ADVANCING TELEHEALTH PARTNERSHIPS

https://ttspsworld.com/

SPS Telemedicine Telehealth
Service Provider Summit℠

OCTOBER 8-9, 2018
Renaissance
Glendale Hotel

2018 PROGRAM

Presented by

THE UNIVERSITY OF ARIZONA | ARIZONA TELEMEDICINE PROGRAM

with Conference Partner
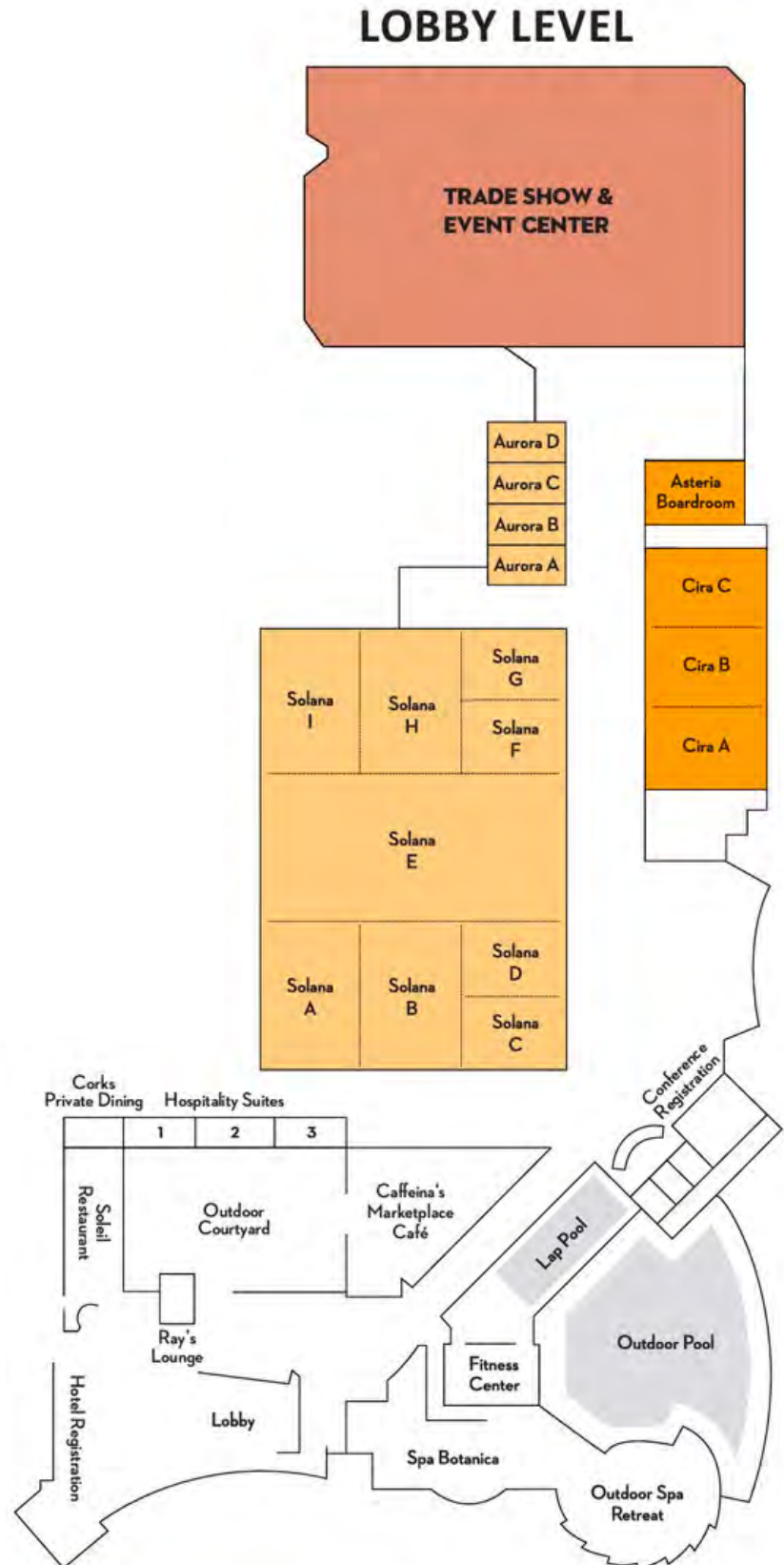
GlobalMed®

Hotel Floor Plan

SPS registration and check-in. From the lobby, follow the corridor between the fitness center and Caffeina's Marketplace Café.

All Monday and Tuesday plenary talks and Lightning Rounds will be held in the Solana Ballroom ABCD. Tuesday afternoon breakout sessions will be held in Cira A, B, and C.

Posters and poster presentations will be in the Solana Ballroom ABCD. Meet the authors at the poster presentation breakfast, Tuesday from 7:30 to 8:30 am. Poster abstracts start on p. 33.

The **SPS Expo Hall** is in the Solana Ballroom EFGHI. The SPS Expo Hall layout is on p. 26.

Networking breaks, lunches, and the Monday evening reception will be in the Expo Hall.

LOBBY LEVEL

TRADE SHOW & EVENT CENTER

Aurora D
Aurora C
Aurora B
Aurora A

Asteria Boardroom

Cira C
Cira B
Cira A

Solana I
Solana H
Solana G
Solana F
Solana E
Solana A
Solana B
Solana D
Solana C

Corks Private Dining
Hospitality Suites
1 2 3

Soleil Restaurant
Outdoor Courtyard
Caffeina's Marketplace Café

Conference Registration

Lap Pool

Outdoor Pool

Ray's Lounge

Fitness Center

Hotel Registration

Lobby

Spa Botanica

Outdoor Spa Retreat

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

General Information

Registration/Information Desk

The SPS Registration/Information Desk is to your right as you enter the conference area (past Caffeina's Marketplace Café).

Registration/Information Desk hours:

- Sunday, Oct. 7: 3:00 pm - 6:00 pm
- Monday, Oct. 8: 7:00 am - 5:00 pm
- Tuesday, Oct. 9: 7:00 am - 3:00 pm

Speaker & Moderator Registration/Information Desk

The Speaker & Moderator Registration/Information Desk is to the left of the conference registration desk. Moderators will receive moderator packets; speakers will receive speaker packets and can upload presentations here. Please have your presentation loaded at least two hours before your scheduled session.

Name Badges

SPS attendees must wear name badges for access to sessions, meals, and the Expo Hall.

Speaker Slides & Handouts

Speaker handouts and slides will be posted at https://ttspsworld.com/2018-presentations/ Some handouts and slides will not be available. The username and password are in your printed program.

Photos and Recordings

Photographs will be taken during SPS and are the property of the Arizona Telemedicine Program (ATP), University of Arizona. Unauthorized recording or broadcasting (audio, video, still photography) of presentations and posters without the express written consent of ATP and individual presenters is strictly prohibited.

Table of Contents

SPS 2018 HOSTS:

**Arizona Telemedicine Program
Southwest Telehealth Resource Center
Four Corners Telehealth Consortium**

Welcome

We are delighted to welcome you to the fourth national Telemedicine & Telehealth Service Provider Summit. SPS focuses on building partnerships to deliver high quality telemedicine- and telehealth-enabled medical specialty services.

We are pleased to present an exciting lineup of speakers that includes nationally and internationally recognized experts on telehealth; industry leaders; and authorities on legal, regulatory, and policy aspects. The two-day conference features a series of high-powered talks and panels on learning what it takes to succeed in this increasingly competitive market; finding the right partners; understanding telemedicine laws, regulations, and policies; establishing successful partnerships; integrating telehealth into different health-care enterprises; making telehealth pay; influencing telehealth legislation; and navigating changing technology.

The Expo Hall showcases a wide array of tele-clinical specialty services and supporting technologies, providing a forum for networking as well as seeing and discussing the latest trends in clinical telehealth. To help attendees navigate the floor and hear first-hand what these telehealth companies have to offer, our "Lightning Rounds" highlight exhibitors with brief descriptions of their products and services.

Healthcare is changing and telehealth is leading the way. Tele-service providers offer a model for improving the efficient and effective delivery of health care in innovative ways that truly impact patient care. SPS 2018 offers attendees practical, useful advice to help you stay competitive in this demanding and dynamic field.

We wish to express our appreciation to the many individuals who have participated in the planning and implementation of SPS 2018. Their enthusiasm and dedication have been critical in making SPS 2018 a reality.

It is our hope that you find this conference enjoyable as well as valuable.

Sincerely,

Your SPS 2018 Co-Chairs,

Dale C. Alverson, MD
Professor Emeritus and Regents' Professor
Medical Director, Center for Telehealth
University of New Mexico Health Sciences Center
Past President, American Telemedicine Association

Elizabeth A. Krupinski, PhD
Professor and Vice-Chair of Research
Department of Radiology & Imaging Sciences
Emory University
Co-Director, Southwest Telehealth Resource Center
Past President, American Telemedicine Association

SPS Hosts

SPS 2018 Leadership

HONORARY CHAIR

Ronald S. Weinstein, MD, FCAP, FATA
Director, Arizona Telemedicine Program
Co-Director, Southwest Telehealth Resource Center

CO-CHAIR

Dale C. Alverson, MD, FATA, FAAP
Medical Director Center for Telehealth
University of New Mexico Health Sciences Center

CO-CHAIR

Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA
Co-Director
Southwest Telehealth Resource Center

NATIONAL ADVISORY BOARD

- **Amanda Aguirre, MA, RD**
  President and Chief Executive Officer
  Regional Center for Border Health, Inc., Yuma, AZ

- **Joseph S. Alpert, MD**
  Editor in Chief
  The American Journal of Medicine

- **Richard S. Bakalar, MD, FATA**
  Vice President and Chief Strategy Officer
  ViTel Net, McLean, VA (based in Denver, CO)

- **Joel E. Barthelemy**
  President and Chief Executive Officer
  GlobalMed, Scottsdale, AZ

- **Rashid Bashshur, PhD**
  Senior Advisor for eHealth (Retired)
  Michigan Medicine, University of Michigan, Ann Arbor, MI

- **Terry Boulanger**
  Executive Director
  New Mexico Telehealth Alliance, Albuquerque, NM

- **Anne E. Burdick, MD, MPH**
  Associate Dean for TeleHealth
  Professor of Dermatology
  University of Miami Miller School of Medicine, Miami, FL

- **Robert "Bob" Burns**
  Commissioner
  Arizona Corporation Commission, Phoenix, AZ

- **Daniel J. Derksen, MD**
  Associate Vice President for Health Equity, Outreach and Interprofessional Activities
  Professor & Chair, Community, Environment & Policy Department
  Walter H. Pearce Endowed Chair & Director, Arizona Center for Rural Health
  Mel & Enid Zuckerman College of Public Health
  The University of Arizona Health Sciences, Tucson, AZ

- **Charles R. Doarn, MBA**
  Editor-in-Chief, Telemedicine and e-Health Journal
  Family Medicine, University of Cincinnati, Cincinnati, OH

- **Alexis S. Gilroy, JD**
  Partner
  Jones Day, Washington, DC

- **Jason Goldwater, MA, MPA, PMP**
  Senior Director
  The CedarBridge Group, LLC, Laurel, MD

- **B. Tilman Jolly, MD, FACEP**
  Chief Medical Officer
  SOC Telemed, Reston, VA

- **Nathaniel Lacktman, JD**
  Partner & Chair, Telemedicine Industry Team
  Foley & Lardner, LLP, Tampa, FL

- **Deb LaMarche**
  Associate Director
  Utah Telehealth Network, Salt Lake City, UT

- **Ronald C. Merrell, MD, FACS, FATA**
  Editor-in-Chief, Telemedicine and e-Health Journal
  Emeritus Professor of Surgery, Virginia Commonwealth University
  Richmond, VA

- **Alan Pitt, MD**
  Professor of Neuroradiology, Barrow Neurological Institute, Phoenix, AZ

- **Sarah N. Pletcher, MD, MHCDS**
  Assistant Professor of Surgery and Assistant Professor of Medicine
  Giesel School of Medicine at Dartmouth, Hanover, NH

- **Ronald K. Poropatich, MD**
  Executive Director, Center for Military Medicine Research
  University of Pittsburgh Medical Center, Pittsburgh, PA

- **Pedro C. Ramos, MD**
  Chief of Telehealth in Mexico
  Professor and Researcher at Telecom-CIDE (Center for Economic Research and Teaching)
  Chief Editor, Journal of the Asociación Iberoamericana de Telesalud y Telemedicina, Monterrey, Nuevo Leon, Mexico

- **Karen Rheuban, MD**
  Director, Center for Telehealth
  University of Virginia, Charlottesville, VA

- **Alan Roga, MD**
  President, Provider Market
  Teladoc, Lewisville, TX

- **Nancy A. Roget, MS, MFT, LADC**
  Executive Director/Project Director/Co-Director
  National Frontier and Rural Telehealth Education Center (NFARtec)
  Mountain Plains ATTC-Region 8
  Center for the Application of Substance Abuse Technologies (CASAT)
  School of Community Health Sciences, University of Nevada, Reno, NV

- **Jay H. Sanders, MD, FACP, FACAAI, FATA**
  Chief Executive Officer, The Global Telemedicine Group, McLean, VA
  Professor of Medicine (Adjunct), Johns Hopkins University School of Medicine
  Founder and President Emeritus, American Telemedicine Association

- **Jay H. Shore, MD, MPH**
  Director of Telemedicine, Helen and Arthur E. Johnson Depression Center
  University of Colorado Anschutz Medical Campus, Aurora, CO

- **Debbie Voyles, MBA HOM**
  Corporate Director, Virtual Health
  Ballad Health, Johnson City, TN

Thanks to Our Sponsors

CONFERENCE PARTNER

GlobalMed®

PLATINUM SPONSOR

ViTel Net

GOLD SPONSOR

American Well®

SILVER SPONSORS

AARP® Real Possibilities
Arizona

SnapMD

SOUTHWEST TRC TELEHEALTH RESOURCE · CENTER

Poster Session Sponsor

SOC Telemed™

Friends of SPS

THE UNIVERSITY OF ARIZONA
MEL & ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH
Center for Rural Health

FOLEY
FOLEY & LARDNER LLP

Lanyard Sponsor

zoom

Networking Break Sponsor

regroup

Copper Sponsor

VSee

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit®

SPS Schedule at a Glance

MONDAY, October 8, 2018		TUESDAY, October 9, 2018	
8:00-8:10	Welcome	7:30-8:30	**Poster Session and Breakfast** *Sponsored by SOC Telemed*
MODULE 1 / LAYING THE GROUNDWORK FOR IMPLEMENTATION & GROWTH		**MODULE 3 / MAKING PARTNERSHIPS WORK**	
8:10-8:40	**Revenue and Monetization Strategies**	8:30-9:30	**Roundtable** **Why Do Industry Leaders Join Forces?**
8:40-9:10	**Building Sustainable Programs through Partnership Funding Models**		
9:10-9:40	**Meet the Service Providers Lightning Rounds**	9:30-10:00	**Meet the Service Providers Lightning Rounds**
9:40-10:10	**NETWORKING BREAK – Expo Hall** *Sponsored by AARP Arizona*	10:00-10:30	**NETWORKING BREAK – Expo Hall** *Sponsored by Regroup*
10:10-11:10	**Panel** **How to "Kick the Tires" of a Prospective Vendor**	10:30-11:00	**Native American Telehealth Partnerships**
11:10-12:10	**Panel** **Proving Your Case with Quality Metrics and Cost Data**	11:00-12:00	**Panel** **Partnership Lessons Learned: Successes to Emulate & Pitfalls to Avoid**
12:10-1:30	**LUNCH – Expo Hall** *Sponsored by American Well*	12:00-1:15	**LUNCH – Expo Hall** *Sponsored by Southwest Telehealth Resource Center*
MODULE 2 / LEGAL AND REGULATORY HOT TOPICS		**MODULE 4 / BREAKOUTS**	

MODULE 2 / LEGAL AND REGULATORY HOT TOPICS (Monday)

Time	Session
1:30-2:00	**Advancing Your Telehealth Legislative Agenda**
2:00-2:30	**Changes in CMS Rules & Federal Law and How They Affect You**
2:30-3:00	**Meet the Service Providers Lightning Rounds**
3:00-3:30	**NETWORKING BREAK – Expo Hall** *Sponsored by SnapMD*
3:30-4:30	**Panel** **How to Leverage Telehealth in Shifting from Fee-for-Service to Value-Based Care**
4:30-5:00	**Asynchronous Telemedicine Law & Regulation**
5:00-6:30	**NETWORKING RECEPTION – Expo Hall** *Sponsored by GlobalMed*

MODULE 4 / BREAKOUTS (Tuesday)

Time	Track 1: Navigating the Rapids of Changing Telehealth Tech (Cira A)	Track 2: Operational Nuts & Bolts for Telehealth (Cira B)	Track 3: Telehealth Partnership Use Cases (Cira C)
1:15-1:45	**Real Healthcare Benefits of Augmented Reality**	**Panel** **Credentialing and Telehealth**	**Teledentistry Partnerships**
1:45-2:15	**Wearable Sensors & Health Outcomes**		**Health Extension Rural Offices (HEROs): Where Does Telehealth Fit?**
2:15-2:30	**NETWORKING BREAK**		
2:30-3:00	**Partnering with Your Telehealth Vendor**	**Negotiating with Payers**	**Integrated Care Partnerships**
3:00-3:30	**AI & Telehealth**	**How Not to Miss a Thing: Telehealth Compliance Checklist**	**Providing Services Internationally**
3:30-4:00	**Closing & Cake: Celebrating 50 Years of Telemedicine and Looking Forward to the Next 50**		

SPS Telemedicine Telehealth Service Provider Summit

Arizona Telemedicine Program

Detailed Schedule

Please note that all plenary sessions will be held in Solana Ballroom ABCD and Tuesday afternoon breakout sessions will be held in Cira A, B and C.

Speaker handouts and slides will be posted at https://ttspsworld.com/2018-presentations/ . The username and password to access the handouts and slides are in your printed program.

