learned that if you set expectations, they will be achieved. For example, the first AAFT cohort had no requirements about Full A-CRA certification, which means that a clinician had to demonstrate competency on all 17 A-CRA procedures. We found that once a clinician achieved Basic certification on the first nine procedures, most did not continue on to pursue Full certification. We made Full certification a requirement for the second two AAFT cohorts and gave them a year to achieve it. Once Full certification was a requirement, most clinicians did achieve it, and we found that across the cohorts, we got better and better rates of certification within the stated deadlines.

One unintended consequence we have noticed related to funding for implementation of evidence-based approaches is that often when sites win funding to implement a particular EBP, the organization sometimes drops one that had already been implemented. This might happen because they had implemented the prior EBP based on time-limited funding or because they now have a new source of revenue with implementation of the new EBP. We have also found, however, that if an organization and its clinicians and supervisors had experience with implementing an EBP that required recording therapy sessions and getting feedback on those therapy sessions, they were more accepting of this process when implementing a new EBP. It appears that most therapists who end up in substance use treatment programs are trained rather generally in their academic programs and are not very familiar with having to record therapeutic sessions for feedback.

It is interesting that we have now arrived at a state of development where there is some competition among brand name EBPs. This seems to happen because developers really believe that their EBP is the best based on the research studies they

have conducted and/or their philosophical beliefs. It is also true that disseminating these treatments in a conscious way requires some investment in infrastructure, and if a developer has invested in an infrastructure, then they want to keep it in place so that they can help other treatment providers implement the EBP. In the end, we believe that there are several EBPs that really do have solid evidence and deserve to be disseminated. Providing the field with a variety of good treatment options is valuable and also provides some healthy competition for pricing and service. This is a good thing as long as EBP purveyors hold to high standards for competency and fidelity. Unfortunately, there are some websites that do not require that high of a standard of evidence in order to classify a treatment as "evidence-based." So, it remains a "buyer beware" situation when it comes to selecting an EBP.

***Bill White*:** How do you plan for sustainability of fidelity in EBPs?

***Susan Godley*:** We have had some success with a supervisor certification process during which we teach supervisors to train and certify clinicians in their own agency. There was hardly any attention to this important topic in the research literature; instead most of the implementation research to date in substance use treatment dissemination research has examined whether an individual learned to deliver an EBP with fidelity, not necessarily an organization's capacity to sustain an EBP (with fidelity). Our supervisor certification process included a strong recommendation that the supervisor achieved at least a basic level of A-CRA certification, but we also required them to (a) display certain supervisory behaviors during a clinician supervisor session; (b) demonstrate that they could reliably rate their clinicians' A-CRA digital session recordings; and (c) work with us in designing the process (i.e., agenda) for training in-house.

We learned that training supervisors to train and certify others was not necessarily the panacea for sustainability that we hoped it would be. First, we found that many supervisors were so burdened with other administrative duties that they often told us they did not have time to review the session recordings of their clinicians. When planning for the 2nd and 3rd cohorts, CSAT attempted to be clearer that funds for clinical supervisors should include time set aside to really spend in these kinds of clinical supervision activities. Second, in most practice situations, there is no reimbursement for clinical supervision, so organizations struggle with how to fund this function. Third, just as many clinicians leave their position, so too do many clinical supervisors. When this happens, we have found it relatively easy to help an existing certified A-CRA therapist achieve certification as an A-CRA supervisor, and it is a nice way to build a clinical career path. We also think that for some agencies, contracting out the A-CRA clinical supervision piece may be a good option.

***Mark Godley*:** I agree, there is a lot to learn still about promoting sustainment of A-CRA in treatment programs, especially those who started it with time-limited grant funding. Despite the fact that most supervisors remain after the grant, there is almost a mindset that once the grant expires, so too do all the services. In those agencies with strong clinical leaders, we see creativity in finding ways to sustain A-CRA and to do so in ways that may adapt it, for example to a mix of group and individual, and family sessions instead of just individual and family. As they make these adaptations, they still keep an eye on fidelity by rating and giving feedback to their clinicians on recorded sessions. I have seen leaders work with their bosses to rewrite their job descriptions to build in time for reviewing recorded sessions and clinical supervision. If we could put as much time and energy into studying and training leaders for sustainment as we do on learning A-CRA, I think we could achieve better sustainment.

***Bill White*:** What lessons did you learn about fidelity monitoring and certification that have

application to the process of clinical supervision?

***Susan Godley*:** Just as we expect the physicians who treat our physical health problems to be competent and up to date in the latest treatment techniques, so too do we want the same level of competence from those treating our mental and behavioral health problems. I can't imagine having an adolescent child with substance use problems being in a treatment session with a clinician who has been hired from a graduate clinical program without that person having specific, documented expertise in an EBP for substance use or receiving supervision to help them achieve that competence. Working with adolescents who have substance use problems and often co-occurring mental health problems is very challenging. Most substance use treatment clinicians do not have doctoral degrees and do not have the level of training that allows them to operate with the autonomy that a physician has early in his/her career. Additionally, attending a lot of continuing education courses does not necessarily translate into skilled therapy during a session.

