





EVIDENCE BASED SUPPORT FOR YOUTURN INTERVENTION EFFECTIVENESS

- Changing health behaviors related to substance misuse and substance use disorders.
- Changing behaviors, raising awareness, and reducing stress in families dealing with a loved one's substance use disorder. This is known as family recovery coaching.
 - o The evidence is also clear: increasing family recovery knowledge increases likelihood of improved health outcomes for their loved one with SUD.

What is evidence for changing behaviors related to substance misuse and SUD? What is the evidence for effective family recovery coaching and support?

- 1. Effective interventions are built on evidenced based practices. youturn.net is founded on sound clinical theory and practice.
 - Motivational Interviewing ("MI"): universally accepted as the gold standard for supporting behavior change across all health conditions. Our youturn video facilitators/teachers have over 15 years of experience in delivering MI interventions.
 - Gain-framed/strengths based messaging. What's right with rather than what's wrong with you.
 - Harm-reduction principles: including medication assisted treatment, moderation management, and co-occurring competent coaching.
 - Stages of change theory and stage-wise case-management principles guide our content delivery.
 - Family systems theory guides youturn family work. In addition, Richard Jones is a certified ARISE interventionist (ARISE is one of 3 evidenced based intervention systems). ARISE principles guide our overall approach.
- 2. Effective interventions are delivered by experienced practitioners with history of success in utilizing evidenced based practice. Anyone can tell you (theoretically) what works, very few of us have shown how it works in real-life. To this end, Youturn.net is, essentially, a digital adaptation of the ground-breaking recovery work being done at FAVOR Greenville recovery community centers and outreach locations.
 - youturn's lead facilitator and director of content is the CEO of Faces and Voices of Recovery, Greenville SC. FAVOR Greenville is the country's premier recovery community organization. Recognized nationally as a model program by both SAMHSA (2017) and the Department of Justice (2018). FAVOR Greenville has developed an engagement and support model that has produced stunning results
 - Over past 6 years: 35,000 people served with over 90,000 hours of recovery coaching.
 - 9,000 families receiving education and support.
 - 60% "active" retention is recovery programming at 12 months (comparable average for community-based retention is ~20%)





YOUTURN IS THE DIGITIZED VERSION OF AWARD-WINNING FAVOR GREENVILLE OUTREACH

youturn's effectiveness is best illustrated via the FAVOR Greenville hospital-based programs. These programs are designed to support patients with the most complex and historically challenging substance use disorders. Opioid use disorders were the original focus of the FAVOR Greenville hospital programs. However, services have been expanded to include all SUD issues.

These programs are most aligned with youturn.net because of the high level of asynchronous communication and digitized support utilized in the hospital programs. Approximately 75% of communication, interaction, and education is done via text messaging, emailing, and content delivery with these patients. This is a group that avoids office-based support. They don't attend recovery meetings or outpatient appointments. They require ongoing digital support.

There have been two (2) studies associated with our hospital partnerships. One is named Favor Opioid Recovery Coaching Evaluation (FORCE). This study has been presented nationally at the several conferences/events including the Society for Academic Emergency Medicine 2019; and the Association of American Medical Colleges in 2018 and 2019. Has also been submitted for publication in the prestigious Annals of Emergency Medicine.

Results have been stunning: since launch in January 2018:

- 214 calls
- 98% enrollment (participants has to sign in and agree to 12 month follow up)
- 61% retention (still engaged with coach)
- 68% linkage to treatment/other support
- Only 8 patients have returned to the hospital for any reason
- 3 patients (1.4%) have died from subsequent overdose-The national average for patients who overdose then die of another overdose within the next year: 15%.

Note: FAVOR Greenville expanded to 7 hospitals in South Carolina with an 8th scheduled for the fall. We have served over 400 opioid overdose patients/500 plus patients overall.

Note: Even more revealing is the preliminary data surrounding hospital readmissions. The following is early results of EPIC electronic health record "chart reviews" being conducted by business intelligence at ST. Francis/Bon Seqours-one of our hospital partners:

# Pre FAVOR ED visits (including engagement visit)	# Pre FAVOR 12 Month ED visits (including engagement visit)	# Post FAVOR Engagement ED Visits	# Pre FAVOR Engagement Inpatient Admission	# Post FAVOR Engagement Inpatient Admissions
576	202	63	80	8

This is a comparison of a cohort of patients pre-favor and post-favor. ED visits went from 202 down to 63. Inpatient admits from 80 down to 8.