DAY ONE - MONDAY, October 8, 2018	
7:00 am – 5:00 pm	**SPS Registration and Information Desk Open**
8:00 am – 8:10 am	**Welcome** **Dale C. Alverson, MD, FATA, FAAP** *Medical Director, Center for Telehealth University of New Mexico Health Sciences Center* *Albuquerque, NM* **Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA** *Co-Director* *Southwest Telehealth Resource Center* *Tucson, AZ*

MODULE 1: LAYING THE GROUNDWORK FOR IMPLEMENTATION & GROWTH	
	Section Moderator: **Ronald K. Poropatich, MD, MS** *Executive Director, Center for Military Medicine Research* *Health Sciences at the University of Pittsburgh Medical Center* *Pittsburgh, PA*
8:10 am – 8:40 am	**Revenue and Monetization Strategies** **Andrew Watson, MD, MLitt, FACS** *Vice President of Clinical Information Technology Transformation, University of Pittsburgh Medical Center* *Pittsburgh, PA* *President, American Telemedicine Association* *Arlington, VA*
8:40 am – 9:10 am	**Building Sustainable Programs through Partnership Funding Models** **Rachel Dixon** *Chief Strategy Officer, Care on Location* *Denver, CO* **Matthew C. Mishkind, PhD** *Deputy Director & Director of Operations for Military and Veteran Programs, Helen and Arthur E. Johnson Depression Center, University of Colorado Anschutz Medical Campus* *Aurora, CO*
9:10 am – 9:40 am	**Lightning Rounds: Meet the Service Providers and Tech Companies** **Dale C. Alverson, MD, FATA, FAAP** **Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA**
9:40 am – 10:10 am	**EXPO HALL OPEN (Solana E-I Ballroom) – Networking Break** *Sponsored by AARP Arizona*

SPS 2018 Social Media: Use hashtag #TTSPS2018 | @UA_ATP

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

Section Moderator:

Elizabeth Krupinski, PhD, FSPIE, FSIIM, FATA
Co-Director, Southwest Telehealth Resource Center
Tucson, AZ

10:10 am – 11:10 am	**Panel**

How to "Kick the Tires" of a Prospective Vendor

Elizabeth Krupinski, PhD, FSPIE, FSIIM, FATA
Co-Director, Southwest Telehealth Resource Center
Tucson, AZ

Gigi Sorenson, RN, MSN
Chief Clinical Officer/Vice President of Operations, GlobalMed
Scottsdale, AZ

Shahram "Shez" Partovi, MD *Chief Digital Officer, Dignity Health Phoenix, AZ*

11:10 am – 12:10 pm	**Panel**

Proving Your Case with Quality Metrics and Cost Data

Introduction: Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA
Co-Director, Southwest Telehealth Resource Center, Tucson, AZ

Najib Ben Brahim, PhD
Founder and Chief Executive Officer
Ignis Health
Charlottesville, VA

Arnab Nayak, PhD
Assistant Professor of Economics
Eugene W. Stetson School of Business and Economics, Mercer University
Atlanta, GA

Kelly J. Ko, MS, PhD
Principal Investigator
West Health
La Jolla, CA

12:10 pm – 1:30 pm	**NETWORKING LUNCH – Expo Hall**

Sponsored by American Well

MODULE 2: LEGAL AND REGULATORY HOT TOPICS

Section Moderator:

Nathaniel Lacktman, JD
Partner, Foley & Lardner LLP
Tampa, FL

1:30 pm – 2:00 pm	**Advancing Your Telehealth Legislative Agenda**

H. Neal Reynolds, MD
Vice President, Board of Directors, Maryland Telehealth Alliance, Inc.
Crisfield, MD
Co-Director, Multi Trauma Intensive Care Unit
R. Adams Cowley Shock Trauma Center
University of Maryland School of Medicine
Baltimore, MD

Time	Session
2:00 pm – 2:30 pm	**Changes in CMS Rules & Federal Law and How They Affect You** **Alexis S. Gilroy, JD** *Partner, Jones Day* *Washington, DC*
2:30 pm – 3:00 pm	**Lightning Rounds: Meet the Service Providers and Tech Companies** **Dale C. Alverson, MD, FATA, FAAP** **Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA**
3:00 pm – 3:30 pm	**NETWORKING BREAK – Expo Hall** *Sponsored by SnapMD*

Section Moderator:

Dale Alverson, MD, FATA, FAAP
Medical Director, Center for Telehealth, University of New Mexico Health Sciences Center
Albuquerque, NM

Time	Session
3:30 pm – 4:30 pm	**Panel** **How to Leverage Telehealth in Shifting from Fee-for-Service to Value-Based Care** **Jean Glossa, MD, MBA, FACP** *Managing Principal for Clinical Services* *Health Management Associates* *Washington, DC* **Kevin Lee Smith, DNP, FNP, FAANP** *Chief Medical Information Officer* *Zipnosis, Inc.* *Minneapolis, MN* **Sylvia Romm, MD, MPH** *Vice President, Medical Affairs* *American Well* *Boston, MA*
4:30 pm – 5:00 pm	**Asynchronous Telemedicine Law & Regulation** **Nathaniel Lacktman, JD** *Partner, Foley & Lardner, LLP* *Tampa, FL*
5:00 pm – 6:30 pm	**NETWORKING RECEPTION – Expo Hall** *Sponsored by GlobalMed*

**Please fill out the conference and presenter evaluation forms included with
your conference packet and drop them off at the SPS registration desk.
Or go to https://www.surveymonkey.com/r/SPS2018Eval to evaluate presenters
and the conference online. Thank you.**

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

DAY TWO - TUESDAY, October 9, 2018

7:00 am – 3:00pm	**SPS Registration and Information Desk Open**
7:30 am – 8:30 am	**POSTER SESSION & BREAKFAST – Lecture Hall** *Sponsored by SOC Telemed*

MODULE 3: MAKING PARTNERSHIPS WORK

Section Moderator:

Alexis Gilroy, JD
Partner, Jones Day
Washington, DC

8:30 am – 9:30 am	**Roundtable** **Why Do Industry Leaders Join Forces?**

Robert M. Kolodner, MD, FACMI, LFAPA
Vice President & Chief Medical Officer
ViTel Net
McLean, VA

Sylvia Romm, MD, MPH
Vice President of Medical Affairs
American Well
Boston, MA

Deborah Ann Mulligan, MD
Chief Medical Affairs Officer
MDLIVE
Sunrise, FL

Andrew Turitz, MBA
Senior Vice President of Corporate Development
Teladoc
Purchase, NY

Alan Pitt, MD
Professor of Neuroradiology
Barrow Neurological Institute
Phoenix, AZ

Lee A. Wood
Executive Vice President & General Manager
Physician Capacity Management
InTouch Health
Santa Barbara, CA

9:30 am – 10:00 am	**Lightning Rounds: Meet the Service Providers and Tech Companies**

Dale Alverson, MD, FATA, FAAP

Elizabeth Krupinski, PhD, FSPIE, FSIIM, FATA

10:00 am – 10:30 am	**NETWORKING BREAK – Expo Hall** *Sponsored by Regroup*

Section Moderator:	
	Claire E. Castles, JD, LLM *Partner, Jones Day* *Los Angeles, CA*

10:30 am – 11:00 am	**Native American Telehealth Partnerships** **Jay H. Shore, MD, MPH** *Director of Telemedicine, Helen and Arthur E. Johnson Depression Center and Professor, Psychiatry, Centers for American Indian and Alaska Native Health, University of Colorado* *Aurora, CO*
11:00 am – 12:00 pm	**Panel** **Partnership Lessons Learned: Successes to Emulate & Pitfalls to Avoid** **Ami B. Bhatt, MD, FACC** *Director, Adult Congenital Heart Disease Program & Director, Outpatient Cardiology* *Massachusetts General Hospital* *Boston, MA* **Taylan Bozkurt, MBA, FACHE** *Assistant Chief Operating Officer and Director of Telemedicine* *Burn and Reconstructive Centers of America* *Augusta, GA* **Zachary P. Griffin, MBA, MHA, FACHE** *Telehealth Director and Senior Service Line Leader, Tele-Neurology* *Providence St. Joseph Health* *Seattle, WA*
12:00 pm – 1:15 pm	**NETWORKING LUNCH – Expo Hall** *Sponsored by Southwest Telehealth Resource Center*

MODULE 4: BREAKOUT SESSIONS

Track 1: – Cira A: **Navigating the Rapids of Changing Telehealth Tech**	Track 2: – Cira B: **Operational Nuts & Bolts for Telehealth**	Track 3: – Cira C: **Telehealth Partnership Use Cases**
Moderator: **Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA,** *Co-Director* *Southwest Telehealth Resource Center* *Tucson, AZ*	**Moderator:** **Ronald S. Weinstein, MD, FCAP, FATA,** *Director* *Arizona Telemedicine Program* *Tucson, AZ*	**Moderator:** **Dale C. Alverson, MD, FATA, FAAP,** *Medical Director Center for Telehealth* *University of New Mexico Health Sciences Center* *Albuquerque, NM*

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

Time			
1:15 pm – 1:45 pm	**Real Healthcare Benefits of Augmented Reality** **Scott Simmons, MS** *Chief Telemedicine Business Architect Medweb* *San Francisco, CA*	**Panel** **Credentialing & Telehealth** **Angela Beaudreau, MA** *Senior Manager Provider Network Providence St. Joseph Health* *Seattle, WA*	**Teledentistry Partnerships** **Maria Kunstadter, DDS** *President The TeleDentists* *Kansas City, MO*
1:45 pm – 2:15 pm	**Wearable Sensors & Health Outcomes** **Veena Misra, PhD** *Director, National Science Foundation ERC ASSIST Nano-systems Center, North Carolina State University* *Raleigh, NC*	**Alan Einhorn, JD** *Counsel Foley & Lardner, LLP* *Boston, MA* **Linda Waldorf, BS, CPMSM, CPCS** *Director of Centralized Credentialing Office and the Office of Medical Staff Services, UNC Health Care System* *Chapel Hill, NC*	**Health Extension Rural Offices (HEROs): Where Does Telehealth Fit?** **Arthur Kaufman, MD** *Professor of Family & Community Medicine & Vice Chancellor for Community Health Sciences, University of New Mexico* *Albuquerque, NM*
2:15 pm – 2:30 pm	**NETWORKING BREAK**		
2:30 pm – 3:00 pm	**Partnering with Your Telehealth Vendor** **Alexis Silver, MBA** *Principal, Alexis Silver Consulting* *Chatham, NY*	**Negotiating with Payers** **Claire E. Castles, JD, LLM** *Partner, Jones Day* *Los Angeles, CA* **Elizabeth M. Miller, RN, CRNP, MBA** *State President WellCare of Florida* *Tampa, FL*	**Integrated Care Partnerships** **Samir Malik, MBA** *Executive Vice President & General Manager Genoa Telepsychiatry* *New York, NY*
3:00 pm – 3:30 pm	**AI & Telehealth** **Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA** *Co-Director Southwest Telehealth Resource Center* *Tucson, AZ*	**How Not to Miss a Thing: Telehealth Compliance Checklist** **Alan Einhorn, JD** *Counsel Foley & Lardner, LLP* *Boston, MA*	**Providing Services Internationally** *Introduction to Legal Aspects:* **Claire E. Castles, JD,** *Partner, Jones Day* *Los Angeles, CA* ***Dale C. Alverson, MD, FATA, FAAP*** *Medical Director Center for Telehealth University of New Mexico Health Sciences Center* *Albuquerque, NM*

3:30 pm – 4:00 pm	**Closing & Cake:** **Celebrating 50 Years of Telemedicine and Looking Forward to the Next 50**
	Dale Alverson, MD, FATA, FAAP
	Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA
	Ronald S. Weinstein, MD, FCAP, FATA

Please fill out the conference and presenter evaluation forms
included with your conference packet and drop them off at the SPS registration desk.
Or go to https://www.surveymonkey.com/r/SPS2018Eval to evaluate presenters
and the conference online. Thank you.

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

Speaker and Moderator Biography Excerpts

Dale C. Alverson, MD, FATA, FAAP
Medical Director, Center for Telehealth
University of New Mexico Health Sciences Center

Dr. Alverson is Professor Emeritus and Regents' Professor at the University of New Mexico, where he is the Medical Director of the Center for Telehealth. He is involved in the planning, implementation, research, and evaluation of telemedicine systems for New Mexico, as well as nationally and internationally. He also is the Chief Medical Information Officer at LCF Research and the New Mexico Health Information Collaborative, assisting in their efforts to address the development and meaningful use of health information exchange, adoption of electronic health records, and integration with telemedicine. Dr. Alverson is a Past President of the American Telemedicine Association. He is involved in collaborative international programs to advance telehealth and e-health globally.

Angela Beaudreau, MA
Senior Manager, Provider Network
Providence St. Joseph Health

At Providence Saint Joseph Health, Angela Beaudreau manages the network of telehealth physicians who provide patient care throughout Alaska, Montana, Idaho, Washington, Oregon, California, and soon Texas and New Mexico. She has been a primary player in the continued efforts to establish a telehealth model that reduces the impact of redundant licensing and credentialing processes while maintaining high quality of care and creating efficiencies that allow for a greater volume of patients to be served. Ms. Beaudreau has a Bachelor of Science in Business Administration and a Master of Arts in Education and has been working in administrative roles within the healthcare landscape since 2004.

Najib Ben Brahim, PhD
Founder and Chief Executive Officer
Ignis Health

Dr. Ben Brahim holds two doctoral degrees, one in systems and information engineering from the University of Virginia and the other in health biology from the School of Medicine of the University of Montpellier in Montpellier, France. He is the founder and Chief Executive Officer of Ignis Health, a company focusing on data analytics approaches to measuring the clinical, operational, and financial return-on-investment performance of telehealth.
@TelehealthData

Ami B. Bhatt, MD, FACC
Director, Adult Congenital Heart Disease Program & Director, Outpatient Cardiology
Massachusetts General Hospital

Dr. Bhatt is an active clinical cardiologist, investigator, and educator. She graduated from Harvard College, obtained her doctoral degree from Yale School of Medicine, and trained at Massachusetts General Hospital (MGH), Children's Hospital of Boston, and Brigham and Women's Hospital in internal medicine, pediatrics, adult cardiology, and adult congenital heart disease (ACHD). Her team has transformed ACHD care at MGH into an internationally renowned program. Dr. Bhatt was nationally recognized as an educator by the American College of Cardiology in 2015 and by the American Heart Association in 2016 for ACHD program building and design. She innovates in the domains of telemedicine for ACHD patient visits, provider consultation, multimodality teleconferences, and adoption of mobile health technologies for caregivers and patients. Some of Dr. Bhatt's practice is now rural telecardiology. She has developed outreach clinics throughout New England to support ACHD care in the community and has been integral in establishing MGH Heart Center's cardiovascular outreach clinics at Holy Cross Hospital in Florida. She also mentors students in starting up companies and assessing novel technologies for applicability in the academic medical and clinical cardiac settings.
@amibhattmd

Taylan Bozkurt, MBA, FACHE
Assistant Chief Operating Officer and Director of Telemedicine
Burn and Reconstructive Centers of America

At Burn and Reconstructive Centers of America (BRCA), Taylan "Ty" Bozkurt leads development and implementation of the telemedicine program and operational/strategic planning to deliver burn/wound, reconstructive, and trauma/critical care across 13 institutions in 6 states. Prior to joining BRCA, he was Program Manager for Episodic and International Initiatives for Massachusetts General Hospital (MGH)

TeleHealth, where he focused on development of eConsults and international virtual visits. He also served as Operations/Financial Specialist for the MGH Department of Surgery, where he was responsible for development and launch of the department's telehealth/mHealth programs, creating the hospital's first telerounding program. Mr. Bozkurt is active in the American Telemedicine Association as a member of the Board of Directors, immediate past chair of the Business & Finance Special Interest Group, and chair of the Operations/Implementation track of the Education Committee. He also is a Board Member for the Georgia Chapter of the American College of Healthcare Executives, serving as Chair of the Growth & Satisfaction Committee for the chapter and as a member of ACHE's national Early Careerist Committee. He earned an MBA from Northeastern University and a BS in Entrepreneurship and Emerging Enterprises from Syracuse University.
@tbozkurt79

Claire E. Castles, JD, LLM
Partner
Jones Day

Claire Castles advises clients across the health care industry on compliance strategies and regulatory issues and in proceedings before federal and state government agencies. Her areas of practice include licensing and certification, payment and reimbursement, health privacy, Emergency Medical Treatment and Active Labor Act (EMTALA), Medicare conditions of participation, contracting and transactional matters, internal investigations, and government investigations and audits. Ms. Castles' experience includes advising hospitals and large academic medical centers in operational and administrative responses to state immediate jeopardy and privacy breach findings and Centers for Medicare and Medicaid Services' surveys and deficiency findings, including threatened termination actions. She also assists clients in responding to Health and Human Services Office of Inspector General audits, recovery audit contractor (RAC) and other program safeguard contractor (PSC) audits, and advises clients on repayments to private payers and the Medicare and Medicaid program. She is a voting member of the National Native American Bar Association and fellow of the American Bar Foundation.
@CECastles

Rachel Dixon
Chief Strategy Officer
Care on Location

Rachel Dixon is Chief Strategy Officer with Care on Location, a telemedicine group; Director of Operations and New Markets for access.mobile, a patient engagement platform; telehealth consultant and subject matter expert for MGMA; and telehealth subject matter expert with The CORE. She has experience in the clinical, operational, and technological implementation of tele-based modes of care delivery. She has worked with numerous provider organizations to successfully design, implement, and maintain virtual collaborative care programs in various settings including primary care, community mental health center, residential facilities, and payer organizations. Ms. Dixon is an energetic leader in the healthcare innovation field, with experience in strategic planning, innovation, program development, implementation, web technologies, integrated and collaborative care models, Medicaid, and organizational development.
@innovationrach

Alan Einhorn, JD
Counsel
Foley & Lardner, LLP

Alan Einhorn is Counsel and a health care business lawyer with Foley & Lardner, LLP. He represents provider networks, hospitals, clinics, practice groups, and individuals in entity formation, corporate reorganization, joint ventures, consolidations, physician/hospital integration strategies, medical staff development and governance, disciplinary matters, and licensure. He also regularly advises clients on strategic, corporate compliance and tax exemption-related issues as well as regulatory issues. He is a member of Foley's Health Care Industry and Health Information Technology Teams and co-chairs the Foley Health Care Industry Team's Compliance and Operations Work Group. In the area of telemedicine, Mr. Einhorn has assisted clients in evaluating regulatory and "practice of medicine" issues associated with the credentialing of out-of-state providers; prepared telemedicine staffing and credentialing agreements; drafted telemedicine credentialing provisions for medical staff bylaws; and assisted with the regulatory analysis for, and the establishment of, a telemedicine "eICU." Mr. Einhorn has been Peer Review Rated as AV® Preeminent™, the highest performance rating in Martindale-Hubbell's peer review rating system, and has been recognized for several years by *Chambers USA* as a leading health care lawyer.

Alexis S. Gilroy, JD
Partner
Jones Day

Alexis Gilroy is a partner at the law firm of Jones Day, where she advises health care providers and technology companies on transactional, health regulatory and corporate matters with an emphasis on digital health topics. She has managed numerous strategic merger, acquisition, private equity, venture capital, and joint venture transactions for various healthcare and technology companies, including telemedicine, mobile device, EHR, practice management, Cyberknife, imaging centers, and teleradiology. She advises on business strategy and implementation matters specific to telehealth programs, business models, m-health devices and products; counsels on regulations regarding virtual consults, e-prescribing, patient consents, credentialing by proxy, corporate practice of medicine, physician supervision, reimbursement, anti-kickback, and licensure matters specific to telemedicine and telehealth providers and businesses; develops and negotiates e-health specific customer, vendor, and affiliation contracts and documentation; structures research arrangements involving health information technology; and leads strategy and communications with medical boards and other regulators and policy makers on digital health topics. She is on the Board of Directors for the American Telemedicine Association, where she is also a past chair of the Business and Finance Special Interest Group, and is an appointee to the Maryland Governor's Telemedicine Taskforce.
@EHealthLaw

Jean Glossa, MD, MBA, FACP
Managing Principal for Clinical Services
Health Management Associates

Dr. Glossa is a physician and business leader focused on improving access to quality health care for underserved and low-income populations. She has a broad background in government-funded healthcare, having worked in various roles across the safety net in public health departments, migrant clinics, Medicaid managed care, graduate medical education, and private practice. She is the Managing Principal for Clinical Services at Health Management Associates (HMA), a leading national consulting firm, where she focuses on delivery system and payment reform, Patient-Centered Medical Home (PCMH) recognition, behavioral health integration, and helping clients with technology-based solutions such as telemedicine. She leads the HMA digital health team on projects related to strategy and program development, implementation, evaluation, and sustainability. Dr. Glossa consults with managed care organizations on procurements and on ways to improve member and provider relations, quality metrics, care management programs, and access to care for their most vulnerable populations. Prior to joining HMA, she worked at Molina Healthcare, served as medical director of the Fairfax County Community Health Care Network, was an assistant professor of medicine at the University of South Alabama and University of South Florida, and was Vice Chief of Staff at Sitka Community Hospital in Alaska.