I believe substance use clinicians need periodic clinical supervision, including a review of actual therapeutic sessions by a trained clinical supervisor. We learned from our dissemination efforts that there is a large variability in the competence of the clinicians we trained. Some were able to achieve certification in a relatively short time. Others (including some that had been in the field for a really long time) took a long time to reach competency because, for example, they were wedded to practices like confrontation. And a very few were found over time not be a good fit for A-CRA or for working with adolescents. Without a method to "listen in" on clinical sessions, it is not possible to judge how well a clinician is doing.

***Mark Godley*:** I agree with Susan. The state of clinical training and preparation of counselors by higher education is at best uneven, with some getting competency-based training in EBPs and others getting little if any exposure to EBPs. There are multiple ways to assess fidelity to an EBP. For example, some low cost methods include giving a rating scale to the clinician or to the patient to complete. But the best, most thorough approach to fidelity monitoring is through observation (direct, audio, or video) and comparing the standards set by model developers. This will compensate for lack of prior training by giving the clinical supervisor the opportunity to coach and shape the clinician to achieve competence in both nonspecific factors such as empathy and specific factors of the EBP.

***Bill White*:** Between A-CRA and the larger GAIN database, CHS is developing one of if not the largest database on adolescent treatment. What is the importance of this achievement?

***Susan Godley*:** Yes, the GAIN database is quite large overall and also very large when it comes to studying A-CRA implementation since we have helped over 100 sites implement A-CRA and have follow-up data on over 5,000 adolescents. The large number of sites funded with AAFT, the use of the same training and certification process across all of these clinicians and supervisors, and the availability of 3-, 6-, and 12-month follow-up outcome data collected on the participants is remarkable. As far as we are aware, there are no other data sets that are as large as this based on the implementation of one EBP; that includes both treatment process and outcome data. We have published papers that look at how the level of implementation of A-CRA impacts outcomes. We have also been able to examine if there are differences in process measures like initiation, engagement, participant satisfaction, and outcomes by gender and racial groups. From these analyses, we learned that across gender and different races, certified A-CRA providers achieved excellent rates of initiation, engagement, high rates of satisfaction, and relatively equal clinical outcomes. Within model guidelines, all providers were allowed to make cultural adaptations to A-CRA

delivery, and we believe this was very helpful.

We have also examined the impact of participation in A-CRA on criminal behavior for adolescents and most recently, are examining outcomes for those with and without co-occurring mental health problems. With such a high number of youth finding their way to treatment via the juvenile justice system, we wanted to assess the effect that A-CRA was having on future illegal activity. We found that A-CRA through its direct effect on reducing substance use led to decreases in illegal activities. We are also finding beneficial effects of A-CRA for mental health problems, with the biggest improvements found in youth with both internal and external mental disorders in addition to their substance use disorder. Now, we know that there is still room for improvement in addressing these problems, but it is encouraging to see that providers may not need to learn a specific new intervention for each co-occurring problem they encounter. In the future, we hope to improve our training recommendations to clinicians to better target specific A-CRA procedures to mental health symptoms.

***Mark Godley*:** As Susan described, this database is unprecedented because it consists of implementation data for A-CRA as well as patient follow-up data out to one year, and because it consists of such a large number of adolescents. For years to come, these records will provide researchers a unique opportunity to study treatment process and outcome. Susan and her team have already started doing this as she has described. Because the GAIN is a broad spectrum assessment tool, the field can learn much about the common and specific factors of this treatment on outcomes. Susan has already described some of the specific outcomes attributable to A-CRA. But A-CRA is not completely unique. It shares many procedures (e.g., problem solving, relapse prevention, and communication skills training) in common with other treatments, and to this extent, it may be possible to generalize effectiveness interventions such as CBT for the treatment of specific co-occurring disorders.

***Bill White*:** With the results from studies like Project Match for adults and CYT for adolescents showing minimal differences in outcomes between the treatments being evaluated, does this suggest that we are moving toward the focus on common factors within effective treatments for substance use disorders?

***Mark Godley*:** The idea of common factors of effective therapy is compelling. A good deal of research shows that more effective treatments maximize empathy and the therapeutic relationship and rely on homework between sessions to promote generalization of skills beyond the clinical setting. Another potential "common factor" that needs further research is the extent to which fidelity monitoring and quality improvement – to almost any manual-guided treatment based on sound therapeutic principles (e.g., skill building to increase self-efficacy) – lead to better clinical outcomes. Meta-analysis of juvenile justice interventions by Mark Lipsey showed that weaker interventions that were implemented with fidelity were as good as stronger interventions implemented with low fidelity. We are currently working with Dr. Jane Ellen Smith and one of her doctoral students to examine whether A-CRA with better fidelity to the model has better clinical outcomes than A-CRA with low fidelity.