In addition to the emergency room data youturn.net can trade on the results from our clinical research trial that measures outreach and retention when working with hospitalized patients with comorbid substance use disorders. These are patients with a long history of Substance Use Disorders ("SUD") who are inpatient for other health related issues such as infectious disease, pancreatitis, liver failure, etc.

During the intervention condition a recovery coach is assigned (which involves assertive digital connection and outreach/engagement). At this point, youturn's content will be utilized as an additional coaching tool for educational content.

In the control it is treatment as usual (which involves referral with no assertive outreach).

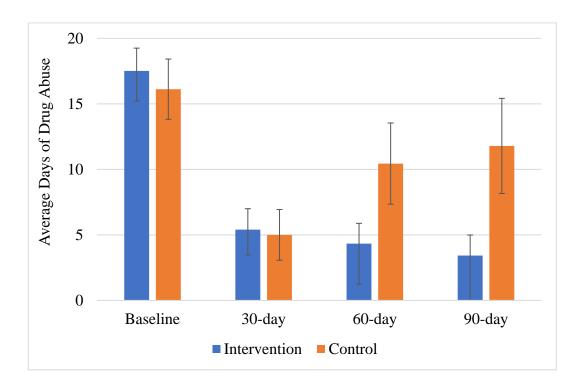
This research study is being facilitated by Clemson University in partnership with 30,000-employee health system, PRISMA Health Upstate. The results are as follows:

Study Results as of 6/28/19

This graph shows that those in the intervention condition spend *fewer* days in the hospital in the six-months post-discharge, or after our initial baseline visit with them. This finding is preliminary and has not yet reached statistical significance.







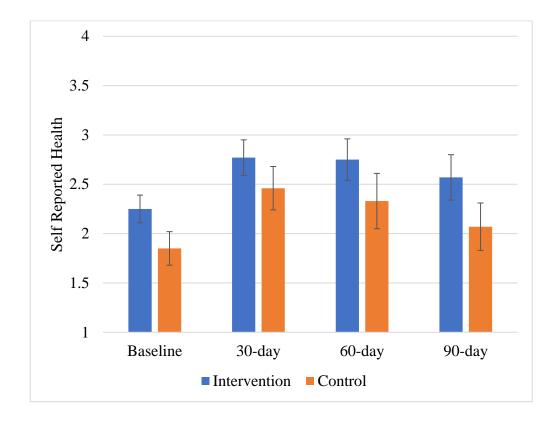
This graph shows that those in the intervention condition (blue bars) are using drugs less at 60-day and 90-days post-discharge compared to the control condition, F(1, 33) = 5.694, p = .023, $\eta^2 = .15$. Note that these results are statistically significant and the effect size is large.

It is clear, that the engagement aspect of coaching is a game changer and represents the future of recovery support. People get better when we find creative ways to connect. The days of waiting for a willing patient to hit bottom and come to the clinic for services are dead and gone.

youturn provides the platform for scaling this approach so that we can help millions in need.







*Note that in the figure above a value of 1 on the y-axis denotes 'poor health' while a value of 5 denotes excellent health. Thus, higher scores = better health.

This graph shows that those in the intervention condition report better health at 90-days post-discharge compared to the control condition, F(1, 33) = 3.613, p = .066, $\eta^2 = .10$.





The other question that is frequently ask: Are videos actually effective for behavior change? Can you actually help someone via video?

The answer is, without hesitation, YES!

A systematic literature review examined the effectiveness of videos in modifying health behaviors. We searched PubMed (1975-2012), PsycINFO (1975-2012), EMBASE (1975-2012), and CINAHL (1983-2012) for controlled clinical trials that examined the effectiveness of video interventions in changing health behaviors. *Twenty-eight studies comprised of 12,703 subjects were included in the systematic review.* The results:

- Video interventions were effective for modifying health behaviors depending on the target behaviors to be influenced.
- Video interventions appear to be effective in breast self-examination, prostate cancer screening, sunscreen adherence, self-care in patients with heart failure, HIV testing, treatment adherence, and female condom use.

The researchers found that videos for influencing addiction behaviors were only effective when they are tailored and delivered via gain framed/strength based messaging. Compared to loss-framing, gain-framed messages may be more effective in promoting certain types of health behavior change. Also, video modeling may facilitate learning of new behaviors and can be an important consideration in future video interventions.

They went on:

"Health behaviors that include a component of addiction, such as cigarette smoking or drug use, may necessitate *different types of interventions that incorporate tailored counseling or creative video messaging techniques.* (This is the youturn.net value add. Our specialized approach, highly engaging content, strengths-based messaging meets these parameters)