Zachary P. Griffin, MBA, MHA FACHE
Telehealth Director and Senior Service Line Leader, Tele-Neurology
Providence St. Joseph Health

Zach Griffin is the Telehealth Director and Senior Service Line Leader accountable for the Providence St. Joseph Health (PSJH) Tele-Neurology program. PSJH is a not-for-profit, 50-hospital system serving communities in seven states. The PSJH telehealth ecosystem consists of 50+ programs across 100+ sites and will complete over 20,000 virtual visits in 2018. Mr. Griffin began his career as a management consultant at Ernst & Young, and has worked for industrial conglomerate 3M, information technology-focused Thomson Reuters, and healthcare service company NRC Health in a variety of leadership, strategy, marketing, product development, and business development roles. His role immediately prior to joining PSJH was General Manager of The Governance Institute, a service of NRC Health. Over the past several years, Mr. Griffin has amassed experience and expertise around the areas of telehealth, healthcare governance, healthcare consumerism, patient experience, and other emerging healthcare industry trends through the study of, and interaction with, hundreds of healthcare organizations. He received a bachelor's degree from the University of Iowa in mechanical engineering and later earned a master's degree in business administration at Indiana University's Kelley School of Business and a master's degree in healthcare administration at the University of Washington.
@SeattleZG

Arthur Kaufman, MD
Professor of Family and Community Medicine & Vice Chancellor for Community Health Sciences
University of New Mexico

Arthur Kaufman, MD, is a Professor of Family and Community Medicine at the University of New Mexico (UNM) and is the Vice Chancellor for Community Health Sciences at the UNM Health Sciences Center. He served in the US Indian Health Service in South Dakota and New Mexico before joining the Department of Family and Community Medicine at UNM. Dr. Kaufman helped initiate the Primary Care Curriculum in New Mexico, which became an international model for change through innovative track in traditional medical schools, and is the Director of New Mexico's World Health Organization Collaborating Center. He created the HEROs (Health Extension Rural Offices) program, which connects UNM Health Sciences Center resources to towns and villages throughout New Mexico. He has received national and international teaching awards including the "5 Star Doctor Award" from the World Organization of Family Doctors in 2008. In 2015, he was elected to the National Academy of Medicine/Institute of Medicine. He has over 70 publications, has written four books, and has received numerous federal and private foundation grants. He received his MD from the State University of New York, Brooklyn, and completed his residency in Internal Medicine at St. Vincent's Hospital in New York.

Robert M. Kolodner, MD, FACMI, LFAPA
Vice President and Chief Medical Officer
ViTel Net

With over 30 years of federal service, Robert M. Kolodner, MD, is a leader in health informatics who has been at the forefront of advances in health information technology for more than two decades. As National Coordinator for Health IT in the Department of Health and Human Services, he promoted the adoption and use of electronic health records and advanced policies and collaborative efforts between the public and private sectors to develop a nationwide, interoperable health IT infrastructure. Before his work at HHS, he was the national Chief Medical Informatics Officer for the Department of Veterans Affairs' broad range of health IT activities. He was the clinical champion for VistA, VA's award-winning electronic health record system, which was the world's first successful, large-scale Electronic Health Record implementation, and oversaw the launch of My HealtheVet, the VA's personal health record for veterans. Dr. Kolodner received his MD from Yale and completed his psychiatric residency at Washington University in St. Louis. He has been on the faculty at three medical schools and the Georgia Institute of Technology. He is board certified in psychiatry, a Fellow in the American College of Medical Informatics, and a Lifetime Fellow in the American Psychiatric Association.

Kelly J. Ko, MS, PhD
Principal Investigator
West Health Institute

Kelly Ko, PhD, is a Principal Investigator with the West Health Institute, with responsibility over a broad portfolio of applied medical research focused on senior-specific models of acute care with an emphasis on geriatric emergency care and telehealth. Prior to his current role at West health, Dr. Ko led research services for one of the nation's largest health information technology companies, partnering with health systems and provider groups executing large scale research studies leveraging clinical data for secondary research purposes. Prior to his work in health information technology, his early research efforts focused on psychosocial aspects of healthy aging across the lifespan.
@kokellyj

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

Elizabeth A. Krupinski, PhD, FSPIE, FSIIM, FATA
Co-Director
Southwest Telehealth Resource Center

Dr. Krupinski is a Professor at Emory University in the Department of Radiology & Imaging Sciences and is Vice-chair of Research. She received her BA from Cornell, MA from Montclair State and PhD from Temple, all in Experimental Psychology. Her interests are in medical image perception, observer performance, medical decision making, and human factors. She has published extensively in these areas, and has presented at conferences nationally and internationally. She is also Associate Director of Evaluation for the Arizona Telemedicine Program and Co-Director of the Southwest Telehealth Resource Center. She is Past Chair of the SPIE Medical Imaging Conference, Past President of the American Telemedicine Association, President of the Medical Image Perception Society, and Past Chair of the Society for Imaging Informatics in Medicine. She serves on a number of editorial boards for both radiology and telemedicine journals and is the Co-Editor of the *Journal of Telemedicine & Telecare*. She serves regularly as a grant reviewer for the NIH, DoD, TATRC, and other federal, state and international funding agencies and has served as a member of a number of FDA review panels.

Maria Kunstadter, DDS
President
The TeleDentists

Maria Kunstadter, DDS, graduated from the University of Missouri-Kansas City School of Dentistry. While there, she co-founded the UMKC Dental Outreach Program. For 25 years, the program has taken students, faculty, and alumni to low- and middle-income countries to provide dental care. Dr. Kunstadter has led and participated in more than 24 medical mission trips worldwide since 1982. She has been in private practice of dentistry for over 30 years. In 2001, she co-founded The Smile Salon, the Midwest's first dental spa. In 2004, she was designated an "Innovator" by the Invisalign Corporation. In 2008, she achieved the designation of Elite Preferred Provider with Invisalign, which is awarded to only one percent of Invisalign providers in the world. Dr. Kunstadter was the first female dentist to be awarded this honor. In 2013, Dr. Kunstadter was appointed the Dental Director of The PAINS Alliance of Kansas City, an organization developed to address chronic pain nationwide. She is the co-founder of The TeleDentists, the first teledental platform to provide dental consultation services to the healthcare industry.

Nathaniel Lacktman, JD
Partner
Foley & Lardner, LLP

Nathaniel Lacktman is a partner with the law firm Foley & Lardner LLP. He is the Chair of the firm's Telemedicine Industry Team and Co-Chair of its Digital Health Group. He advises hospitals, health care providers, and technology companies on business arrangements, compliance, and corporate matters, with particular attention to telehealth, digital health, and health innovation. His approach to practicing law emphasizes strategic counseling, creative business modeling, and fresh approaches to realize clients' ambitious and innovative goals. He serves on the Executive Committee of the American Telemedicine Association's Business & Finance Group, co-Chairs the Telemedicine and eHealth Affinity Group of the American Health Lawyers Association, and is Chief Legal Counsel to the Telehealth Association of Florida. Mr. Lacktman speaks and writes frequently on issues at the forefront of telehealth, and has helped author telemedicine policy letters and position statements with such organizations as the American Telemedicine Association and the American Heart Association. He has provided comments, draft legislation, and policy input on telehealth to state lawmakers, the Drug Enforcement Agency, the Congressional Research Service, state Medicaid agencies, and state boards of medicine. His work has been recognized in Chambers USA: America's Leading Business Lawyers.
@lacktman

Samir Malik, MBA
Executive Vice President/General Manager
Genoa Telepsychiatry

Samir Malik is the Executive Vice President and General Manager of Genoa Telepsychiatry, one of the largest outpatient telepsychiatry providers in the country. Samir came into this role through the acquisition of his company, 1DocWay, a New York City-based telepsychiatry company, which he co-founded and where he served as CEO. Prior to 1DocWay, Mr. Malik was the President of Signature Healthcare and CEO of ZipCare Transportation, two healthcare service companies he started and led, and that have grown in the past five years from two employees to over 200. From 2010 to 2012, he was the Director of Strategic Planning at CenterPointe Hospital, a 150-bed health system in St. Louis, MO, where he designed and built a new model for outpatient mental health programs

across three states. Prior to CenterPointe Hospital, his career began with McKinsey & Co as a Business Analyst, where he focused on a wide range of strategic and operational initiatives for large organizations both inside and outside healthcare. Mr. Malik received a BS in economics from the Wharton School at the University of Pennsylvania, a BA in neuroscience from Penn with distinction, and an MBA in healthcare management from Wharton.

Elizabeth M. Miller, RN, CRNP, MBA
State President of Florida
WellCare Health Plans, Inc.

Elizabeth Miller was named President of WellCare of Florida in October 2016. In this role, she is responsible for the company's Florida Medicare and Medicaid health plans, including plan strategy, regulatory compliance, network management, sales and marketing, medical management, finance, and administration. Previously, she served as the Florida plan's Chief Operating Officer, leading the teams responsible for network management, health services, behavioral health, and organization training. Ms. Miller joined WellCare in March 2012 as Vice President, Product Operations in Florida. Prior to that, she held roles with increasing levels of responsibility with Genesis Healthcare, a national long-term care company, and held network development and health service roles with UnitedHealth Group. A certified nurse practitioner, she began her career as an oncology clinical nurse and transitioned into managed care after completing her Master's in Business Administration at the Wharton School at the University of Pennsylvania. She currently serves on the state's Telehealth Advisory Council and on the Board of Trustees of the Florida Council on Aging.

Matthew C. Mishkind, PhD
Deputy Director and Director of Operations for Military and Veteran Programs
Helen and Arthur E. Johnson Depression Center, University of Colorado

Matt Mishkind, PhD, has focused his career on military health care, telehealth program development, and organizational development. He began his military health career with the Deployment Health Clinical Center (DHCC) at Walter Reed Army Medical Center in Washington, DC. He also served as one of the original staff members tasked with developing the National Center for Telehealth and Technology (T2), located on Joint Base Lewis-McChord

in Washington State. While at T2, Dr. Mishkind helped lead the development of several technology-based initiatives to improve behavioral health access across the Department of Defense. His particular focus was on developing telehealth programs for remote and otherwise isolated populations. Both DHCC and T2 are part of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury. Dr. Mishkind currently serves as Deputy Director of the Helen and Arthur E. Johnson Depression Center at the University of Colorado Anschutz Medical Campus, which includes overseeing veteran and military programs. He recently served as a national telehealth consultant for the Cohen Veterans Network. He is actively developing telehealth programs to reach mountain and rural communities throughout the intermountain west. He received his BS from the University of Oregon and his PhD from the University of Vermont.

Veena Misra, PhD
Director, National Science Foundation ERC ASSIST Nanosystems Center
North Carolina State University

Veena Misra is the Director of the National Science Foundation Nanosystems Engineering Research Center for Advanced Self-Powered Systems of Integrated Sensors and Technologies (ASSIST). She is a Professor of Electrical and Computer Engineering at North Carolina State University and is an IEEE Fellow. She received her BS, MS, and PhD degrees in electrical engineering from North Carolina State University, Raleigh. After working at the Advanced Products Research and Development Laboratories of Motorola Inc., Austin, TX, she joined the faculty of North Carolina State University in 1998. She has authored or co-authored over 150 papers in the areas of state-of-the-art, low-power CMOS devices, power devices, alternative high-mobility substrates, nanoscale magnetics, and energy harvesting. Dr. Misra was the recipient of the 2001 National Science Foundation Presidential Early CAREER Award, the 2011 Alcoa Distinguished Engineering Research Award, and the 2007 Outstanding Alumni Research Award. She also served as the General Chair of the 2012 IEEE International Electron Device Meeting.

**Bookmark https://ttspsworld.com
for information on SPS 2019!**

Deborah Ann Mulligan, MD, FAAP, FACEP
*Chief Medical Affairs Officer*
MDLIVE

A tri-lingual, board-certified, practicing pediatric emergency medicine physician, Deborah Ann Mulligan, MD, is the Founder and Director of the Institute for Child Health Policy at Nova Southeastern University (NSU). She also is the Chief Medical Affairs Officer of MDLIVE. She has held leadership positions in healthcare, government, research, and technology sectors, including that of Pediatric Services Medical Director for the nation's fourth largest safety net hospital system. She has served the HHS Maternal and Child Health Bureau's Emergency Medical Services for Children program as Project Director and Florida Senior Advisor of state model programs. She is a consultant to the White House Office of National AIDS Policy, Centers for Disease Control, and Florida State Agency for Health Care Administration and Department of Health. Dr. Mulligan serves on the University of California Santa Barbara Center for Digital Games Research Board of Advisors and is Co-President/CMO of Sitio Saludable, Inc., a national, multi-disciplinary media startup company formed to provide broadcast and digital content to promote and support positive health behavior change among the US Hispanic population. With over 100 peer-reviewed publications in her field, she has lectured globally and received numerous health policy, community service, scientific, educational, and professional society awards.

Arnab Nayak, MA, MS, PhD
Assistant Professor of Economics
Eugene W. Stetson School of Business and Economics
Mercer University

Arnab Nayak is an Assistant Professor of Economics at Mercer University. His primary teaching and research interests are empirical international trade, health economics, microeconometrics, and economics of multinational enterprises. Before joining Mercer University, Dr. Nayak spent three years as an economist for Deloitte and used his expertise in healthcare and pharmaceutical research to plan and price cross-border transactions for multinational companies, including several healthcare and pharmaceutical companies. For his research in health economics, he uses large US and international healthcare and pharmaceutical-related databases to investigate areas including healthcare benefits and costs, healthcare policies associated with pharmaceutical research and

development decisions, and child obesity and related policy issues. He is actively involved in health economics and healthcare-related research and seeks to improve quality of life and healthcare policies, facilities, and practices through policy analysis, improved healthcare outcome research and policy recommendations, community involvement, and his teaching for the benefit of the community in the region. Dr. Nayak has published articles in several health- and economics-related journals and also has presented his research at conferences and academic institutions nationally and internationally. He earned his PhD at Purdue University.
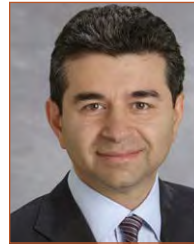
Shahram (Shez) Partovi, MD
Chief Digital Officer
Dignity Health

Shahram (Shez) Partovi, MD, completed his neuroradiology training at the Barrow Neurological Institute in Phoenix, AZ. He obtained his MD from McGill University in Montreal and moved to Phoenix to complete his subspecialty training at Barrow. In addition to his passion for clinical excellence, he has deep knowledge in the field of medical computing and health IT. During his medical training, he simultaneously studied computer science to solidify his dual domain expertise. After a decade of practice as a neuroradiologist, he transitioned into the role of Senior Vice President of Digital Transformation and Chief Digital Officer for Dignity Health. In this role, he oversees the system-wide digital strategy and heads the Office of Digital at Dignity Health. The Office of Digital is a "startup" within Dignity Health with the mandate to create an intensely positive and personal digital experience for patients, consumers, providers, and employees. To deliver on that mission, Dr. Partovi recruited a team of talented individuals and launched agile software engineering at Dignity Health. Today, he oversees the development of many personalized, patient-facing digital services such as SEO engagement, online scheduling, and telehealth, as well as the customization of provider-facing digital tools such as the enterprise EHR.
@spartoviMD

Alan Pitt, MD
Professor of Neuroradiology
Barrow Neurological Institute

Alan Pitt, MD, is a professor at the Barrow Neurological Institute. He has a BA from Stanford University and earned his MD from the University

of Arizona. He did postgraduate training in internal medicine, neurology, radiology, and neuroradiology. Over the past two decades, he has worked at the nexus of computers and medicine, looking for better ways to stitch together our fragmented care system. He passionately believes that by putting the patient in front of the right person, fear and anxiety (for the patient, the loved one, the nurse or generalist) can be replaced by reassurance. This avoids needless tests, transfers, and worry. He focuses on cloud-based solutions leveraging messaging and collaboration with sustainable business models. Dr. Pitt is an adjunct at the University of Arizona College of Public Health. He has been involved with several health IT and device companies, most notably serving as the Chief Medical Officer of Avizia from 2014 until it joined American Well in 2018, as well as working with a medical robotics company later sold to Globus Medical. He has continued interests in companies in the AI, data analytics, blockchain, and personal health records spaces. *@alanpittmd*

Ronald K. Poropatich, MD, MS
Executive Director, Center for Military Medicine Research
Health Sciences at the University of Pittsburgh

Ronald Poropatich, MD, is the Director of the Center for Military Medicine Research, Health Sciences at the University of Pittsburgh, where he also is a Professor of Medicine in the Division of Pulmonary, Allergy, and Critical Care Medicine and a Senior Advisor for Telemedicine, University of Pittsburgh Medical Center. He is an experienced pulmonary/critical care medicine physician who served 30 years on active duty in the US Army, retiring at the rank of Colonel with extended assignments at the Walter Reed National Military Medical Center. His last assignment was at the US Army Medical Research and Materiel Command at Fort Detrick, MD, serving as the Deputy Director of the Telemedicine and Advanced Technology Research Center (TATRC), where he managed large medical research programs and developed novel research programs and technologies in medical informatics and telemedicine. He led the U.S. Army effort from 1992-2012 in the development and deployment of telemedicine capability across 22 time zones. He has served as an associate editor for *Telemedicine and e-Health Journal*, is the former chair of the NATO Telemedicine Expert Team and Past President and board member of the American Telemedicine Association. Dr. Poropatich received his MD from Hahnemann University (now Drexel University).
@PittCMMR

H. Neal Reynolds, MD
Vice President
Maryland Telehealth Alliance

H. Neal Reynolds, MD, is an intensivist with the University of Maryland R Adams Cowley Shock Trauma Center in Baltimore, MD, where he is Co-Director of the Multi-Trauma ICU. During a hiatus he provided care at the most underserved facility in Baltimore, where in 2003 he established a tele-ICU program utilizing robotic technology. He helped implement the first commercial tele-ICU at the Sentara Health System in Norfolk, VA, and established a working group to develop a "Lexicon for the Tele-ICU." He has published in the disaster telemedicine and correctional telemedicine arenas and reviewed national deployment of tele-ICU robotics. Dr. Reynolds has worked for legislation with the Maryland General Assembly, culminating in laws mandating private payer and Medicaid reimbursement and simplifying credentialing. He chaired the Clinical Group for the 3rd Maryland Telemedicine Task Force and worked for adoption of the Interstate Medical Licensure Compact and reduction of burdensome Medicaid telehealth credentialing requirements. Most recently, he worked to establish a statewide alliance to promote the adoption and growth of telehealth within the State of Maryland, and is Vice President of the Maryland Telehealth Alliance, Inc. Dr. Reynolds is board certified in Internal Medicine and four times certified in Critical Care Medicine.