***Bill White*:** Susan, one of your interests has been the effects of mobilizing environmental support for recovery through the family local recovery mutual aid groups. What have you learned about these two potential influences?

***Susan Godley*:** There is a lot of research that shows family approaches to the treatment of adolescents with substance use treatment are effective. I think even if they aren't always found more effective than individual approaches, we shouldn't be implementing treatments for adolescents that ignore parents since as I mentioned

before, the vast majority of adolescents live with their parents. Parents or other caregivers are an important part of adolescents' environments, and they need to be brought in to support recovery as best they can. It has been great to see the burgeoning movement of parents forming groups to lobby for more and better adolescent substance use treatment, like the group "Momstell." These groups lag far behind parental advocacy groups for other problems – like developmental disabilities – due to, I think, the greater stigma of having a child who has a substance use problem. These groups are usually started by parents who have been devastated by the loss of a child to substance use and have dedicated their talents towards helping increase the recognition for the need for more and better adolescent substance use treatment.

Based on my review of the outcome research, there is not a lot of evidence that one type of family treatment is superior to another type; they are all effective. I also think it is time that adolescent substance use treatment researchers quit spending research dollars to compare individual vs. group vs. family treatments. Most treatments in the "real world" already incorporate all three of these modalities due to licensing or accreditation requirements, or due to reimbursement mechanisms. And, frankly, I just feel that including parents or other caregivers in the treatment of adolescents is ethically correct.

What we have learned about mutual aid groups is that these groups can be helpful to young people, but how helpful they are depends on the composition of the group. It is important for treatment professionals to investigate available groups and be discriminating about which groups they refer youth to. Lora Passetti led some pilot work to learn more about facilitating attendance at these groups. She was able to have people go to various groups that adolescents might be referred to, and she found wide variability in the group membership and what went on during the meetings. It is also important to recognize, however, that these groups do not appeal to every youth and the expectation that mutual aid will resonate for every youth is unrealistic, just as it is for adults. We've found for example, that adolescents with more severe substance use problems will be more likely to want to attend these groups, and they appear to be more effective for them. I would like to see treatment program staff or others to help these groups incorporate fun non-using activities in the groups.

***Bill White*:** Susan, you also led a project to evaluate a usual treatment program. Can you talk about how that project came about and its importance?

***Susan Godley*:** Sure. The Center for Substance Abuse Treatment (CSAT) issued an RFA with the purpose of evaluating existing potentially exemplary treatment programs for adolescents with substance use problems. It was called the Adolescent Treatment Models (ATM) program. Ten programs received funding for evaluation either in 1998 or 1999. Six were residential programs, and four were outpatient treatment programs. Chestnut's Outpatient and Intensive Outpatient program had been in development for about 15 years. It is also important to note that this program had not at that time incorporated any A-CRA into its treatment programs because our CYT study site had been located at another Chestnut treatment site 150 miles away. I'd like to mention this RFA was issued under the leadership of Randy Muck, who I have already mentioned and who deserves tremendous credit, I think, for improving the adolescent treatment system in the U.S.

I led an application to evaluate Chestnut Health Systems' existing adolescent treatment program, which by then had evolved to include outpatient and intensive outpatient treatment, along with residential treatment. The part of the case management that had been developed under the old OTI grant had been retained as front end services, and case managers screened, assessed, and linked adolescents into the appropriate level of care. My application was to evaluate the outpatient treatment program.

As with CYT, the evaluation was based on the use of the Global Appraisal of Individual Needs (GAIN) and assessments at Intake, 3, 6, 9, and 12 months, and like CYT, our site had exceptional follow-up rates. I was able to recruit Bryan Garner, who had worked on CYT as a research assistant, to be the coordinator for this project, and he oversaw the recruitment and follow-up. Bryan has since gone on to earn a doctorate at TCU in experimental psychology and is now leading his own NIH-funded studies related to adolescent treatment, specifically in the areas of implementation science and staff turnover.

With ATM, we were able to conduct a quasi-experimental study comparing Chestnut outcomes with those from the CYT study. Later, this study served as a preliminary study for a randomized clinical trial application that was jointly funded by CSAT and NIDA called the Adolescent Outpatient and Continuing Care study.

***Bill White*:** Susan, another project that you were involved in was the Strengthening Communities for Youth project that really was inspired by the C&A MH system of care approach. Can you tell us about that project and what was learned?

***Susan Godley*:** This was another rather ambitious project that resulted from Randy Muck's leadership. It was influenced by the system of care work led by the Children and Adolescent Service System Program (CASSP). It was also a federally funded initiative, and it included core principles for children and adolescent mental health services with the following emphases: (a) child-centered; (b) family-focused; (c) community-based; (d) multi-system; (e) culturally competent; and (f) offered in the least restrictive/least intrusive environment. One of my early contracts had been to work with the state of Illinois on a CASSP grant, so I was familiar with the principles.

With this funding, we were to implement evidence-based assessment (the GAIN), evidence-based treatment, develop linkages with other child-serving organizations, and build an electronic record system, which ideally was tied to other adolescent-serving organizations. I worked closely with Loree Adams, who was the Director of Chestnut's adolescent program at the time, to write and implement the project. Early on, we learned that in our community, there was already a fairly high degree of collaboration among the child-serving organizations with several existing committees, and we had to be careful not to "trip over" existing collaborating efforts. One challenge (ironically) was the local mental health center. Even when we offered to fund travel for their director of adolescent services to a national conference to help increase our collaborative efforts, they refused to participate.

One of the important achievements with this grant was to implement the same evidence-based approach to assessment (the GAIN) and treatment in 23 school-based programs Chestnut operated in several counties in central Illinois. There had been a history of school-based services, but the "interventionists" as they were called all provided somewhat different services based on what the administration/counselors wanted in each school. While this approach had value, it did not really build on any substance use treatment expertise that Chestnut had to share. To promote project buy-in, we made presentations to superintendents and boards of directors to educate them about evidence-based assessment and treatments that we wanted to implement. Most willingly signed on to our plan and one of the reasons, I think, was that when I showed them the MET/CBT manual, it looked like a curriculum, and of course, educators are familiar with curriculum plans.

We also implemented MET/CBT in the outpatient program. We chose to implement this CYT intervention instead of A-CRA at the time because it included group CBT sessions, and group treatment had been the primary modality offered in the Chestnut Outpatient program. We called it MET/CBT7. It was the basic MET/CBT5 intervention with an added parent session in the beginning and the end – at Loree's insistence, we had to include family, both due to state regulations and their current

practice, which included a family component. We also decided to use this opportunity to launch a randomized clinical trial and build on the earlier quasi-experiment that we had published comparing Chestnut's Usual Outpatient treatment statistically with the CYT interventions that had been delivered in Chestnut's southern region. So, for this new RCT, participants were either assigned to the MET/CBT7 intervention or Chestnut's Usual Outpatient program – which really was pretty intense and included individual, group, and family sessions. I think this was an important study because RCTs that compare researcher-developed interventions with "usual" treatments tend to often have usual treatment conditions that do not reflect real usual treatments that have evolved over decades and been refined and adhere to requirements by state licensing agencies and accrediting bodies like JCAHO. In other words, typical comparison programs are launched for the purpose of having a comparison treatment and usually consist of a number of sessions that equal the same number of sessions as the investigator's treatment of experimental interest rather than vary the number of sessions, as is often the case in real practice settings. [Findings are described below in answer to another question.]

Another long lasting (for Chestnut) result of this particular funding was the development of an electronic record system for the adolescent program. This was a web-based program, and it had several neat features. One was that probation officers could make referrals online to the program, and intake staff could respond to their referrals via this secure network. It also did away with voluminous paper files for the residential unit and helped many paraprofessional staff learn how to record shift notes in an electronic system. Treatment planning goals and objectives became more standardized and met criteria for being stated in a measurable way, and extensive record quality assurance safeguards were able to be built into the system, which reduced errors that might be uncovered in audits, and it also reduced the time that records staff had to be reviewing physical records. Chestnut's MIS staff learned to make changes to the system and write reports, and it was eventually extended to the adult programs and the other adolescent program in the southern region. Additionally, staff's familiarity with this type of system is a helpful background for migrating to a new integrated EHR that is currently being implemented throughout the corporation in line with expectations for meaningful use from the Affordable Care Act.

***Bill White*:** The SCY project led to your RCT (AOCCS) comparing Chestnut's UOP with an evidence-based approach. What has this contributed?

***Susan Godley*:** First of all, we learned that participant engagement and retention were excellent for both outpatient approaches. As for outcomes, we learned that Chestnut's usual outpatient program and MET/CBT7 had an advantage for average days abstinent over the 12-month period; however, when taking into account the cost of services, the briefer MET/CBT7 appeared to be more cost effective. We also found that unlike when ACC followed residential treatment, there did not appear to be any statistical benefit on average for those adolescents who participated in outpatient followed by ACC. Another lesson from this study was that in real service systems like the one Chestnut had developed, there were all sorts of natural contingencies that resulted in treatment readmission. I wrote a paper about this because I did not think this phenomenon had been documented well by researchers. Instead, clinical researchers often provide the illusion that they are controlling what treatment a study participant is receiving when in reality, depending on the service system, there can be other processes operating that result in study participants getting various combinations of treatment outside what are prescribed according to their study assignment. I think it is important that researchers report other services beyond their control that participants receive.