Sylvia Romm, MD, MPH
Vice President of Medical Affairs
American Well

Sylvia Romm MD, MPH, is the Vice President of Medical Affairs of American Well and works with health systems, employers, health plans, pharmaceutical companies, and other healthcare innovators to design and implement their digital health strategies. She worked as a pediatric hospitalist before founding a company focused on telemedicine for new mothers, and then joining American Well full time. Through these experiences working both as a clinician and as an entrepreneur, Dr. Romm believes that the integration of digital health care delivery into the traditional health care ecosystem is a key component to the quadruple aim of enhancing patient experience, improving population health, reducing cost, and improving the work life of health care providers. She is an avid author and speaker in the areas of healthcare, technology, and health IT policy, with articles published in *NEJM Catalyst, Forbes, KevinMD,* and *Huffington Post* and

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

named as one of *FierceHealthCare's* "8 Influential Women Reshaping Health IT." Dr. Romm holds a medical degree from the University of Arizona College of Medicine and a Master of Public Health from the Harvard School of Public Health. She completed her pediatrics residency at Massachusetts General Hospital.

@sylvia_romm

Jay H. Shore, MD, MPH
Director of Telemedicine
Helen and Arthur E. Johnson Depression Center
University of Colorado

Jay H. Shore, MD, MPH, is the Director of Telemedicine at the Helen and Arthur E. Johnson Depression Center, Professor in the Department of Psychiatry and the School of Public Health's Centers for American Indian and Alaska Native Health, and Medical Director for the Steven A. Cohen Military Family Clinic at the University of Colorado Anschutz Medical Campus. He also is Chief Medical Officer at AccessCare, Associate Medical Director for the Colorado Physician Health Program, and the rural Native Veteran Domain Lead for the Department of Veterans Affairs Veterans Rural Health Resource Center Western Region (VRHRC-WR). His career has focused on the use of ongoing technology in mental health. He currently is participating in multiple projects, which include development, implementation, and assessment of programs in native, rural, and military settings aimed at improving both quality and access to care. Dr. Shore has consulted for tribal, state, and federal agencies and served on planning and/or grant review committees for several federal agencies including the Department of Veterans Affairs, the Department of Defense, the Indian Health Service, and the National Institutes of Health.

Alexis Silver, MBA
Principal
Alexis Silver Consulting

Alexis Silver has been involved in the telehealth and remote monitoring field since 2003, working with providers to develop and improve telehealth programs and advocating on the state and federal levels for policy and reimbursement changes that support the use of technologies for aging and vulnerable populations. She co-wrote legislation that led to Medicaid reimbursement for telehealth in New York and worked with the New York State Department of Health to design and implement New York's Home Telehealth

Demonstration Project. As a program advisor, she worked with home care agencies throughout New York, helping them design, implement, and evaluate their programs; co-wrote a telehealth manual; and implemented a telehealth certification program for home care nurses. As an independent consultant, Ms. Silver has worked with Metropolitan Jewish Hospital System and Jewish Home Lifecare (now the New Jewish Home) in New York City. She also served as a clinical project manager overseeing a joint effort between Jewish Home and Panasonic in the development of several remote monitoring products and has written policy documents and FDA applications for a startup medical technology company. She is Vice Chair of the American Telemedicine Association's Home Telehealth and Remote Monitoring Special Interest Group.

Scott Simmons, MS
Chief Telemedicine Business Architect
Medweb

Scott Simmons, Chief Telemedicine Business Architect for Medweb, has presented and published extensively on various aspects of telehealth and is a member of the editorial board of the *Telemedicine and e-Health Journal*. In 2014 he joined Medweb from the University of Miami (UM) where, as Director of TeleHealth, he developed and managed UM's telehealth portfolio, including a school-based telehealth program, store-and-forward dermatology, a pediatric mobile clinic, and telehealth capabilities to support the Haiti earthquake relief team and provide humanitarian assistance in the Caribbean and Latin America. He began his career in telehealth with the US space program at the Johnson Space Center, where he was project manager for the Telemedicine Instrumentation Pack (TIP), NASA's first space-certified telemedicine system. He then moved to CyberMDx, Inc., a firm formed to commercialize the TIP, and served as its VP of Operations and Chief Technology Officer. He was Assistant Director of East Carolina University's Telemedicine Center, where he led the expansion of ECU's telemedicine network to more than double in size. He is a member of the American Telemedicine Association's College of Fellows. Mr. Simmons received his BS in biomedical engineering from Tulane University and his MS in industrial engineering from the University of Houston.

Kevin Lee Smith, DNP, FNP, FAANP
Chief Medical Information Officer
Zipnosis, Inc.

Kevin Lee Smith is Chief Medical Information Officer at Zipnosis, a virtual care software and technology company. He has been at the vanguard of developing disruptive innovations focused on improving access and quality of care for patients. He helped to develop QuickMedx (which became MinuteClinic), the first retail clinics in the country, where he served in leadership roles contributing to EHR design and integration of evidence-based content. In his current role, Dr. Smith provides strategic leadership for the development and implementation of evidence-based clinical guidelines for virtual care services and clinical informatics. He is adjunct faculty at the University of Minnesota School of Nursing, a Fellow of the American Association of Nurse Practitioners, an Education Committee Chair for the American Telemedicine Association, and an inaugural member of the Clear Health Quality Institute (CHQI) Telemedicine Accreditation Standards Committee.

@KevinLeeSmitty

Gigi Sorenson, RN, MSN
Chief Clinical Officer/Vice President of Operations
GlobalMed

Gigi Sorenson is the Chief Clinical Officer / Vice President of Operations of GlobalMed. Prior to joining GlobalMed in 2017, she was System Director of Telehealth & Community Connected Care for Northern Arizona Healthcare (NAH), where she was responsible for the inception of the program, strategic planning, and global operational oversight, with NAH acting as both hub and spoke site. She has developed programs in remote patient monitoring, prehospital, direct to consumer, outpatient and inpatient care delivery models, and transitions planning using connected care programs. NAH's remote patient monitoring (RPM) program, Care Beyond Walls & Wires™, is nationally recognized for its impact and outcomes. Ms. Sorenson has published on RPM and has presented a national case study on RPM at the Brookings Institution. She is actively involved in the American Telemedicine Association, as an Executive Committee member and past chair of the Business & Finance Special Interest Group, and is a member of the Arizona Telemedicine Council. Ms. Sorenson is a graduate of Northern Illinois University with a Master of Science in Nursing.

Andrew Turitz, MBA
Senior Vice President of Corporate Development
Teladoc

Drew Turitz serves as Senior Vice President of Corporate Development for Teladoc. He is responsible for identifying, evaluating and executing growth opportunities for Teladoc Health through partnerships, acquisitions, joint ventures and other third-party relationships. Mr. Turitz has nearly 15 years of experience in healthcare transactions, including the management of all phases of acquisitions, investments and partnerships—from analysis, diligence and transaction structuring to product integration, go-to-market strategies and operational implementation. He has advised on M&A transactions for Fortune 500 Companies, and led investments in and served on the board of directors for venture-backed companies. He is also an entrepreneur whohas launched or joined numerous early-stage businesses. Mr. Turitz holds a bachelor's degree from Stanford University and a Master of Business Administration degree from the Kellogg School of Management at Northwestern University.

Linda Waldorf, BS, CPMSM, CPCS
Director of Centralized Credentialing Office and the Office of Medical Staff Services
University of North Carolina Health Care System

Linda Waldorf is the Government Relations Liaison for the National Association Medical Staff Services (NAMSS). She has served in various roles with NAMSS, including President in 2015. She is currently participating on a workgroup with NAMSS and the American Telemedicine Association to create a telemedicine guidebook for credentialing by proxy. Other current NAMSS initiatives include the expansion of NAMSS PASS (Practitioner Affiliation Sharing Source), development of a national hospital and payer credentialing application, and exploring use of Blockchain for credentialing. Ms. Waldorf also is the Director of the Centralized Credentialing Office for the University of North Carolina (UNC) Health Care System and the Medical Staff Office for UNC Hospitals, with credentialing oversight for approximately 6,000 providers. Prior to joining the UNC Health Care System, she worked for Johns Hopkins Medicine as Director of the Medical Staff Office for Suburban Hospital in Bethesda, MD. She has written and presented on credentialing topics such as collateral consequences, going paperless, impact of ethics on organizational performance, the goodness of change, and the NAMSS ideal credentialing standards.

Ms. Waldorf also serves as an expert witness in negligent credentialing cases. She received her BS degree in Accounting from NC Wesleyan College.

Andrew Watson, MD, MLitt, FACS
Vice President of Clinical Information Technology Transformation, University of Pittsburgh Medical Center
President, American Telemedicine Association

Andrew Watson, MD, is a fourth-generation surgeon and the eighth surgeon in his family. He earned his master's degree at the University of Oxford, studying 17th century baroque architecture, and attended medical school at the Columbia University College of Physicians and Surgeons. He did his surgical training and fellowship at the University of Pittsburgh Medical Center (UPMC). He is an actively practicing colorectal surgeon specializing in minimally invasive inflammatory bowel diseases and complex reoperative abdominal surgery. He is the primary surgeon in the IBD medical home at UPMC. He actively uses and helps to develop telemedicine at UPMC, with a focus on remote patient monitoring, and has personally done over 500 virtual consults including pre-operative, post-operative, tele-rounding, intra-operative, and remote patient monitoring. He blends his career working for UPMC International, Insurance Services, and Health Services Divisions to practice and help envision the transformation of healthcare, with a focus on remote patient monitoring. He is the President of the American Telemedicine Association.

Ronald S. Weinstein, MD, FCAP, FATA
Director
Arizona Telemedicine Program

Ronald S. Weinstein, MD, is the founding director of the Arizona Telemedicine Program. He received his medical degree from Tufts Medical School, in Boston, and is a Massachusetts General Hospital (MGH)-trained pathologist. He is regarded as a pioneer in both telemedicine and telepathology. While a MGH pathology resident, he participated in rendering diagnoses on some of the first telemedicine cases of the MGH-Logan International Airport telemedicine program in 1968. Decades later, he turned his attention to telepathology while a pathologist for National Cancer Institute-funded clinical trials. In 1986, he introduced the term "telepathology" into the English language. He invented, patented, and commercialized robotic telepathology and is often referred to as the "Father of Telepathology." He has served as president of six professional organizations including the American Telemedicine Association (ATA). In addition to being President Emeritus of the ATA, he has received the Lifetime Achievement Award of the Association for Pathology Informatics and has been inducted into the United States Distance Learning Association Hall of Fame. Dr. Weinstein has over 600 professional publications cited over 10,000 times in the literature.

Lee A. Wood
Executive Vice President and General Manager, Physician Services
*InTouch Health*

As Executive Vice President and General Manager, Physician Services, Lee Wood brings 25 years of experience in healthcare and hospital management, finance, and business development to InTouch Health. Throughout his career, Mr. Wood has worked closely with physicians and organization leaders across multiple sites and in multiple states in developing and managing physician provider networks, servicing both inpatient and outpatient practice populations. Prior to joining InTouch Health, he held business development and operations positions with Columbia/HCA, AmeriPath, and, most recently, MEDNAX, Inc., where he was the Regional Vice President of a 12-state region for the national physician group. He received his bachelor's degree from Texas Wesleyan University in Fort Worth, TX.

Full speaker and moderator bios are online at https://ttspsworld.com/speakers

SPS Exhibitors

- **AARP Arizona**
  Booth 39

- **AdviNow Medical**
  Table 3

- **American Well**
  Booths 22/29

- **Blue Cirrus Consulting**
  Booth 21

- **Bluestream Health**
  Booth 30

- **Bright.md**
  Booth 1

- **Brother International Corporation**
  Booth 18

- **Center for Credentialing & Education (CCE)**
  Booth 33

- **ClearHealth Quality Institute**
  Booth 23

- **Cloud DX**
  Booth 24

- **Dignity Health Telemedicine Network**
  Booth 25

- **Eko**
  Booth 42

- **FasPsych, LLC**
  Booth 4

- **GenieMD**
  Booth 41

- **GlobalMed**
  Booths 13/14

- **ID Solutions, Inc.**
  Booth 9

- **InTouch Health**
  Booth 38

- **Iris Telehealth**
  Booth 26

- **Iron Bow Healthcare Solutions**
  Booth 20

- **Jackson & Coker**
  Booth 12

- **Legal Language Services**
  Booth 40

- **Life365, Inc.**
  Table 2

- **Mackay Communications**
  Booth 8

- **MD24 iHealth**
  Table 4

- **Media Network Services**
  Booth 36

- **Perinatal Access**
  Table 5

- **Philips Healthcare**
  Booth 32

- **Polycom**
  Booth 35

- **Providence St. Joseph Health**
  Table 1

- **Salus Telehealth**
  Booth 27

- **SnapMD**
  Booths 2/3

- **SOC Telemed**
  Booth 16

- **Synergy Physicians**
  Booth 15

- **Synzi**
  Booth 19

- **T-Psychiatry**
  Booth 5

- **Teladoc**
  Booth 7

- **TeleDIETS**
  Booth 43

- **Teleradiology Specialists**
  Booth 11

- **TeleSpecialists LLC**
  Booth 34

- **Vidyo**
  Booth 31

- **ViTel Net**
  Booths 10/17

- **Vivify Health**
  Booth 37

- **Yorktel**
  Booth 6

- **Zipnosis**
  Booth 28
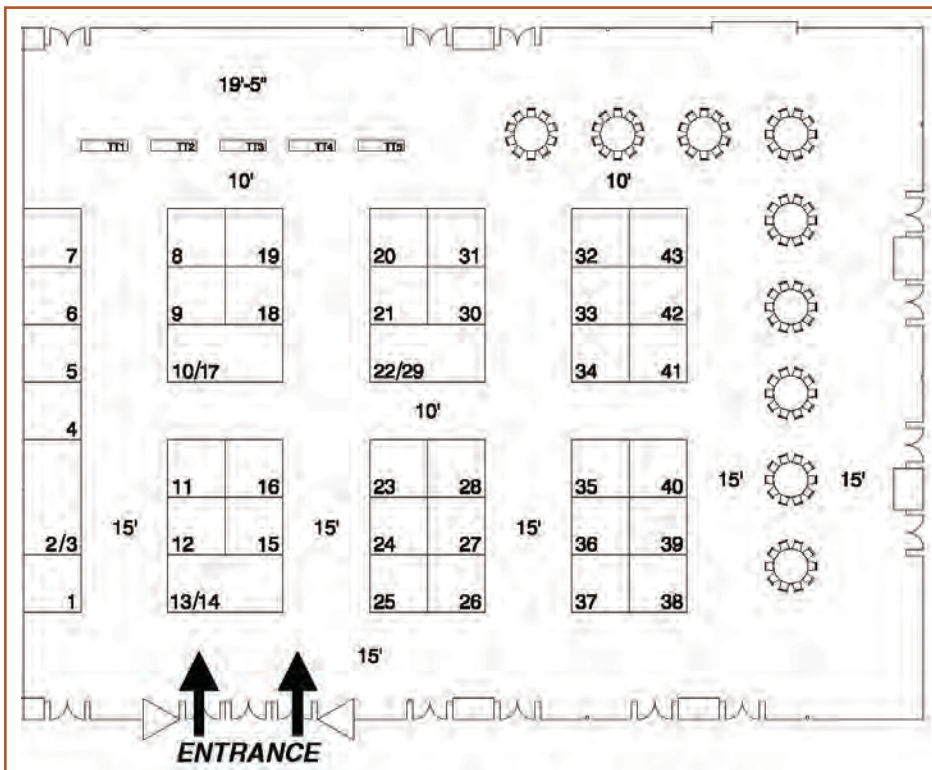
Exhibitor Descriptions

SILVER SPONSOR

AARP

AARP is working to help Americans 50+ in Arizona live life to the fullest. We advocate on critical priorities, such as strengthening Social Security, protecting seniors' access to their doctors, and ensuring all Americans have independence and choice as they age.

https://states.aarp.org/region/arizona/ @AZ_AARP **Booth 39**

AdviNow Medical

Using artificial intelligence and augmented reality, AdviNow Medical has reimagined the patient/provider experience through unique automation on the front and back end of the patient encounter, maximizing provider/patient interaction, nearly eliminating burdensome provider documentation, improving outcomes, and overall reducing costs.

www.advinow.com @AdviNOWMedical **Table 3**

GOLD SPONSOR

American Well

American Well is a telehealth services company that brings healthcare into patients' homes and workplaces. We partner with health plans, delivery networks, retailers, and employers to deploy telehealth services, including solution design and set-up, provider network design and operations, and marketing.

www.americanwell.com/ @AmericanWell **Booth 22/29**

FRIENDS OF SPS SPONSOR

Arizona Center for Rural Health

The mission of the Arizona Center for Rural Health is to improve the health and wellness of Arizona's rural and underserved populations through education; technical assistance; health professional training and recruitment; and data collection, analysis, and dissemination.

http://crh.arizona.edu/ @UACRH

Blue Cirrus Consulting

Blue Cirrus is a premier management consulting firm providing skilled and experienced advisors, technicians, clinicians, and project leaders to clients nationwide. We provide telehealth planning, strategy development, and implementations, focusing on partnering with clients to achieve their goals.

www.blue-cirrus.com @BCirrus **Booth 21**

Bluestream Health

Born from the idea that access to specialists and high quality care should be easy and fast, Bluestream Health has developed a streamlined platform that instantly connects patients to specialists via live, secure videoconference.

www.bluestreamhealth.com @bluestream **Booth 30**

Bright.md

SmartExam, Bright.md's virtual visit solution, automates care and communication between physician and patient for fast, convenient, and high-quality diagnosis and treatment of more than 400 low-acuity conditions.

https://bright.md @Bright_Health **Booth 1**

Brother International

Large healthcare institutions and solo practitioners alike are utilizing Brother's OmniJoin cloud-based telemedicine solution to grow their telehealth practices and personally connect with patients from virtually anywhere. OmniJoin is HIPAA compliant, powerful, and secure.

www.omnijoin.com @www.omnijoin.com **Booth 18**

The Center for Credentialing & Education™ (CCE)®

CCE® is a global not-for-profit offering assessments, credentialing, business support, and licensure services—grounded in research and experience and in collaboration with its parent company, the National Board for Certified Counselors (NBCC)®—to advance professional credibility of individuals and organizations worldwide.

www.cce-global.org

Booth 33

ClearHealth Quality Institute (CHQI)

ClearHealth Quality Institute's Telemedicine Accreditation Program, the only telemedicine or telehealth accreditation program endorsed by the American Telemedicine Association, provides consumers and stakeholders an easy-to-identify confirmation of quality and unique standards for each modality of telemedicine, from an independent, third-party organization.

www.chqi.com   @ClearHealthQI   **Booth 23**

Cloud DX

At Cloud DX, we build and sell precision vital sign monitoring equipment, software, and mobile apps. Our products are used by advanced healthcare providers to extend care beyond the four walls of the clinic. We call our platform Cloud Diagnostics.

www.clouddx.com/   @CloudDX   **Booth 24**

Dignity Health Telemedicine Network

The Dignity Health Telemedicine Network helps hospitals and physicians care for their patients locally, without the challenges of a transfer. Working together, we are able to help the local physician determine optimal care plans and provide specialized care.

https://www.dignityhealth.org/telemedicine-network   @DignityHealth   **Booth 25**

Eko

Eko combines cardiology-grade wireless digital stethoscope and ECG devices with powerful live streaming and decision support software that enables better detection, monitoring, and management of cardiovascular diseases. Eko stethoscopes are being used by over 10,000 clinicians at 1,000 institutions worldwide.