Regarding the lack of additional impact for ACC services after outpatient treatment, we have a few thoughts for why that might be. One is that adolescents who are recommended for outpatient treatment in a system that uses ASAM criteria have less severe problems and not all will need or benefit from an intense continuing care approach. It may be true, however, that as is the case with Scott & Dennis' Recovery Management Check-ups, some selective re-intervention may be a cost-effective way of improving average outcomes.

What happens after treatment?

***Bill White*:** Much of your collective work has focused on adolescent post-treatment outcomes in general and patterns of adolescent relapse in particular. What are the major conclusions you have drawn about such outcomes and patterns?

***Mark Godley*:** We have learned a number of things from our study of post-treatment outcomes and continuing care. First, it is clear that many young people come to treatment by way of some early acting out or more clinically significant conduct disorder. If it is the former, they are likely to benefit a great deal from maturation, and we need to help them stay safe and reduce or prevent return to use so they can survive the potentially turbulent transition into adulthood. For those youth who have co-morbid mental disorders, they experience significantly greater substance use problems, and we need to pay very close attention to helping them successfully cope with or overcome the symptoms that often cause them to self-medicate or otherwise compensate with substances. Susan is currently leading a series of papers that underscores the need to pay particular attention to the early assessment and diagnostic clues as to the mental health symptoms patients exhibit because our treatments can be targeted to help reduce these symptoms as well as substance use.

Second, by focusing on what happens after treatment, you begin to learn a lot about the transiency of treatment effectiveness. Both you and Tom McLellan have done a lot to raise the awareness of clinicians and researchers about the transiency of treatment effects, and it does appear that more addiction treatment research is focusing on disease/recovery management and continuing care to monitor, support, and reintervene with patients of all ages.

Third, and this may be an observation that is more unique to adolescents than adults, we have come to understand that theoretical and clinical formulations focused on a unitary conception of motivation (e.g., stages of change; treatment readiness) are just one part of the picture. The ACC studies all relied on home or community visits to adolescents and their parents, and we learned so much about the barriers to treatment that had little to do with whether or not they were motivated. Here are some of the things we learned: 1) 50+% of adolescents in treatment are living in a single parent family and that parent is usually working during the day or evening, causing lots of unmonitored time and little ability to get their child to a clinic for outpatient appointments; 2) fewer than 15% of youth in treatment have a driver's license; 3) urban youth often fear using public transportation due to gang lines and violence; 4) adolescents tell us they hate going into clinics because they feel like they don't know what to do and that everyone is looking at them because they don't know what to do or belong; 5) the larger the family, the more likely there are to be family crises that relegate outpatient appointments (either at home or somewhere else) to a very low priority; and 6) for adolescents who do have jobs, often it was through these jobs that they met other substance users and gained disposable income that could be used to buy alcohol and drugs – often parents were not monitoring what youth were doing with their disposable income. There are more, but the picture is clear: motivation for treatment is just one factor and many of youth and families are in the middle of such serious problems that home or school visits are the best and perhaps the only way to deliver

face-to-face services, and even then we expect some missed sessions.

Fourth, by doing community visits, we can often be there to help when help is needed, we can celebrate accomplishments, participate in or prime pro-social activities, and make linkages to more appropriate peers and activities. By being willing to accept the clients and parents and working with them where they live, it has been gratifying to see the extent to which many felt valued and validated and went out of their way to tell us so.

Fifth, I think our ACC studies were the first continuing care studies that optimized the idea of continuing care. Prior to these studies, aftercare was the idea of providing services to maintain the gains derived from the primary treatment episode. But we went much further and encouraged participation in ACC even if the client was asked to leave treatment or left against staff advice. Such patients were usually told to go back and do that treatment all over again when they were ready to be serious. Well, I think that doesn't interact very well with adolescents' developmental stage. Instead, we went to their home or school, or offered them a ride to their probation officer, or dealt with their parent who was angry about her child "getting kicked out of treatment" and we would say, "Look, it's a new day, and we are not looking backward. Let's give this a try and see what we can do." The research is clear on this: we can help these kids too. On average, their results are not quite as good as other youth we served, but they did have better outcomes than their counterparts in usual continuing care that did not link to any continuing care.

***Bill White*:** Historically, much of adolescent treatment is focused on successful completion of treatment. What is the relationship between discharge status and post-treatment recovery outcomes?

***Mark Godley*:** As I mentioned above, I believe our work on ACC was the first or among the first to include youth (or adults) who failed to successfully complete residential treatment in continuing care. Because the residential programs we were working with had such long lengths of stay (90+ days), the likelihood of youth leaving against staff advice or at staff request was about 50%. But we were not willing to write off half the youth and say that they would not benefit from continuing care. We were especially willing to reach out to them because we knew that the majority of them were not going to repeat residential treatment in any timely manner. Every study published prior to our work contextualized aftercare participation as the province of those who were successful in their first episode of treatment. Those who were unsuccessful were required to redo primary treatment first. But once the view of aftercare changes from supporting only those who were successful in primary treatment to one of continuing care for youth with problems, then we dramatically broaden the inclusion criteria and can help those who arguably need services the most. With two different ACC studies now, we have found that those who failed to successfully complete residential treatment still derived benefit from ACC and reduced their substance use more so than if they had been left to the traditional service system.

***Bill White*:** Assertive continuing care is one of the hallmarks of research at Lighthouse Institute. Could you describe what you mean by continuing care and assertive approaches to such care?

***Mark Godley*:** I think I've pretty well indicated that "assertive approaches" reach out to adolescents who have substance use problems through home or other community visits and do so in a way that recognizes that the passage of time matters: the sooner we initiate continuing care with patients after discharge, the more likely we are to prevent or interrupt relapse and other problems. But the idea of "assertive approaches" to care really comes out of our work and the work of Test and Stein that dates back to the mid 1970s. First, our early work on the Community Reinforcement Approach taught us a lesson that has stuck with us throughout our careers. Even before the *Field of*

Dreams movie, I learned that "if you build, it they will come" really did not apply to our field of endeavor. It may be necessary to "build it," but that is not sufficient. Azrin taught us the idea of "systematic encouragement" and by this, I mean a graduated series of successively more helpful steps to prime the behavior you want to occur. So, in the late 1970s, we "built" a dry social club for our outpatients with alcohol use disorders. But simply telling individuals about its hours of operation and what it had to offer was not sufficient to produce attendance. We did not get reliably good attendance until we started making mid-week reminder calls, pairing individuals up with a buddy who would spend time with them at the club so they wouldn't feel isolated, and even offering to send a bus around to pick them up and take them home – much like some of the evangelical Christian churches do.

So, fast forward 25 years later when ACC was developed, and the term "assertive" means that our clinicians assume the responsibility for initiating continuing care services with patients after they are discharged from primary treatment. They also practice systematic encouragement in many of their sessions with patients in order to prime new pro-social activities or initiate new services (e.g., GED) that will help patients advance in their goals. And, of course, the groundbreaking work in mental illness published by Test and Stein in 1974 called Assertive Community Treatment that Susan read about was influential as well.

The last and perhaps the most important influences I'd like to acknowledge are B.F. Skinner, Nate Azrin, and my mother. When I was a junior or senior in college, by now well established in my major field of study, I would come home and tell my mother about the laws of behavior (e.g., positive and negative reinforcement, punishment, schedules of reinforcement and so on). I went on to tell her about interventions such as "time out" and others. I lectured her about how Skinner, Azrin, and others had experimentally demonstrated the virtues of positive reinforcement over punishment or negative reinforcement paradigms. And in her very accepting but authoritative way she said, "Oh, I call that momma psychology." A few years later when I started working with Nate, I wrote up a memorandum of understanding that would involve our outpatient program collaborating with Nate's research unit on a CRA study. Nate agreed with everything in principle but asked me to rewrite it, using a much more positive tone so that it would create positive expectations for success.

It is interesting that behaviorists are often thought of as mechanistic, punishment-oriented, or discounting the effects of therapeutic alliance. In my experience, the opposite was closer to reality. Indeed, Susan and I have been fortunate to have such influential role models and mentors in our life. If you look at CRA, A-CRA, and ACC, you will see interventions for people with substance use disorders that accept people where they are at, that never confront, never provide all or nothing advice, and help the patient move toward change at a pace that accelerates commensurate with their readiness. The best CRA and ACC clinicians are basically very nice, optimistic people who become adept at praising clients for the recovery-oriented work they engage in and ignoring or trying to reframe relapses as learning experiences that they can grow from. Can you imagine how different this approach was in 1975, the heyday of the "knock them down" version of therapeutic communities or the "let them hit bottom so they'll be ready to change" treatment approach? Even today, many will see this approach as wrong headed for addiction treatment. Time, experience, and data have taught us otherwise, and it has been gratifying to see so many other evidence-based practices, such as motivational interviewing and cognitive behavior therapy, use similar positive approaches.

***Bill White*:** Mark, you have also been involved in studies of telephone continuing care. What have you learned from these studies?

***Mark Godley*:** Yes, thanks for asking about this. Our telephone continuing care work is

another example of an assertive approach to continuing care. The goal of telephone continuing care is to reach out to patients by phone within the first week after discharge to begin providing monitoring, support, and engaging patients in pursuing pro-social activities, including friends and family, that will support recovery. Consistent with everything we do, the conversation is decidedly upbeat, our callers are always listening for positive descriptions about what the patient is doing to reinforce, while also helping the patient set small achievable recovery-oriented goals. In previous work with this approach, we found that our calls were helpful in encouraging adolescents to increase their pro-social activities, including attendance at mutual aid meetings, and this in turn improved their recovery outcomes over a six-month follow-up period. We now have funding to study this in a randomized controlled design with a one-year follow-up period in three different locations in the U.S.