Ekodevices.com   @EkoDevices   **Booth 42**

FasPsych, LLC

For over 10 years, FasPsych's mission has been to provide immediate, innovative staffing solutions to the ever-growing demand for behavioral health services. We provide a wide range of clinical services including psychiatric care, medical directors, utilization review, and counseling.

www.faspsych.com   **Booth 4**

FRIENDS OF SPS SPONSOR

Foley & Lardner, LLP

Foley & Lardner LLP helps healthcare organizations build sustainable, scalable business models while navigating legal issues in digital health. As regulation struggles to keep up with innovation, Foley's experience and resources help grow your business and manage evolving issues.

www.foley.com/health-care   @FoleyHealthCare

GenieMD

GenieMD's iVisit is a cloud-based telemedicine platform including evidence-based algorithmic guidelines, videoconferencing, secure text messaging, payment processing, chronic care management, and more. We were named one of the 50 Most Promising Healthcare Solution Providers 2018 by CIO Review.

www.geniemd.com   @GenieMed   **Booth 41**

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit®

GlobalMed

GlobalMed is a vertically integrated provider of telemedicine software, hardware, and service solutions. Our state-of-the-art technologies are deployed in more than 55 countries across the world and enable more than 3 million telehealth consults annually.

www.globalmed.com/   @GlobalMed_USA   **Booth 13/14**

ID Solutions, Inc.

IDSolutions is a visual communications company providing custom solutions for telehealth, videoconferencing, media management, streaming video, and digital signage. Our healthcare team is focused on integrating best-of-breed technologies to create, implement, and support a telehealth-enabled workflow unique to each client's needs.

www.e-idsolutions.com/tele-health   @IDSolutionsInc   **Booth 9**

InTouch Health

InTouch Health, ranked the 2018 Category Leader virtual care platform by KLAS Research, makes virtual care easy by giving health systems one scalable platform to deliver care for any use case, including direct-to-consumer telehealth.

www.intouchhealth.com   @InTouchHealth   **Booth 38**

Iris Telehealth

Iris Telehealth is an innovative telepsychiatry company with a mission to provide underserved communities with access to the best mental health care possible. We have earned a reputation for providing outstanding customer service and excellent clinical care.

iristelehealth.com   @IrisTelehealth   **Booth 26**

Iron Bow Healthcare Solutions

Iron Bow Healthcare Solutions empowers providers and patients through telehealth implementation. Through our knowledge of the healthcare industry, the depth of our technical expertise, and our workflow process awareness, we enable enhanced patient outcomes through increased access to remote care.

ironbowhealthcare.com   @Iron_Bow   **Booth 20**

Jackson & Coker

Jackson & Coker provides medical staffing and locum tenens, helping great physicians and advanced practitioners find great jobs. We focus on practitioners, so they can focus on their patients, improving access and providing the very best patient care.

https://jacksoncoker.com   @JacksonCoker   **Booth 12**

Legal Language Services

For more than 35 years, Legal Language Services has provided best-in-class interpreting in 200+ languages. We offer HIPAA-compliant video remote, phone, and on-site interpreting 24/7/365. LLS also provides translation, transcription, and non-emergency medical transportation. For a free consultation call 1-800-322-0284.

www.legallanguage.com   @LegalLanguage   **Booth 40**

Life365, Inc.

The Life365 Digital Health Platform enables healthcare professionals to remotely monitor the health status of patients, while simultaneously empowering those patients to take charge of their own health management.

Life365inc.com   @Life365Inc   **Table 2**

Mackay Communications

Mackay Communications' Satellite Services Division has been on the forefront of providing turn-key satellite solutions for commercial and governmental mariners and land-based remote and emergency applications. We concentrate on "system solutions" to meet our global customers' connectivity needs.

www.mackaycomm.com

https://www.mackaycomm.com/satellite/ **Booth 8**

MD24 iHealth

The goal of MD24 iHealth is to develop an entrepreneurial ecosystem specializing in healthcare technology, where we bring innovators together to nurture emerging technologies and accelerate their migration from laboratory to commercialization.

http://www.md24ihealth.org   @MD24HouseCall1   **Table 4**

Media Network Services

For more than a decade, Media Network Services has provided worldwide services that enhance and extend your existing video collaboration platform and equipment, including optimized routing, recording and streaming, interactive voice response, endpoint self-testing, and automated endpoint testing.

www.mns.vc   @MNS_VC   **Booth 36**

Perinatal Access

Perinatal Access is a turnkey solution providing the tools, expertise, and Maternal Fetal Medicine physicians (if needed) to help you expand care to expectant mothers via telemedicine and other innovative technologies.

www.perinatalaccess.com   **Table 5**

Philips Healthcare

Health systems partner with Philips because of our industry-leading technologies coupled with an approach forging new paths in care delivery; our relentless pursuit to make life better; and our vision of more seamless care that breaks down boundaries and reduces complexity.

www.usa.philips.com/healthcare   @PhilipsNA   **Booth 32**

Polycom

Polycom's healthcare solutions enable patient-centered care, multi-disciplinary team support, reduction of unnecessary re-hospitalizations, and collaboration across the entire healthcare team independent of physical barriers.

www.polycom.com   @Polycom   **Booth 35**

Providence St. Joseph Health

With more than a decade of experience in telehealth, we provide care facilities and employers with innovative, convenient, and cost-saving tools to improve the health of their communities. We offer more than 40 telehealth services, with expertise in multiple specialties.

www.providence.org/telehealth   @Prov_Health   **Table 1**

NETWORKING BREAK SPONSOR

Regroup

Regroup provides integrated telepsychiatry services to healthcare entities and their patients across the US. With its nationwide network of behavioral health clinicians, proven process, and virtual care platform, Regroup serves over 100 sites including primary care, outpatient behavioral health, and corrections.

www.regrouptelehealth.com   @RegroupTH

Salus Telehealth

Through our Salus app and dedicated setup services, we provide doctors the tools they need to work more efficiently and expand their reach beyond their physical offices, improving patient care and reducing burdens on urgent care and EDs.

www.salustelehealth.com   @SalusTelehealth   **Booth 27**

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

SnapMD

SnapMD's Virtual Care Management enables patient engagement via a HIPAA-compliant, cloud-based, multiple or single service-line telehealth platform with powerful systems to manage the digital healthcare continuum. Our software and services improve access to convenient and effective care.

www.snap.md   @snapmdinc   **Booth 2/3**

SOC Telemed

SOC Telemed enables healthcare systems to advance access to care, deliver measurable patient outcomes, and optimize organizational efficiencies. Our flexible and scalable platform is a proven solution for delivering care. We have earned The Joint Commission's Gold Seal of Approval.

www.soctelemed.com   @SOCTelemed   **Booth 16**

SWTRC

The SWTRC offers a variety of training opportunities and resources to assist start-up telehealth programs as well as existing programs in the US Southwest region. SWTRC is a member of the National Consortium of Telehealth Resource Centers, funded by HRSA.

http://southwesttrc.org   @UA_ATP

Synergy Physicians

Synergy Physicians is a co-op for healthcare partners to provide direct healthcare, improving patient care and experience while reducing costs. We specialize in round the clock telemedicine services to provide acute, post-acute, chronic disease management, remote monitoring, and home health services.

https://synergyphysicians.org/   @SynPhysicians   **Booth 15**

Synzi

Synzi is a technology company dedicated to providing better ways for healthcare organizations to manage and engage colleagues, patients, and members, simply and efficiently. Use our award-winning virtual care communication platform to engage your patients/members with video, SMS, text, and/or email.

https://synzi.com   @SynziCare   **Booth 19**

T-Psychiatry

T-Psychiatry has multiple years of experience serving providers and facilities nationwide. We offer in-person locum tenens; telepsychiatry; part-time or full-time coverage including permanent placement; and a comprehensive telemedicine program including hardware, software, EMR, and e-prescribing tools.

http://www.tpsychiatry.com   @t_psychiatry   **Booth 5**

Teladoc

Teladoc, now Teladoc Health, Inc. (NYSE:TDOC) partners with employers, hospitals, and insurers to transform care delivery. The company is the only virtual healthcare provider exclusively endorsed by the American Hospital Association for its licensable technology solution for hospitals and health systems.

www.teladoc.com/healthsystems   @Teladoc   **Booth 7**

TeleDiets

TeleDiets gives physicians access to a library of meal plans (with accompanying grocery lists) that address common disease states, predesigned by dietitians and contributing doctors, for assignment to patients and delivered by email, internet health portal, or the TeleDiets app.

www.telediets.com   **Booth 43**

Teleradiology Specialists

The physicians and supporting staff at Teleradiology Specialists are dedicated to providing the best in urgent care x-rays and teleradiology service. Our network of 90+ US-based, board-certified radiologists has a 99.97% accuracy rate and a turnaround time of 30 minutes or less.

www.teleradiologyspecialists.com   @TeleradSpclist   **Booth 11**

TeleSpecialists LLC

A physician-owned company, TeleSpecialists is a team of well-respected neurologists working to enhance your TeleStroke and TeleNeuroHospitalist program. Our physicians are board-certified, credentialed at your facility, and available 24/7/365. We are also tech-neutral, utilizing your cart and EMR.

Tele-specialists.com   @telepecialists   **Booth 34**

Vidyo

Millions of people around the world connect visually every day through Vidyo's secure, scalable technology and cloud-based services. Its patented platform integrates with virtually any application environment, network, and device to deliver the highest quality experiences.

https://www.vidyo.com/video-conferencing-solutions/healthcare   @Vidyo   **Booth 31**

PLATINUM SPONSOR

ViTel Net

ViTel Net is a global telehealth technology and services company delivering connected care software, point-of-care technology, and clinical service provider partners necessary to efficiently distribute healthcare resources, reduce costs, and improve care access and quality.

www.vitelnet.com   @ViTelNet   **Booth 10/17**

Vivify Health

Vivify Health, through its mobile remote care management platform, provides multiple modalities of patient monitoring and engagement. Intuitive interfaces define the experience for patients and clinicians, with flexibility for monitoring, education, care plan adherence, and virtual visits. Learn more: http://blog.vivifyhealth.com/

www.vivifyhealth.com   @VivifyHealth   **Booth 37**

COPPER SPONSOR

VSee

VSee is the trusted telehealth platform for 1200+ customers including Walgreens, MDLIVE, Trinity, Ascension, DaVita, HealthPartners, and NASA--where it's the only approved platform of astronauts on the Space Station. VSee's complete, scalable platform provides simple HIPAA communications + fast clinic workflows.

https://vsee.com/   @VSee

Yorktel

In addition to providing videoconferencing, integration, and streaming media services for the administration side of healthcare, Yorktel also offers a complete suite of products and services for clinical application of videoconferencing as part of a telehealth network.

www.yorktel.com   @YorktelCorp   **Booth 6**

Zipnosis, Inc.

Health systems looking to offer a complete virtual care service need a partner that understands the virtual care landscape. With Zipnosis, you get a decade of experience and tailored, innovative virtual care solutions that go far beyond traditional telemedicine software.

https://www.zipnosis.com   @Zipnosis   **Booth 28**

LANYARD SPONSOR

Zoom

Zoom is a leading provider of healthcare video communication services that enable HIPAA compliance across desktop, mobile, conference rooms, and exam rooms. Zoom's platform features healthcare and telehealth specific features, including patient waiting rooms, Epic integration, end-to-end workflows control, and more.

hhttps://zoom.us   @zoom_us

Poster Abstracts

Meet the authors at the poster presentation session breakfast, Tuesday from 7:30 to 8:30 am in the Solana ABCD Ballroom. Abstract number indicates poster location.

1) Facilitators and Barriers to Urologists' Engagement with the eConsult Service at Dartmouth-Hitchcock

John Anagnost, MS and Jacqueline Kihwele, MD, MPH

The Dartmouth Institute for Health Policy

Background: Electronic consultations (eConsults) allow primary care physicians to ask questions to specialists regarding the care management of individual patients through a shared electronic health record system. Although specialists' perceptions and experiences with eConsults have been thoroughly examined in the Canadian and VA health systems, similar rigorous qualitative work has yet to be done in the context of academic medical centers in the US which are characterized by a balance between research, patient care, and teaching.

Methods: Participants were recruited based on their level of engagement with eConsults at the AMC: established users (n=3), new users (n=2), and non-users (n=3). Qualitative semi-structured interviews were conducted from February 2018 to March 2018. Data analysis was focused on familiarization, coding, and theme development. Some codes were theory-driven based on previous literature while other codes emerged from the data specific to interviewees' experiences. Thematic analysis followed a modified grounded-theory framework.

Results: Participants generally perceived eConsults outside of their sub-specialties to be less interesting and more time consuming. Similarly, most felt that eConsults were "extra" work, lacked a financial incentive, and required a similar amount of effort and time as face-to-face visits of comparable complexity. However, participants were interested in eConsults because they facilitated quick and effective education of primary care physicians- having a downstream effect of improving referral prep work, decreasing redundant questions, limiting unnecessary referrals, and reducing patient travel. Recommendations to improve engagement included integrating eConsults into normal workflow, increasing the number of providers doing eConsults, distributing general eConsults among mid-level providers, and separating out paychecks for eConsults.

Conclusions: Optimal ways to balance these different factors should be considered in future strategies to improve specialist engagement with eConsults, especially in settings driven by productivity measures like RVUs.

2) Transition Care Management: Improving Care by Decreasing Readmissions Through Transition Care Management Program

Cindy Bobay, MSN, CPHQ

Atrium Health (formerly Carolinas Healthcare)

Background: Carolinas HealthCare System (CHS) implemented a Transition Care Management (TCM) program with care managers making follow-up phone calls to patients with high or moderately high risk for readmission.

Methods: Cerner's risk prediction tool generates the patient list for calls. The care managers contact the patient within two business days of discharge, review the medication reconciliation, discharge instructions, transportation, any social needs, and documents assessment in the HealthECare discharge tool. The follow-up appointment is verified or made within the required time from discharge and enters the referral source as TCM in the scheduling systems. The Central Billing bills TCM calls end of the month reimbursing physician practices. All patients are contacted regardless of payer source or facility. The CPT code 99495 requires a face-to-face visit within 14 calendar days of discharge, and CPT code 99496 requires a face-to-face visit in seven calendar days of discharge.

Results and Conclusions: The TCM discharge phone call program reduced readmissions from Jan 2017 through April 2017 with 4,392 calls completed from 5,296 discharges. There were 4,181 appointments with 3,775 arrived for a 90% arrival rate. Only 56 patients werereadmitted before appointment, a 0.01% readmission rate.   The TCM program improves follow-up appointment compliance reducing readmissions.

3) Creating a Telebehavioral Health Strategy

Geoffrey Boyce, MBA

InSight Telepsychiatry

Telepsychiatry has made its impact on the healthcare market, but often it can be thought of as a "band aid" for the immediate psychiatry needs of an organization. It is now time to think of telepsychiatry, with its trend of increased usage across the care continuum, as a long-term strategy that can help an organization meet both its immediate needs, as well as help address and

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

add value to many future strategic priority areas. Through the lens of a leading telepsychiatry service provider, this poster will showcase how organizations can integrate telehealth into their current services and future strategies to add value for consumers, providers, organizations and the greater community. For consumers, telehealth is appealing for its convenience, potentially heightened engagement opportunities and improved access to specialty care. For providers, it can create opportunities for staff to use telehealth with their existing case load, improve work/life balance and decrease burnout. For organizations, telebehavioral health is a way to potentially increase billable hours, grow into new areas and become an innovative leader in a community. For the community, telehealth creates the opportunity to connect multiple points of the care continuum with a single, more accessible provider network.

4) The Importance of Early Developmental Screening via Online Assessment

Mark Boyd

The Scott Center for Autism Treatment at Florida Institute of Technology

Children reach many milestones in how they behave, learn, speak and move. Developmental monitoring and screening are ways to check that your child is meeting these milestones at an appropriate age. Many children with developmental delays are not being identified as early as possible. As a result, these children must wait to get the help they need to do well in social and educational settings (for example, in school). In the United States, about 13% of children 3 to 17 years of age have a developmental or behavioral disability such as autism, intellectual disability and attention-deficit/hyperactivity disorder. However, less than half of children with problems are identified before starting school. During this time, the child could have received help for these problems and may even have entered school more ready to learn. An online teleheath program called ScreenOurKids.org is a great way to easily access your child's risks. The program was developed by the non-profit ,The Scott Center for Autism Treatment, and lays the ground for an awareness, assessment, diagnosis and treatment telehealth practice.

5) Banner Health's Tele-Behavioral Program: Assessing Patients with a Mental Health Crisis in Eleven Banner Emergency Departments

Gary Broadbent, LCSW, JD/MBA[1] and Mark VanderWerf[2]

[1]Banner Health and [2]Banner Telehealth

Background: Historically, mental health patients have waited extended periods of time to be seen by a mental health professional in emergency rooms throughout the country. This has resulted in an increase in costs, frustration among ED staff and most importantly poor patient care. To address these issues, Banner Health introduced a tele-behavioral solution.

Methods: Banner Health created a team of mental health clinicians to assess patients in Banner emergency rooms in the greater Phoenix metro area. The Banner tele-behavioral team is located at a central hub. Video carts are wheeled into patient rooms and the assessments are conducted via a secure video conference application.

Results: Banner Health has significantly reduced wait times in their emergency departments. ED staff have embraced the program and the system is saving thousands of dollars because of the tele-behavioral solution.

Conclusion: Completing mental health assessments in emergency departments is a proven solution to reduce patient wait times and reduce the costs associated with meeting the needs of PTs presenting with a mental health crisis.

6) Telemedicine Leverages Expert Nursing & Technology Delivering Standard of Care Closer to Home

Elizabeth Cook, MSN, RN, NE-BC and Luisa Taylor MPH, BSN, RN

Children's Mercy

Background: Telemedicine is the use of electronic information and communications technologies to provide and support healthcare when distance separates the participants (IOM). Primary care providers often encounter patients with very complex conditions that need to see a specialist but oftentimes those specialists are not nearby. About 1 in 3 children must travel > 40 miles to receive pediatric specialty care. Our facility offers telemedicine for 27 specialty and sub-specialty services including pulmonology, asthma and allergy, rheumatology, etc.