Another key feature of this approach is the use of recovery support volunteers. We will be calling adolescents weekly for the first 3 months, then move to a less frequent schedule, fading out altogether by 9 months after discharge. In previous studies with both adults and adolescents, we have successfully recruited and trained volunteers in recovery as well as pre-professional students to follow a standardized call protocol. We provide them with training, and they record most of their calls. Our supervisor reviews many of the recordings, scores them for fidelity, and gives feedback to the volunteers on a weekly basis. Since the calls are generally 10 to 15 minutes in length, quality assurance and feedback is efficient, and the volunteers really appreciate the coaching and feedback. I think it's a great volunteer experience for anyone who wants to be involved directly with patients in a way that is supported and supervised by professionals.

We have also found that most patients appreciate that we are taking a continued interest in them, do not pass judgment, and provide support and referrals as needed. I do want to note that we carefully monitor and avoid putting our support callers in the position of advice giving or counseling. It turns out to be fairly easy to avoid advice giving or counseling by using reflective statements or asking the patients what they learned in treatment that they can apply to their current situation. We also coach our volunteers what situations point to asking the patient if they would like us to have a counselor call them. We have learned through the years that asking them to have a counselor call them will be more likely to result in a linkage to a counselor than what we call a "passive" referral to a counselor.

***Bill White*:** There seems to be growing interest in addiction research in the differences between adolescents and young adults and how to support recovery through the transition between these two developmental stages. What are we learning in this area?

***Mark Godley*:** It's a great question. By now, most readers are familiar with neuroscience findings that brain development continues until the mid-20s and that development of the pre-frontal cortex, which controls judgment, is the last to develop. So, this is one more piece of concrete information that reminds us that many youth and young adults may have a substance use disorder that is attributable more to developmental factors than to genetic predisposition or eco-behavioral factors.

Recently, through Susan's wide-scale dissemination and implementation work with A-CRA for SAMHSA grantees, we have accumulated data on over 500 young adults with six-month follow-ups as well. What we are learning is that they have more or less equal responses to A-CRA treatment, that is, the rate of improvement over time for both age groups appears to be quite similar, but there are some striking differences at the point of intake to treatment. Typically, young adult substance use is more severe. In addition, we see significantly higher levels of homelessness, HIV risk, and less involvement in school or work. All of these findings suggest that at least among those who are getting into treatment, individuals from this age group present with more risk

and clinical severity and may need higher levels of clinical involvement, case management, and social network support.

Toward that end, our colleague, Dr. Doug Smith at the University of Illinois Urbana-Champaign, is beginning to study Peer-Enhanced Community Reinforcement Approach (P-CRA) therapy. In P-CRA, Doug asks the young adult patient to bring a close friend to treatment. Interestingly, he has found that peers whose substance use is high may still be willing to support their friend in treatment and that coming to treatment may moderate the peer's use as well as the identified patient. As young adults move out of their parents' home, the importance of peers increases dramatically, and thus an approach based on including peers in treatment or even small peer groups is theoretically sound. Whether it is practical, feasible, and effective are the questions Doug's work will address over the coming years.

***Bill White*:** What are some of the most important unanswered research questions related to adolescent treatment and recovery?

***Mark Godley*:** We need 15-year longitudinal studies with large samples to help us learn more about the characteristics of youth who "age out" of substance problems versus those who go on to develop adult SUD.

***Susan Godley*:** We also need more and better studies to evaluate treatment for youth with CODs. Working with Dr. Jane Ellen Smith, we have, for example, developed a training for clinicians on how to use appropriate A-CRA procedures for differing CODs that adolescents presenting to substance use treatment have. The incremental nature of NIH-funded research means that it may take decades before we can definitively say how the treatment adaptations work with the multiple morbidities that adolescents present with.

***Bill White*:** What is the role of government in the future evolution of adolescent addiction treatment in the U.S.?

***Mark Godley*:** A significant problem with our current outpatient clinic system of care (where 80+% of youth are enrolled in treatment) is that it's a poor setting for seeing and retaining youth in treatment. We built it and we can get many of them to come a couple of times – and that may be sufficient for low severity patients – but it turns out to be a poor system for retaining youth for weekly treatment over a 90+ day period. We believe that the future should include incorporating AOD screening, assessment, and treatment in school-based health clinics and working treatment into academic subjects. Such an approach overcomes nearly every logistical and psychological barrier that exists in our current outpatient clinic structure. This is an important area for the federal government (e.g., SAMHSA, HRSA) to consider funding projects and for NIH to conduct health services research.

There is also the issue of dissemination of evidence-based practices within addiction treatment. In 2002, Barry Brown and Pat Flynn published a paper in the *Journal of Substance Abuse Treatment* that called for the federal government to play a central role in the dissemination of evidence-based practices to providers. Since this publication, we have seen solid research that clearly indicates the best way to disseminate EBPs is with a combination of training, competency monitoring and feedback strategies, and ongoing coaching for a period of time. Certainly, we have seen SAMHSA doing this in several meaningful ways in their adolescent portfolio, but we would like to see an increase in SAMHSA's commitment to funding dissemination efforts to the field. Likewise, city, county, and state agencies with responsibility for treatment can and should play a role in facilitating EBP adoption by the organizations they fund. We have had a few excellent collaborative experiences with state and local authorities to help provider organizations reach sustainable levels of evidence-based practice. I would point to our collaboration with the King County, Washington authority and their work to spread both the GAIN and

A-CRA/ACC throughout Seattle/King County.

***Susan Godley*:** I would just add that it is very important to create a federal-state link so that a federal agency like SAMSHA can work closely with single state authority agencies. For example, early on, individual provider organizations would win grants to implement an EBP and the state agency that was responsible for licensing them had requirements that were in conflict with the implementation of the EBP and did nothing to promote sustaining the EBT after the federal funding ended. There have been some attempts by SAMHSA to improve this alignment – one was the State Adolescent Coordination grants, and more recently the State Adolescent Substance Abuse Treatment Enhancement and Dissemination grants.

Future of Adolescent Treatment

***Bill White*:** One of the striking features of adolescent treatment in the U.S. is the dominant role played by the criminal justice system. What have you observed about this role and its implications through the course of your studies?

***Susan Godley*:** I like to bring this subject up during our A-CRA trainings, especially when we are discussing the role of urine testing in treatment. The juvenile justice (JJ) system is the primary referral source for adolescents to specialty substance use treatment agencies. As such, there is sometimes this implied relationship between the JJ system and treatment, which suggests that treatment is an extension of the JJ system, and sometimes this means that clinicians can get in positions where they are confronting or challenging the adolescents. We attempt to explain the difference between the role of a probation or diversion officer and the role of a therapy clinician. The different roles also should sometimes lead to different ways that the juvenile system may use positive urine test results than a clinician might. For example, a probation officer may need to seek sanctions as a result of continued use. A clinician may choose to conduct an A-CRA Functional Analysis of Substance Use or Refusal Skills procedure. Unfortunately, too often, the JJ system relies on the treatment system for testing and expects clinicians to share results with them. We think it is preferable that the JJ system test for their purposes and the treatment system tests to use results in a clinical way.

***Bill White*:** Mark and Susan, let me ask one final question: What do you see as the future of adolescent treatment in the U.S.?

***Susan Godley*:** There is a lot of talk about the coming demise of specialized addiction treatment. However, if this system ceases to exist, it will need to be replaced with some other means of providing substance use intervention/treatment for youth. With the advent of the Affordable Care Act, one possibility is that treatment for adolescent substance use would be integrated in primary care settings. This makes sense since many adolescents with substance use problems also have at least one other behavioral health problem. We would not expect that physicians treat these problems, but that there be professionals who work in primary health care who can address these problems in an integrated way.

We think it also makes a lot of sense for the integrated health care setting to be in school-based health clinics. Many of these clinics already treat students for other behavioral health issues, and it makes sense that since most adolescents (including those with substance use problems) are in schools, that there are substance use screening, assessment, and treatment options in those settings. Now, it would be quite different from the situation now if every school had a school-based health clinic, so we suspect there would have to be some hybrid models.

We also assume, based on some earlier work we have done, that if substance use screening and treatment is available in more schools, youth with these problems will be identified earlier and a greater percentage of females will be identified. It is not clear, however, what would be the route

to treatment for the JJ-involved youth – if specialty clinics did not exist, would they be referred to school-based health clinics or back to another medical home?

***Mark Godley*:** I agree with Susan's comments. There also seems to be growing interest in addiction research in the differences between adolescents and young adults and how to support recovery through the transition between these two developmental stages.

***Susan Godley*:** Other important unanswered research questions related to adolescent treatment and recovery are:

- What is the impact of medical marijuana (or legalization of marijuana in some states) on the increase of marijuana use and disorders by young people?
- How well would ongoing Recovery Check-ups work for adolescents?
- What is the model for the most effective mutual support group for adolescents? How do we proliferate such models?

***Mark Godley*:** I would also add:

- How can we use technology to improve the effectiveness of treatment and recovery for adolescents?
- Can leadership training produce clinical leaders committed to supporting evidence-based practices with ongoing fidelity?
- How do we increase the commitment of accreditation and licensing bodies to continuing education that measurably increases competency in clinical skills?

***Bill White*:** Susan and Mark, thank you for sharing these reflections on the work you have done advancing adolescent treatment in the United States.

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