Methods: Utilize telefacilitators at the patient site to ensure the patient receives the same level of care as they would an in-person visit. Provide additional nursing support and health education for patients/families at the point of contact. Serve as an advocate for the patient/family.

Results: Routine visits can be done via telemedicine to keep kids healthy and out of the hospital. Telemedicine also keeps families from having to drive long distances for appointments, keeping them off the highways and safe. The telemedicine technology allows providers to see their patients on a more frequent basis to troubleshoot any issues and see what changes may be necessary.

Conclusion: Getting to stay in your community, not miss work and school, receive the same quality of care as you would traveling to the major academic institution with specialty resources equals value.

7) Use of Electronic Health Records to Enhance Women's Menopause Knowledge

Stuti Dang[1,2,3], Diana I. Ruiz[1,2], Berry Thavalaathil[4], Carlos Gomez-Orozco[4], Orlando Gomez-Marin[4], Silvina Levis[1,2,3], Remberto Rodriguez[1]

[1]Miami Veterans Affairs Healthcare System, [2]Miami VA Geriatric Research Education and Clinical Center, [3]University of Miami Miller School of Medicine, [4]South Florida Veterans Affairs Foundation for Research and Education

Background: Shared decision-making (SDM), is a patient-provider collaborative process for making health decisions, accounting for both clinical evidence and patients' preferences. Women can benefit from improved SDM regarding menopause and associated conditions, which affect aging women.

Purpose: To assess impact of weekly materials related to women's health sent via secure messaging from an Electronic Health Record (EHR) on knowledge and SDM regarding menopause.

Methods: We implemented an educational intervention for women using the EHR, My HealtheVet. We enrolled 140 women, ages 45-60, from the Miami Veteran Affairs Healthcare System. After 6-months, participants were surveyed using a study-specific questionnaire and the validated SDM-Q-9.

Results: Post intervention survey respondents included 80 women, mean age 53 ± 4; 76% Non-Hispanic, 24% Hispanic; 44% White, 44% Black; 92% with a college education; and 8% who attended graduate school. Post-intervention 88% of the women felt more knowledgeable regarding menopause treatment options; 87% recognized that a treatment decision was necessary, 89% felt more confident discussing menopause treatment with their provider, and 77% agreed their ability for SDM improved; 48% stated their doctor asked about their preferred decision-making involvement, 47% felt their doctors asked about their preferences, 51% weighed the options together, 48% agreed on treatment options; 27% planned to make an appointment with provider to discuss hormone therapy.

Conclusions: EHRs represent a novel and practical way to enhance women's knowledge of menopause and other age-related conditions, and promote SDM. EHRs promise to enhance SDM merits further exploration, as it may improve patient-centered care, adherence, and patient outcomes.

8) Assessing the Efficacy of Mobile Interpersonal Therapy for Depressed College Students

Maggie Donovan, BS[1,2,3], Ankita Batra[2], Adriana Shen[2], Rachel Reyes[2], Pratik Doshi, MS[3]

[1]Glia Mental Health, [2]University of Southern California, [3]Duke University School of Medicine

Background: Glia Mental Health is a not-for-profit organization that aims to dynamically change how depression is treated for college students through a mobile phone app. Currently, mental health stigmas, private counseling expenses, and lack of resources at college health centers prevents students from receiving the care they need. Since nearly 30% of college students face depression in the United States, better treatment options need to be established. Glia was created to provide such an option. Through free online peer support, it delivers proven Interpersonal Therapy (IPT) via an easy-to-use and anonymous text platform. Such IPT groups include 3 to 4 students and a trained IPT counselor. The app was tested among USC undergraduates, who are battling depression, with the following 3 objectives kept in mind:

1) Test the efficacy of mobile and text based services to deliver low intensity mental health support
2) Measure the change in depression status of current students
3) Assess areas of improvement for subsequent research

Methods:
• 6 USC undergraduate students participated in the pilot study through the Glia mobile app
• An anonymous name (ex. Pink Otter) was provided to each student
• Demographic data, previous therapy modalities and goals were collected
• For one hour a week for 6 weeks, students participated in Glia IPT counseling sessions through the mobile app's text-based platform
• Participants answered the Patient Health Questionnaire (PHQ-9)

Results:
• Average Reduction for the 4 students was 3.75 points on PHQ-9 Scale.
• Pink Otter went from severe depression to moderately severe depression

Conclusion: Overall, a 3.75 reduction in depression severity is significant, especially considering the short time frame. Currently, Glia Mental Health is continuing these pilot studies to confirm the efficacy of our method and make improvements where needed. In the future, Glia hopes to partner with university health centers and provide its services to countless numbers of college students.

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

Enterprise Telehealth Platform

ViTel Net

Connected Care *Your* Way

Your Workflow. You tell us how your clinicians deliver care and we rapidly configure the user experience to your workflow, all inclusive in your vCareNet subscription.

Your Providers. Our platform aggregates patient data and makes it available to care team members, both within your system and provider partners.

Your Health IT Systems. Our platform integrates with the health IT systems you already have, including EHR, PACS, PHR, and 3rd party telehealth solutions.

Exhibit Hall Booth #10

www.vitelnet.com   info@vitelnet.com   703-762-9992

Telemedicine Telehealth
Service Provider Summit

ARIZONA TELEMEDICINE PROGRAM

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

9) Will Using Telemedicine with Medical Command during Situational Awareness Escalation Add Value to Patient Care?

Kathy Farrell, MD, FAAP, Brad Bishop, MD, FAAP Medicine Program at CMH-Kansas; Lisa Carney MD, FAAP, Laura Fitzmaurice MD, FAAP, FACEP, Matthew Johnson MD, FAAP, Natalie Masters, MSN, RN, Sherry McCool, Lisa Pruitt, BSN, RN, C-NPT

Children's Mercy Hospital Kansas City

Background: Critically ill patients arrive or deteriorate during admission at remote Children's Mercy Kansas Hospital (CMK). The most common reason for transfer is respiratory distress. Transfers are initiated with a conference call with an intensivist (NICU/PICU), a Transport Shift Coordinator (TSC with PICU RN/RT expertise), Bed Control, and a CMK Hospitalist. The TSC listens to the phone call to triage/dispatch the appropriate critical care transport team accordingly. Phone triage and handoff do not allow a visual clinical assessment. Telemedicine is a tool to improve communication and offer a visual clinical assessment at the bedside readily. A telemedicine workflow has been developed when there is a delay in transfer 17.5 miles between campuses from CMK to Adele Hall, Children's Mercy Kansas City.

Methods: Telemedicine offers video "eyes" and USB stethoscope "ears" to assess patient status, triage the appropriate transport team, and offer support with critical care interventions. Telemedicine can be requested by a CMK Hospitalist for many reasons, including a delay in transport team availability, or high patient acuity requiring multiple safety huddles. Situational Awareness (SA) safety huddles had previously been developed to successfully reduce Code Blue occurrence at CMK.

Measure Outcome: Total # of SA safety huddles at CMK/Total # of SA patients at CMK Transferred, Total # SA Huddles using Telemedicine/Total # SA patients transferred using telemedicine.

Process Measure: Continue to identify high-risk patients via SA Huddle for patients with Pediatric Early Warning Score (PEWS) >= 5, High flow Nasal Cannula initiation, or cardiac PEW >=4.

Conclusion: Telemedicine helps triage and communicate the most appropriate level of transport team (critical vs. noncritical) when patients are determined to need escalation and transfer of care. Telemedicine offers PICU expertise, a visual clinical assessment and early intervention when caring for clinically deteriorating patients.

10) Diagnosing from a Distance and Treating Locally: Results of a Combined MFM/Fetal Cardiac Telehealth Program

Gerard Frunzi, MBA[1], Bettina F. Cuneo MD[2], Amy Gagnon, MD[3], Nicholas Behrendt[4], J. Fred Thomas PhD[1,5], Christina A. Olson MD[1,5] Justin Linder[1]

[1]Telehealth Department, Children's Hospital Colorado, [2]Department of Pediatrics, Division of Cardiology, the Colorado Fetal Care Center, University of Colorado School of Medicine, [3]St. Mary's Medical Center, [4] Department of Obstetrics and Gynecology, Division of Maternal Fetal Medicine, The Colorado Fetal Care Center, University of Colorado School of Medicine; [5]Department of Pediatrics, University of Colorado School of Medicine

Background: Congenital heart disease (CHD) is the most common and most lethal congenital anomaly. Prenatal diagnosis of fetal CHD improves postnatal outcomes, especially with a focus on the maternal/fetal dyad. By identifying, monitoring and treating conditions that increase the risk for adverse outcomes, a team of maternal fetal medicine (MFM) and fetal cardiology physicians can risk stratify pregnancies and provide anticipatory care. A barrier to improved care recognizing this approach is limited subspecialty care in sparsely populated regions.

Methods: We reviewed the feasibility, outcomes and local provider/patient acceptance of an MFM/fetal cardiology virtual clinic between an MFM practice on the Western slope with a catchment area of ~900 square miles, and the Colorado Fetal Care Center (CFCC), 250 miles away. The two sites were connected by HIPPA compliant video conferencing software in conjunction with live-stream ultrasound equipment using broad band internet. Onsite technical expertise was available at both centers. The CFCC physician would obtain a history from the patient, view the ultrasound or fetal echo live, then discuss the results with the family. The local physician and the CFCC physician jointly decided the management plan, which emphasized local patient care. Following the encounter, the patient filled out a survey of their experience.

Results: In the 18 months since the cardiology virtual clinic's inception, 437 patient visits/fetal echoes have occurred with fewer than 10 having to be repeated at another clinic time for technical failures. All abnormal patients traveled to Denver for delivery, but were followed locally until delivery. One mother refused telemedicine services. All other mothers preferred telemedicine services locally over traveling to in-person services at the CFCC. The program continues to grow. MFM telehealth services started in January 2018 and 169 CFCC MFM encounters have occurred to date. This Cardiology clinic allows Pediatric/Fetal Cardiologists to see patients that would otherwise have to travel 250 miles. The MFM telehealth offering allows a solo MFM provider to have virtual partners that function like a normal clinic. Currently, ~44 MFM/fetal cardiology visits are scheduled per week.

Conclusion: Real time ultrasound/echo and virtual Fetal cardiology/MFM telehealth clinics consolidate resources without sacrificing quality of medical care, are preferred by patients and empower general OB providers to care for pregnant women locally. This approach should be strongly considered when subspecialty resources in a community are insufficient to meet patient needs.

11) Telemedicine for Diabetes Care: Serving Patients Where They Are

Michelle Griffith, MD, Matt Ryan, Amber Humphrey, David Charles, MD, Shubhada Jagasia, MD, MMHC

Vanderbilt University Medical Center

Background: Diabetes mellitus is a modern scourge, affecting 29 million Americans. It is a leading cause of death and disability, and drives over 20% of health spending. Gestational diabetes is a form of diabetes diagnosed during pregnancy, and it can cause serious complications for both mother and baby. Good control of blood sugar reduces the risk of complications and death. For many patients, control requires self-monitoring of blood sugar and medication adjustments guided by a health care provider. High-quality diabetes care can be provided via telemedicine (Toledo 214; Liu 2016).

Methods: At Vanderbilt University Medical Center, we have launched two telemedicine service lines for diabetes care: 1) Direct-to-patient service designed for the frequent follow-up needs of patients with gestational diabetes, 2) Clinic-to-clinic service to allow patients to access care closer to their homes, with reduced need for travel, located at a multispecialty clinic with a mix of traditional and telemedicine visits. We also incorporate diabetes education into our care plans and utilize other diabetes technology available to patients, such as insulin pumps with home download capability for transmission to the clinician for analysis.

Results: Patient satisfaction is high for both service lines. 90%+ of surveyed patients from each service line agreed or strongly agreed that they were satisfied overall. The majority of patients have opted to continue with telemedicine care rather than resume travel to the distant clinic.

Conclusions: Telemedicine is well suited to diabetes care and can be effective for a variety of populations and settings. Both clinic-to-clinic and direct-to-patient models can be used to meet the unique needs of individual patients and increase access to expert diabetes care. Existing diabetes technology tools can be incorporated into telemedicine workflows to maintain standards of care. References: 1) Toledo et al, Diab Care 2014; 37:e179-e180 ; 2) Liu W et al. Journal of Diabetes Science and Technology 2016; 1-8

12) Implementation of Tools in a Virtual Telehealth Organization

Carey Hart, MBA, John Butler, MD, Alexander Mason, MD

Specialist TeleMed

Background: Operations in telehealth require developed, organized tools, and processes. Specialist TeleMed, a national physician services organization, was challenged to develop tools that could be shared simply and virtually. While the organization maintains a physical office, the clear majority of operations is completed remotely. A second challenge with the remote nature of the organization was facilitation of physician activity, including onboarding, and ensuring appropriate patient care was delivered. Finally, Specialist TeleMed's working relationship with its contracted sites depended on a fluent and consistent process.

Methods: Specialist TeleMed identified its biggest pain points by soliciting feedback from physicians, staff, and clients. The organization also reviewed tasks within Specialist TeleMed to identify where most of the time and energy was spent. Specialist TeleMed enlisted technology, including secure file-sharing tools, was used as a starting point to solve their challenges. These tools began as simple in nature as the organization found that physicians and staff would be hesitant to use complicated methods that were time-consuming.

Results: Through research, the biggest issues were communication and transparency, especially pertaining to where a physician was in his or her onboarding and credentialing status. This issue applied not only to physicians, but also to Specialist TeleMed's clients.

Conclusions: Overall staff and physician satisfaction increased once the tools and process improvement was implemented. The organization shifted its focus from reactive status to proactively identifying and managing areas of need.

13) Inpatient Dialysis Made Possible by Telemedicine

Kristi Iannucci, MBA and Fredda Kermes, MHI, RN

Summit Healthcare Regional Medical Center

Background: Summit Healthcare Regional Medical Center is an 89-bed hospital located in rural northeastern Arizona. Without a nephrologist on staff or the ability to perform dialysis for patients requiring inpatient care many patients with chronic kidney disease or requiring dialysis had to be flown or transferred to another facility averaging 200 miles away, most often resulting in expensive flight costs averaging $42,000.

Methods: Summit partnered with a nephrologist group out of area with 4 nephrologists already credentialed at Summit that support an outpatient dialysis facility in the local area. The physicians had no prior experience with telemedicine
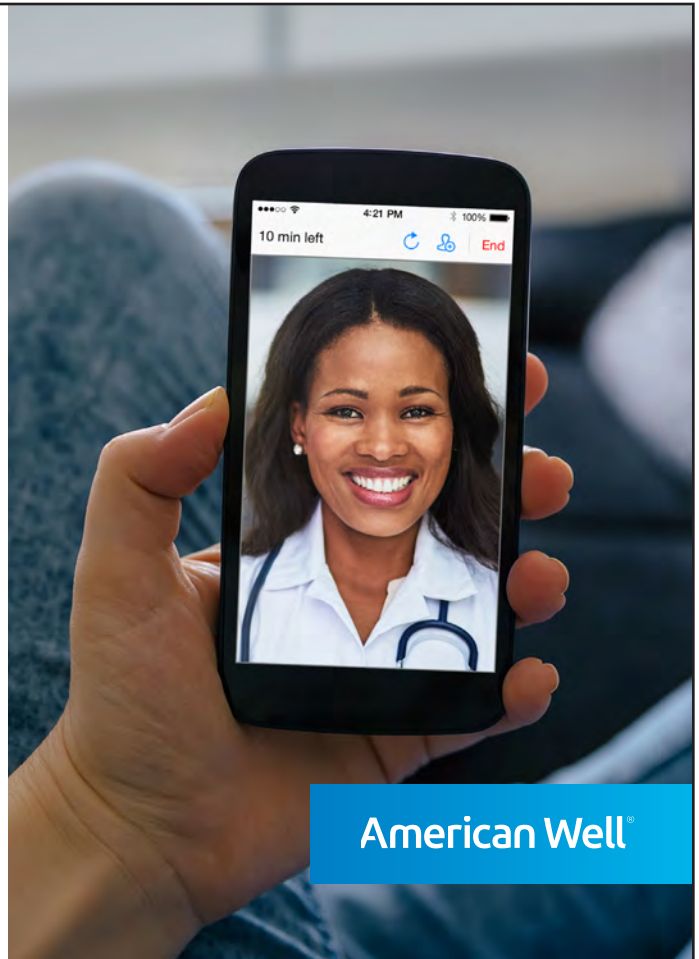
but were trained on the technology and best practices. The physicians are using Cisco Jabber to connect into Avizia carts at Summit with either a computer or an iPhone. Summit hired an experienced dialysis nurse who oversees and/or performs the dialysis treatments. The nephrologists see the patient before, during and/or after treatments as needed via telemedicine. The nephrologists have direct access to the patient's chart remotely and document their consult notes and orders directly into Summit's EMR.

Results: Since launching the program in November 2017, Summit has averaged 25 inpatient telenephrology consults per month. This program has greatly expanded access to care for dialysis and chronic kidney disease patients in the inpatient setting. Summit has been able to perform 124 dialysis treatments since inception for patients requiring an inpatient stay and been able to capture additional revenues from those inpatient stays and dialysis treatments that would have previously been transferred out. It has allowed Summit to keep patients close to home, saving an estimated $1.2 million in saved transport, flight and/or travel costs.

Conclusion: The teledialysis partnership is one way in which Summit is fulfilling its mission of being trusted to deliver exceptional compassionate care close to home. Summit hopes to continue to add more telemedicine programs that will bring added resources and better care for the local communities.

14) The Impact of Asynchronous Virtual Care on Managing Patient Volume During an Influenza Outbreak

Lisa Ide, MD, MPH

Zipnosis, Inc.

Background: A large academic medical center in the southeastern U.S. launched its asynchronous virtual care service in 2013. The service supports diagnosis and treatment of common conditions, including upper respiratory infections (URI), including influenza using best practice driven clinical content algorithms and embedded clinical decision support. This particular organization was in an area hit hard by the 2017-2018 flu season, so we gathered data to help evaluate the impact of having a virtual care service during a major influenza outbreak.

Methods: We gathered and evaluated data from the virtual care platform for November through March 2016-17 and 2017-18, including year-over-year change in virtual visit volumes (total and URI/influenza) and clinical work time.

Results: The academic medical center's virtual care service saw a 130% growth in virtual visits for upper respiratory infections and influenza between 2016/17 and 2017/18, along with an overall virtual visit volume increase of 94% during that time period. This translated to 1,995 virtual visits for upper respiratory concerns and 622 for other health complaints. Clinical worktime averaged 1:03 per virtual visit, translating to a total of 45.8 hours of worktime for the 2,617 virtual visits. The asynchronous model has previously demonstrated similar efficiency along with 94% adherence to evidence-based practice.[1] Assuming an in-person visit requires 10-minutes of clinical worktime, the virtual visits were 952% more efficient than in-person care.

Conclusions: In seasons with widespread influenza outbreaks, asynchronous virtual care can help health systems more effectively manage visit volumes by unlocking efficiency in care delivery.

15) Telehealth Utilization in Corrections: Meeting the Challenge of Providing Care to Incarcerated Patients in Rural Communities

Norman Knippen, MBA, CCHP, C.M. Ramsue, MD, CPE, MSM, CCHP-P, FAAFP, Ethan Pinkert, Qutishia Brown

Centurion and MHM Services, Inc.

Background: In the US a large number of individuals with health issues reside in our prisons and jails. Many corrections departments face significant challenges in addressing the healthcare needs of this group. Incarcerated patients have a constitutional right to healthcare services, so for corrections

administrators it is not only an ethical mandate to ensure quality healthcare but also a legal mandate. Providing treatment to incarcerated patients presents unique challenges as compared to treatment received "outside the walls". Prison and jail populations are generally comprised of individuals who had limited access to healthcare prior to incarceration, who have engaged in substance use, and who are more likely to have experienced trauma and abuse. Many have co-occurring mental illness. The aging of correctional populations increases the need for more chronic care. Telemedicine represents a powerful solution for many correctional systems, many of which are distributed over large geographical areas with daunting commute distances and significant shortages of local providers. Healthcare providers may be reluctant to practice within correctional environments, often due to concerns about commuting distance or personal safety. Telemedicine helps to address these issues.

Methods: We will present the advantages recognized with correctional telemedicine use. We will also address factors correctional programs should consider when establishing new telemedicine services or when seeking to enhance services already in place.

Results: According to the Federal Bureau of Justice Statistics, more than 95% of inmates will return to the community. Inmates whose healthcare needs are adequately addressed while incarcerated will require less medical intervention when they return to the community. They are also more likely to gain meaningful employment, a well-documented factor related to reduced recidivism.

Conclusion: It is in everyone's best interest to ensure that incarcerated patients are receiving adequate healthcare. Telemedicine has been a tremendous help with meeting this challenge.

16) Pilot Study: Evaluation of Interprofessional Education Through Telesimulation Using Remote and Live Facilitation

Marissa, Lovett, MS[1], David Biffar, MS[1], Coy Collins, BSN[1], Karen Holder, FNP-BC[2], Mike Holcomb, BS[3], Pete Yonsetto, BS[3], Ronald S Weinstein, MD, FCAP, FATA[3], Allan Hamilton, MD, FACS[1]

[1]Arizona Simulations Technology and Education Center (ASTEC), [2]Northern Arizona Area Health Education Center, [3]Arizona Telemedicine Program

Background: Interprofessional education, often implemented through simulation education, has become a primary strategy to improve clinical communication and health outcomes.[1,2] Telesimulation may provide a new modality to expand interprofessional education to more learners while addressing key barriers of cost and facilitator deficit within traditional simulation education.[3,4] This pilot study was designed to evaluate the effectiveness of remote facilitation in comparison to live facilitation for interprofessional telesimulation events and to develop a model for interactive, interprofessional training at two remote sites.

Methods: This study was conducted at the Arizona Simulation Technology and Education Center (ASTEC) and the Northern Arizona Area Health Education Center (NAHEC). Five first-year medical students participated at ASTEC, while two second-year osteopathic students and three fourth-year pharmacy students participated at NAHEC. Both locations were equipped with a high-fidelity patient simulator, all necessary medical supplies, and live telemedicine visual/audio connectivity. The learners completed four cardiopulmonary resuscitation scenarios, two scenarios per site, that were each followed by a debriefing. At each site, students were provided with one debriefing led by the on-site facilitator and one debriefing led by the remote facilitator. Students completed a survey at the end of the training, evaluated on a 5-point Likert scale.

Results: Learners agreed with the use of remote facilitation: to meet the interprofessional learning objectives (4.9 ± 0.3), as an adequate replacement for live facilitation (4.2 ± 0.6), and to implement in low-resource or low-facilitator areas (4.7 ± 0.7). Learners agreed that the visual connectivity (4.5 ± 0.7) and facilitator audio connectivity was effective (5 ± 0.0). Improvements were suggested for audio connectivity between participants (3.9 ± 0.6).

Conclusions: The study suggests that telesimulation, with remote and live facilitation, is an effective strategy to provide interprofessional simulation education. Improvements can be made to standardize the set-up and connectivity of the audio/visual technology. Additional orientation can be done to encourage more interaction between sites.

17) Different Telehealth Models to Address the National Shortage of Genetic Counselors

Austin McKittrick, MS, Katie Stoll, MS, Kelly Donahue, MS

Genetic Support Foundation

Background: The field of medical genetics has seen astronomical growth in recent years. Many more genetic tests are now available and can be ordered by both medical providers and patients, but genetic counseling remains an essential part of the process. Genetic counselors review medical and family histories as well as any testing that has already been completed to assess if there is an increased risk for a hereditary condition in a family, as well as which specific genetic test, if any, is the most appropriate. They also provide comprehensive discussion about the impact of both positive and negative test results. Undergoing genetic testing without this vital context has been shown to have potentially dangerous results. With this influx

of genetic testing and its widespread utilization, the shortage of genetic counselors that previously existed has been further exacerbated. To help mitigate the effects of the shortage, our organization sought to develop programs to provide and support genetic counseling services in innovative, efficient ways nationwide.

Methods: Our organization has worked with a variety of medical organizations to help bridge gaps in genetic counseling services, and has also developed an independent telehealth service to provide nationwide reach to patients in need. While the specifics of the telehealth models vary from site to site, there are three categories that describe our programs: 1) permanent integration of a telehealth genetic counselor into a system that previously employed an in-person genetic counselor, 2) temporary program support with utilization of a telehealth genetic counselor while a site awaits recruitment of an in-person genetic counselor, and 3) an independent nationwide genetic counseling service which patients can access via telehealth from their homes.

Results: Although each model has had its unique benefits and challenges, we have been able to increase access to genetic counseling through all of these programs. The first two models have been successful in providing continuous genetic counseling coverage for clinics that experience significant gaps in coverage due to employee turnover. By having multiple genetic counselors credentialed at each site we cover, we have established an infrastructure that further limits lapses in coverage due to provider turnover, illness, or time off. Furthermore, with the longevity of dedicated providers supporting specific sites, relationships with the remote genetic counselors and the clinic providers and staff is strengthened. The second model has been successful to ensure patients are still being seen while recruitment efforts are underway, helping to make a notoriously challenging transition less negatively impactful to patient care. The third model provides services to areas that do not regularly have access to genetic counseling, and facilitates genetic counseling and cascade screening for family members of patients who live in an area that does not have genetic counseling available.

Conclusion: Genetic counselors are in short supply, and genetic counseling is an important element of comprehensive genetic evaluation. Although genetics is playing an increasing role in all areas of medicine, genetic counselors have historically been located in population-dense, urban settings. Technological advances have allowed telehealth to be more widely available to all communities, including those in rural areas that would not otherwise have access. Being innovative and flexible have been essential to tailoring our genetic counseling services to be able to best serve our clients and patients.

18) Telemedicine and SMS Screening for Dengue Population

Linh Nguyen, MD

MD24 iHealth

Background: Dengue is a public health issue impacting half of the world's population with approximately 60-100 million infections annually. The Philippines is suffering a controversy over its Dengue vaccination program, where it is estimated that 800,000 Filipino children were vaccinated, and in the last three months 75 have died. The Philippines is experiencing a decrease in immunization rates and an increase in Dengue cases after the program. With the current situation of vaccine dilemma, MD24 is working with the Department of Health of the Philippines (DOH) to apply our expertise in health technology and population health to monitor their influenced patients and coordinate care to them.

Method: MD24, the Philippine Red Cross, and the DOH are partnering together to deliver an approach to reach those vaccinated in the program to closely monitor their symptoms and provide the proper channel of care on a nationwide scale. The Red Cross and the DOH are collecting recipient information and utilizing MD24's technology to send text messages with programmed algorithms to all recipients and screen them for early assessment. When high risk is determined, patients are alerted immediately to connect with health coaches and doctors for telemedicine consultations.

Results: MD24 and the DOH aim to use SMS screening, telemedicine, and disease reporting data to determine impact of the program. By applying SMS with programmed Artificial Intelligence, and telemedicine access to high risk patients. MD24 wants to raise the healthcare access and quality (HAQ) measure, and health-seeking behavior for the Philippine population. Telemedicine with text message technologies will, at the same time, reduce the time and cost burdens on hospitals and clinics, while maintaining proper resource allocation for the government.

Conclusion: With the successful proof of this model in the Philippines within one year, MD24 wants to apply this high quality low cost method to other countries experiencing similar situations.

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

19) Investigating Time-Savings of an Asynchronous Telehealth Diagnostic Method for Autism

Ronald Oberleitner, MBA[1], Christopher Smith, PhD[2], Gwen Mitchell PhD[3], Catherine Rice PhD[4], Michael Morrier PhD[4], Uwe Reischl, MD, PhD[5]

[1]Behavior Imaging, [2]Southwestern Autism Research and Resource Center, [3]University of Idaho, [4]Emory University Autism Center, [5]Boise State University Health Sciences

Families referred for a developmental evaluation for their children routinely face long wait lists, and access is especially hard for underserved populations living in rural communities. Three autism clinics that provide diagnostic and treatment services participated in a study that examined time differences between traditional and telehealth autism assessments. Recruitment included families from both urban and rural areas in 3 States. Each participating family was assigned to either the traditional in-person assessment (IPA) or assessment through the smartphone-based Naturalistic Observation Diagnostic Assessment (NODA™) method. A total of 57 families were enrolled, of which 11 were from rural communities. 28 families were assigned the NODA method and 29 families were assessed via the IPA method. The average total time associated with obtaining an ASD assessment using the IPA method was 118 days as compared to 59 days using the NODA method. Families were asked to complete a questionnaire immediately after the assessment was completed (before receiving the report) and again 3-months after receiving the center's diagnostic report. No within-group differences were observed between the rural and urban families. The response to the 3-month post-project survey indicated that families in the NODA group had a slightly less favorable opinion about the diagnostic assessment process in comparison to the families who completed the traditional IPA method. However, families reported they were agreeable to using a similar telehealth tool to facilitate treatment. The results showed that the NODA method shortened the overall time required to complete an ASD symptom assessment, while providing acceptable levels of satisfaction for the families involved.

20) Teleconnectivity Reaching Rural Areas in High Risk Obstetrics

Kathy Ogden, RN, MSHA, MBA, and Jose Compton, APN-C
Regional Obstetrical Consultants

Background: The second leading cause of infant mortality is short gestational periods and/or low birth weight. Tele/video connectivity helps brings state of the art care to the rural area for women with risk factors that may affect their pregnancy.

Methods: High tech, High touch. Through a referral-based system to the high risk OB or Maternal Fetal Medicine specialist, (MFM), the patient is seen at the rural health site by a specialized sonographer and a midlevel provider, the MFM is connected via video conference as the patient is being scanned and examined. The physician is "live" via videoconference and can view the patient's scans in real time. The MFM can ask the patient questions directly and provide care and direction at the time of the patient visit.

Results: To date there have been nearly 40,000 virtual consultations. Gestational age at delivery of greater than 37 weeks reached 88% in this first quarter. Newborn Nursery vs. Intensive Care Nursery from 2013 to the first quarter of 2018 was 93% Newborn nursery stays to 7% NICU admissions, while transfer rates to a perinatal center after delivery for the first quarter of 2018 was only 1%. This is definitely lower than the national average for NICU admissions and tertiary care transfers. Therefore, the technology enables better outcomes, optimizes supply and demand, and as a result, is good for the organizational bottom line, but more importantly good for the patient.

Sponsor

Conclusions: This connectivity helps the patient and provider to overcome obstacles in healthcare. Geographic, financial, and time constraints are just a few obstacles as well as lessening the added stress of travel and missing work for the patient. The healthcare provider is offered added support as well from a highly trained specialist that they may not be able to access in the smaller rural setting. An extra set of eyes and ears is on the scene to assess and consult within real time situations.

21) Comparison of Pharmacist Managed In-Person and Telehealth Warfarin Clinic Outcomes

Michael Pham, PharmD and Laura Moore, PharmD

North Country HealthCare

Background: Warfarin is an oral anticoagulant used for the prevention of thromboembolism and requires frequent monitoring due to a narrow therapeutic window. The use of warfarin in rural communities has been complicated by a lack of access to consistent and timely monitoring. Through telehealth anticoagulation appointments, patients from rural communities are able to have more frequent monitoring by pharmacists.

Methods: The electronic medical records (EMR) of patients on warfarin enrolled at the NCHC on-site anticoagulation clinic in Flagstaff, AZ was compared to the EMRs of pharmacist managed telehealth patients on warfarin at NCHC satellite clinics. The primary outcome measured the time-in-therapeutic-range (TTR) using the Rosendaal method. The secondary outcome compared the TTR of physician-managed patients at NCHC Williams satellite clinic versus TTR of pharmacists managed telehealth patients at NCHC Williams satellite clinic.

Results: The average TTR for patients managed by pharmacist in-person at Flagstaff was 70.55% (N=82) while the average TTR for patients managed by pharmacist through telehealth was 58.98% (N=35, Williams), 63.04% (N=4, Winslow), 63.09% (N=6, Ashfork), and 50.60% (N=7, Seligman). Patients who were managed by their providers had an average TTR of 51.99% (N=27, Williams). Patients who were seen in-person (Flagstaff) had a statistically significant higher time in therapeutic range than patients who were seen through telehealth at the Williams clinic (p-value 0.0091). However, there was no statistically significant difference of TTR seen between in-person appointments (Flagstaff) with telehealth patients from other clinics. There was also no significant difference between TTR of physician managed patients compared with pharmacist managed telehealth patients at the Williams clinic.

Conclusions: Patients who were managed in-person by a pharmacist had a higher TTR than patients who were managed by pharmacist through telehealth. Also patients managed by pharmacists via Telehealth at Flagstaff, Williams, Winslow, and Ashfork had a higher average TTR than patients managed in person by their providers.

22) Optimizing Behavioral Health Services in Long-Term Care with Scalable Telemedicine

Christopher Pick

Deer Oaks – a behavioral health company

Specialty medical services can be challenging to deliver in institutional settings. A study in the American Journal of Preventive Medicine finds that a majority of non-metropolitan counties (65%) do not have a psychiatrist and almost half of non-metropolitan counties (47%) do not have a psychologist. Based on current CDC statistics for nursing home residents, over two-thirds suffer from behavioral and mental health disorders, 37% suffer from depression which can lead to suicide, and over 50% from Alzheimer's or other dementias. Behavioral health conditions influence many comorbid conditions, immune and cardiac functions, susceptibility to infection, asthma and recovery time. Integrated, or partial behavioral health services for residents are scarce with more than 30% of nursing homes in non-metropolitan areas. As the nation's leading provider of behavioral health services to long-term care communities, Deer Oaks serves over 1,400 long term care facilities across 27 states, serving over 10,000 senior adults. Known for consistency, clinical efficacy and

a commitment to serving rural communities with many facilities operating in remote areas. To address the obstacles that stand in the way of consistent mental health services, Deer Oaks enhanced their care model by implementing telemedicine as a complement to on-site services, for both Gero-Psychology and Gero-Psychiatry. Partnering with leading telemedicine software provider SnapMD, Deer Oaks extended their care offering virtually via the Patient-Presenter Workflow to allow on-site general medical staff to "present" patients requiring care to physicians for treatment. All of which meet Medicare/Medicaid requirements addressing rurality, multi-language requirements, and more efficient allocation of higher-end resources and specialists. In implementing telemedicine for behavioral health, Deer Oaks designed and deployed a telemedicine program within reimbursement operating margins, selected/configured scalable platform/hardware, overcame cultural/communication barriers towards telemedicine, and changed traditional treatment delivery to embrace healthcare IT while employing cross entity partnerships of onsite and remote healthcare staff. By providing distant provider services as a complement to on-site care, Deer Oaks can now fully meet the needs of long-term care patients wherever they may be. Care teams also found no limitations of telemedicine, which increased patient and facility satisfaction.

23) Expanding MAT on the Mountain

Jennifer Pierce BBA[1], Sunshine Coffman MA[1], Rose Planteen MPH, CPhT[1], Sara Gibson MD[1], Ryan Kivela MA[1], Lauren Lauder MSW, MBA, LISAC[2]

[1]Health Choice Integrated Care (HCIC), [2]Southwest Behavioral & Health Services

Background: Health Choice Integrated Care (HCIC) partnered with Project ECHO® to launch a tele-mentoring program for Northern Arizona's physical and behavioral healthcare practitioners. Project ECHO (Extension for Community Healthcare Outcomes) is a hub and spoke model of knowledge-sharing in which a group of specialists and remote clinics meet via video conferencing on a regular basis to present didactics and cases.

Methods: In March 2018, HCIC introduced Mountain ECHO, a community collaborative specific to Northern Arizona that offers training and support to multidisciplinary healthcare professionals serving individuals diagnosed with opioid use disorder (OUD). The project is funded by the State Targeted Response grant from SAMHSA and administered through AHCCCS. The goal of Mountain ECHO is to increase access to medication assisted treatment (MAT), the evidence-based best practice for treating OUD.

Results: As of the end of May 2018, six sessions have been completed. Attendance ranged from 25 to 39 participants, excluding the hub team. A survey is sent after each session asking about session satisfaction, use of time, the lecture,

the case presentation, likelihood of ongoing attendance, and impacts on change in practice. Each survey yielded a 50 percent or greater response rate. The feedback has been overwhelmingly positive. We received over 3.5 on a 4-point scale for overall satisfaction, good use of time, and brief lecture survey results. When asked if the case was useful for the attendees we received above a 3.4 on a 4-point scale. We received 100 percent positive responses that the participant will attend in the future.

Conclusion: Our first ECHO clinic is scheduled to end August 20th, 2018. Based on the positive reaction and successful impact we have enough demand to start again in October 2018.

24) Technical Innovations to Deliver State-Wide Oncology Lectures in North Carolina

Jon Powell, PhD

UNC Cancer Network, UNC Lineberger Comprehensive Cancer Center; UNC School of Medicine; the University of North Carolina at Chapel Hill

The UNC Cancer Network is a part of The Lineberger Comprehensive Cancer Center and the UNC School of Medicine. As a part of our non-profit's mission to reduce cancer morbidity and mortality in North Carolina, we provide approximately twenty-four live and self-paced oncology lectures each year. These lectures reach a live audience of clinicians across our state, and we award, CME, CNE, and ASRT credit. Our schedule is available at http://www.unccn.org/live. All lectures are also made available on-demand for free continuing education credits via our Online Learning Portal at https://learn.unccn.org/. Over the years, our service has evolved from one that exclusively utilized Polycom and Cisco video conferencing systems for live lectures, to a much more accommodating approach that uses Zoom in coordination with video conferencing systems and Mediasite to deliver live lectures via Zoom Webinar, H.323, SIP and a live stream. Poll Everywhere is utilized across all video delivery mechanisms to provide interactive polling and Q&A throughout our lectures. For Zoom Webinar participants, to-the-minute participation is tracked to provide attendance accountability. In late 2017 we introduced an in-house developed, WordPress-based LMS to provide access to our recorded content. This system allows registered users to view our Mediasite-recorded content and receive online, continuing education certificates (provided a proficient score is achieved in an online assessment). Our group relies heavily on our non-profit access to Salesforce for managing customer records, site details, customer outreach, bulk emailing, equipment inventory, internal knowledge-based articles, support case management, project management, and much more. Having a fine-tuned CRM allows our small team to maintain detailed and relevant records in order to continually expand our reach. We look forward to attending SPS in October

to share many of the innovative uses of technology that have allowed our team to effectively deliver telehealth lectures across North Carolina.

25) Setting the Stage for Telehealth

Laura Rivela, LCSW-R, BCD and Brendan Guldi

East End Mental Health

Setting the stage for an effective implementation of telepsych services is much more than camera, lights, action! It requires the appropriate training of staff who will be delivering the services, as well as training for the support staff who will be coordinating the services. Patients need to receive educational materials to explain the service and the potential benefits. Conducting a pilot study of the various telepsych providers and application of their products helps for an effective and efficient implementation. Promotion of telepsych using marketing and social media will also be addressed.

26) Availability and Growth of Commercial United States Telemedicine Services

Nicholas Rolig, MPH, Gail Barker, PhD, Mike Holcomb, Karen A. Rogge-Miller, Nancy Rowe, Ronald S. Weinstein, MD

University of Arizona

Background: In 2014 the Arizona Telemedicine Program (ATP), Southwest Telehealth Resource Center (SWTRC), and Four Corners Telehealth Consortium hosted the first Telemedicine Telehealth Service Provider Summit (SPS). One of the main goals of the summit was to facilitate networking between commercial telemedicine/telehealth service providers and potential customers. Since 2014, two more SPSs have taken place, one in 2016 and another in 2017. To foster networking beyond the conferences, the SWTRC and ATP created the Service Provider Directory (SPD). Using a 33-item questionnaire, the SPD is updated annually. Leveraging access to the SPD's underlying database, this research aimed to determine availability of tele- and ancillary services, and investigate how telemedicine has progressed over time.

Methods: The database was sampled on 10/11/2017 and 06/04/2018. Data were geographically associated and aggregated with each state based on the reported service footprint of each company. Services available within each state were determined by replacing the list of companies per state with their respective services and removing duplicates. Growth was analyzed based on comparing the results of both geographic analyses, graphing the year each company was incorporated and plotting case volume over time.

Results: All 69 tele-services and 8 ancillary commercial services are currently available in each state. The telehealth industry is still growing, with respect to the number of companies currently operating within each state and the number of cases seen per year. However, some evidence may suggest that consolidation is occurring.

Conclusions: Collectively, these data support that tele- and ancillary services are ubiquitously offered throughout the United States, and the telehealth industry has grown sharply within the past five years. Limitations of this study include the exclusive usage of the SPD as a source of data, which does not include information such as service usage details. Future research will address these shortfalls.

27) Collaborative Medical Dental Telehealth Oral Health Assessments Utilizing an Intra-Oral Camera

Elaine Mamola, RDHAP

Smiles by Delivery and Housecall Dentistry

Background: "Oral health is essential to general health and quality of life." – WHO. Older adults with poorest oral health include the disabled, homebound, or institutionalized (nursing homes). The Federal Medicare program does not cover routine dental care. Oral health problems in older adults over the age of 65 years, including untreated dental decay [1 in 5], periodontal disease [2 in 3], edentulous [1 in 5], oral cancer 62 years median age, and dry mouth (xerostomia) due to chronic disease and medications, affect 25% of the U.S. adult population.

Methods: A mobile housecall dental program in collaboration with a mobile physicians group utilizing telehealth developed a pilot to perform oral health assessments on older adults. The dental providers trained the medical providers to utilize an intra-oral camera as an oral health assessment tool. Standard Intra-oral photos were taken, then forwarded to the dental provider. The medical providers were asked to not use the camera for the first 30 days. A comparison was then made to determine if the use of an intra-oral camera aided the mobile medical group in determining oral health assessments and telehealth referrals. Ultimately, the goal of the collaboration was to improve the number of older adults receiving oral health assessments, thereby reducing the number of urgent dental needs in the older adult population due to early detection of oral conditions by the medical providers.

Results: The mobile medical providers reported increased number of oral health conditions identified, and improved confidence in referring older adult patients to dental providers when utilizing the intra-oral camera and telehealth referrals.

Conclusions: Improved early detection of oral conditions were noted. Final data will be available for poster presentation.

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

SOUTHWEST TRC TELEHEALTH RESOURCE · CENTER™

YOUR CONNECTION TO TELEHEALTH IN THE SOUTHWEST

www.southwesttrc.org

Mission

The SWTRC assists start-up telehealth programs in their development and serves as a resource for existing programs regarding changes in technology and other issues affecting telehealth in the Southwest region.

The SWTRC is supported by grant number G22RH30360 from the Office for the Advancement of Telehealth, Federal Office of Rural Health Policy, Health Resources and Services

SWTRC Services

- Full-Day Training Program
- Online Learning Modules
- Help Desk
- Technical Assistance
- Tools & Templates
- Program Development
- Business Models
- Evaluation
- Best Practices
- Clinical Operations
- Sustainability
- Equipment Recommendations
- Program Operations
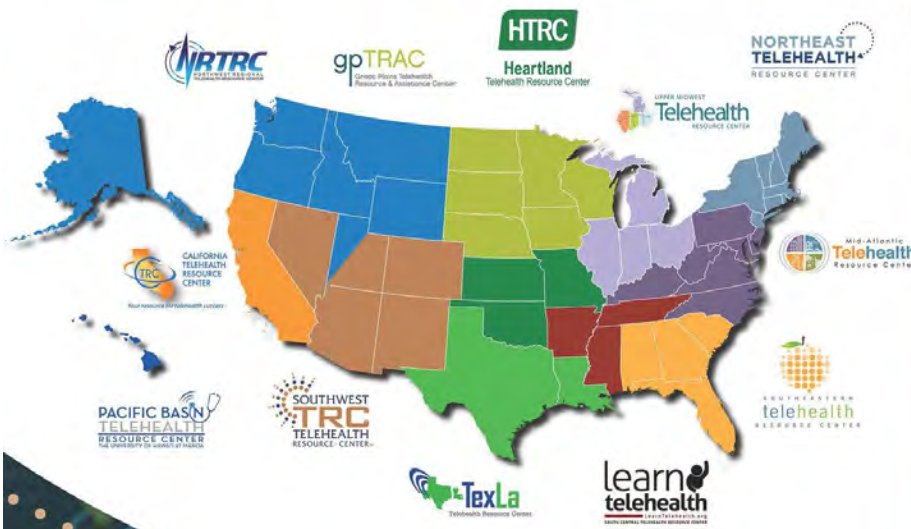
ARIZONA TELEMEDICINE PROGRAM

The Southwest Telehealth Resource Center is a subsidiary of the Arizona Telemedicine Program.

THE UNIVERSITY OF ARIZONA
MEL & ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH

Center for Rural Health

crh.arizona.edu

The Arizona Center for Rural Health (AzCRH) serves Arizona through its core mission to improve the health and wellness of Arizona's rural and underserved populations.

State Office of Rural Health

Arizona First Responders Initiative

Arizona Rural Hospital Flexibility Program

Students Helping Arizona Register Everyone

Small Rural Hospital Improvement Program

Arizona Prescription Drug Misuse & Abuse Initiative

AzCRH Navigator Consortium

Rural Recruitment and Retention

Student Internship Projects & Opportunities

Tribal Health Initiatives

ARIZONA TELEMEDICINE PROGRAM

SPS Telemedicine Telehealth Service Provider Summit

28) Telemedicine Ventilator Rounding in the Intensive Care Unit

Ruth Anne Skinner, DNP, ACNP-BC, and Pamela Love, DNP, RN

Grand Canyon University

Background: Advancing the scientific knowledge in the teleICU is important because it is a newer modality in healthcare and has potential for incredible growth. Ventilator rounding is the assessing and verifying ventilator management of mechanically ventilated patients to ensure usage of the most recent evidence based research. The purpose of this direct practice improvement project was to evaluate the effectiveness of ventilator rounding by nocturnal telemedicine nurse practitioners as manifested by improved daily compliance of ventilator bundle and lung protective ventilation for adult mechanically ventilated patients.

Methods: A quantitative simple correlation design was used for both clinical questions. The dependent variable was the respective compliance percentage on that given day. The independent variables were the retrospective compliance percentage on the given day and the number of days since ventilator rounding practices were instituted (N=40).

Results: Improved ventilator bundle compliance indicated a moderate, statistically significant, positive correlation, r = .41, p = .008, between the two variables. Improved lung protective ventilation indicated a weak, not statistically significant positive correlation, r = .14, p = .39.14. The DPI project was clinically and statistically significant noting that all three hospitals improved their length of stay and improved the days intubated. However, it is recommended that a future project evaluate the relationship between ventilator rounding and days in the ICU. The project supports the continued use of ventilator rounding to improve ventilator management.

Conclusions: The professional and practical implications were to increase daily compliance of lung protective behaviors. The significance of the project was the prevention of ventilator associated complications which supports the continued use of ventilator rounding to improve ventilator management. Keywords: ventilator rounding, teleICU, acute care nurse practitioner, mechanical ventilation, ventilator bundle, and lung protective ventilation

29) Integrating Medication Management Services within a Mobile Integrated Health (MIH) Model Leveraging Telehealth

Olufunke Sokan, RPh, MS Pharm, Folasade Osotimehin, PharmD, BCACP, Magaly Rodriguez de Bittner PharmD, BCPS, Todd Crocco, MD, FACEP, Colleen Landi, MS, CRNP, David Marcozzi, MD, MHS-CL, FACEP, Mark Fletcher

University of Maryland School of Pharmacy, University of Maryland Medical Center, Baltimore City Fire Department

Background: More than 80% of Baltimore City Fire Department (BCFD) 911 dispatches are for Emergency Medical Services (EMS) resulting in transportation to the Emergency Department (ED). An estimate of about 32% of these EMS calls could be safely treated outside the hospital setting. This utilization pattern has led to a disproportionate devotion of ED personnel and financial resources to providing non-urgent care. In addition, this places a significant strain on the BCFD system and response time.

Methods: A unique model was established to deliver quality healthcare to low acuity patients and support the health of West Baltimore residents over utilizing EMS and ED services. The multidisciplinary model comprises mainly of a 2-person on-scene care team, a BCFD community paramedic and BCFD nurse. An Advanced Practice Pharmacist provides support to the team from a remote location. The Pharmacist is able to participate during the patient's home-visit using a HIPAA compliant Telehealth solution (Zoom video technology). An additional technology (DocHalo) allows for immediate communication between team members. Patient home-visits occur the next business day post discharge. These patients are followed for 30 days and transitioned back to their PCP for continued management. Documentation by all team members occurs within EPIC.

Results: Telehealth has afforded the incorporation of Pharmacy from a remote location within a MIH care model. Over a two month period, 32 patients have been enrolled in the program. Pharmacy has conducted 30 virtual visits and resolved 25 drug related problems.

Conclusions: The MIH innovative TOC model aims to reduce overutilization of ED and improve the health of West Baltimore residents while addressing the drug related problems during a transition of care right at the patient's home by leveraging Telehealth. This approach makes pharmacists available and present in a virtual capacity expanding access to this important resource within a multidisciplinary team.

30) e-Health Interventions as a Treatment Modality for Obese Adults: A Systematic Review

Douglas Sutton, EdD, APRN, and Pamela Stetina, PhD, RN

Northern Arizona University

Background: Technology-based interventions also referred to as electronic (e-Health) or mobile (m-Health) interventions, are among the available treatment modalities for managing weight loss in obese or overweight adults. Due to the disproportionate incidence and prevalence of obesity, and the continued weight gain among the general population, there is a noted lack of sufficient evidence to support the effectiveness of using e-Health interventions as a method for managing clinical outcomes. The primary purpose of this systematic review is to determine the effectiveness of technology-based or e-Health interventions as a treatment modality for weight loss and management among the overweight and obese adult population. This systematic review evaluated the efficacy of e-Health or technology-based interventions as a weight-loss, or weight-maintenance treatment modality in adults who are overweight or obese.

Methods: This review focused on the effectiveness of e-Health interventions by comparing weight-loss findings from previously published studies between 2007 to 2017. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement was used as a guide during this review. The articles were retrieved from electronic databases, using the search terms computer, e-, or m-Health, Internet, Smart Phone Applications or Apps, technology-based, obesity, overweight, and weight loss and weight maintenance. Boolean operators "AND" and "OR" were used in the review. A total of 2,909 articles were identified, and thirty articles met the eligibility criteria for inclusion.

Results / Conclusions: These studies demonstrated that e-Health, m-Health as well as internet technology-based modalities are clinically meaningful for achieving varying degrees of weight loss and weight maintenance in adults. Further, published research findings comparing study completion date to technology implementation date, reveal a large time disparity in study results and journal dissemination dates; which may imply best current practice to either the client community or their clinicians.

31) Improvements in Clinic Flow Efficiency and in Enabling Economic Screening for Diabetic Retinopathy Through AI

Gilberto Zamora, PhD[1], Jeremy Benson[1], Sheila Nemeth[1], John Maynard[1], Peter Soltz[1], Javier Lozano[2]

[1]VisionQuest Biomedical LLC, [2]Clinicas del Azucar

Background: Countries throughout the world are experiencing a shortage of trained specialists to address the growing need for the care and treatment of individuals with diabetes. This shortage is especially important to eyecare, where early detection of diabetic retinopathy (DR) can prevent vision loss. Through periodic screening, progression of advanced, sight-threatening DR can be prevented or delayed. However, because of the shortage of eyecare specialists, including the USA, individuals with diabetes find the challenges of complying with recommended eye screening overwhelming. In the USA, less than 50% of individuals receive the recommended annual retinal exam. This holds true for other countries like Mexico.

Methods: VisionQuest has developed an artificial intelligent (AI) system, EyeStar, to automatically screen digital retinal images for signs of DR. The AI method uses deep learning techniques which have captured the attention of many researchers in ophthalmology and other medical disciplines. Deep learning relies on training of the algorithm on large databases such as one used in this project. The AI screening software was implemented at 12 diabetes care clinics in Monterrey Mexico.

Results: EyeStar has been operational at these clinics since 2016, in which time 10,000 individuals have been screened. A

quality assurance program selected a sample of cases processed by EyeStar to be over-read by a trained reader. The human reader's findings were considered the reference standard for determining the performance of EyeStar. The 12 clinics used two different camera models, the Canon CR2/AF and the Pictor Plus. EyeStar was found to have a sensitivity of 98% and specific of 77%.

Conclusion: EyeStar performed to levels that would meet FDA requirements. Because of the high-performance levels at these clinics, the workload on the ophthalmologist is reduced by 72%.

32) Building an International Telehealth Network for Pediatric Burn Care: Provider Lessons Learned

Ramon Zapata-Sirvent, MD, Karel D Capek, MD, Mayra Monreal, Steven E Wolf, MD, David N Herndon, MD

Shriners Hospitals for Children, Galveston and University of Texas Medical Branch

Background: Severe burn injuries in children are more frequently survived when treated at specialized centers, but patients must often travel long distances for follow-up care. These same centers typically have greater experience with the complex reconstructions needed by severely burned children. Telehealth can alleviate some long-distance travel, particularly for routine preoperative assessment and postoperative follow-up. Because there is limited data on the interchangeability of face-to-face versus telehealth reconstructive clinic visits, we analyzed our experience thus far.

Methods: We reviewed the number of providers, sites, and patients who received telehealth services. Providers were asked to identify which aspects of the visits were similar to in-person clinic visits and identify areas where difficulty was encountered.

Results: Since 2011, 1,070 children received telehealth visits for post-acute and reconstructive care for severe burn injuries. Nine sites participated, comprising 5 US and 4 Mexican clinics. Providers noted that most aspects of reconstructive visits were similar to the in-person setting. There were no barriers to eliciting the patient's complaints of problematic scar areas, functional movement deficits, and scar disfigurement/pain/itch. The various equipment configurations utilized allowed satisfactory scar evaluation and preoperative assessment for reconstructive procedures. Routine postoperative care was also possible without observed difficulty in these visits, including stitch removal by remote site providers. Wound assessment proved somewhat difficult, with the major observed barriers being pain, need for in-person skill at dressing takedown, and dressing replacement. No adverse telehealth-related events were retrospectively encountered.

Conclusion: Routine pre- and postoperative care and reconstruction of severely burned children can be accomplished through telehealth. Specialized visits, such as burn wound

dressing changes, challenge current telehealth capabilities due to lack of remote-site specialists. The central question, "Will this patient benefit from reconstructive operation as their next appointment?" can be successfully addressed through telehealth.

ARIZONA TELEMEDICINE PROGRAM

telemedicine.arizona.edu/training

Warren St. Clinic

T-Health Amphitheater

The Arizona Telemedicine Training Program and the Southwest Telehealth Resource Center offers 1-day training courses on telemedicine and telehealth.

There are two tracks offered:

Developing a Telemedicine Program

- Clinical services
- Telecommunications and infrastructure development/operations
- Distance education
- Evaluation
- Business aspects
- Telemedicine equipment/technology demonstration

Telemedicine Applications

Advanced topics and Real-World Clinical Applications

ATP's staff and colleagues, many of whom are national experts in telehealth, distance education and the business of telemedicine, teach both tracks. The Arizona Telemedicine Training Program is accredited by the American Telemedicine Association. Advanced Registration is required to attend ATP training courses.

Join us at an upcoming training course to enhance your telemedicine and telehealth knowledge, to network and build relationships, and discover resources to help advance your telemedicine and telehealth efforts.

The Southwest Telehealth Resource Center is a subsidiary of the Arizona Telemedicine Program.

NOTES

Looking for tele-clinical services to meet your organization's needs?
We provide the details to help you find your perfect telehealth partner!

SERVICE PROVIDER DIRECTORY

Welcome to the Telemedicine & Telehealth Service Provider Directory, a service of the Arizona Telemedicine Program. The directory is a resource for hospital and healthcare administrators and other decision-makers who want to expand or improve their healthcare services to their patients, employees, clients, etc. The directory lists companies providing medical specialty services (such as radiology, rheumatology, neurology, psychiatry) and ancillary services (such as patient education and language interpretation) through telemedicine to healthcare providers such as hospitals, clinics, nursing homes, private practices and urgent care centers.

Service Providers: List your company here.

Search the Directory

Company Name (or part of)

Services In	Tele-services	Customers	Ancillary Services	Items per page
Alabama	Addiction	Accountable Care Organizations	Continuing education	20
Alaska	Allergy	Assisted living facilities	Continuing medical education	
Arizona	Audiology	Community mental health clinics	Distance education	
Arkansas	Autism	Correctional facilities	Health call center	Search listings
California	Bariatric medicine	Educational institutions	Language interpretation services	
Colorado	Burn	Employers	Patient education	
Connecticut	Cardiology	FQHCs	Patient engagement	Clear search
Delaware	Chronic disease management	Government agencies	Support groups	

NATIONAL | SEARCHABLE | FREE

http://telemedicine.arizona.edu/servicedirectory

The Telemedicine & Telehealth Service Provider Directory is a public service of the Arizona Telemedicine Program and the Southwest Telehealth Resource Center. This resource is made possible through funding provided by Health Resources and Services Administration, Office for the Advancement of Telehealth (G22RH30360).

The Telemedicine & Telehealth
Service Provider Directory is here for *you*.