PITFALLS OF INTERNATIONAL MEDICAL WORK:
LESSONS FROM CARDIOLOGY AND CARDIAC SURGERY

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OBJECTIVES

1. Career pathways to facilitate continued international volunteer medical work
2. Partnering with medical groups
3. Experience with cardiac initiatives in developing countries

No conflicts of interest relevant to this presentation

WHERE DO YOU WANT TO BE?

WHERE ARE THE PHYSICIANS?

LOCUM TENENS

- Staffing companies that provide temporary physician services to hospitals, clinics, and offices
- Physicians are independent contractors (1099 vs W2)
- Assignments can be for several days – recurring for many years
- Staffing company pays for medical malpractice insurance, travel, licensing, and hospital privileges which are then billed to the client
- Compensation varies and are negotiable

THE GIG ECONOMY
ADVANTAGES

▶ Set your own schedule
▶ Travel
▶ Time to pursue other interests
▶ Multiple systems of care
▶ Learn multiple EMR’s
▶ Explore a job/area
▶ Flexible financial compensation

DISADVANTAGES

▶ Continuity of patient care
▶ Temporary Physician
▶ “Business” owner
▶ Complex tax implications
▶ Lack ownership in a system of care

CAN YOU DO BOTH?
MEANINGFUL VOLUNTEERISM AND MAKING A LIVING

CONGENITAL HEART DISEASE

▶ Prevalence is 1/100 live births
▶ Over 90% of children born with heart defects do not have access to cardiac care
▶ The sick child with CHD drains scarce resources that could be used for the non-sick children

WORLDWIDE BURDEN OF CHD

How do we serve ourselves and the greater good?

Stan Kirkpatrick MD

“I wish I had the energy to serve more children now that people seem to think I know what I am doing.”

Lecture to pediatric cardiology fellows, Rady Children’s Hospital, July 2002 (After having been a physician since 1961)

Worldwide Society for Pediatric and Congenital Heart Surgery
The Challenge of Congenital Heart Disease: Anzilotti, Zuberbuhler, and Bernier, JTCVS, 2010
WHERE AM I MOST USEFUL?

WHERE ARE THE PHYSICIANS?

VOLUNTEERING WITH A MEDICAL CHARITY

1. Understand the ‘Mission Statement’
2. Religious vs Secular
3. Governmental vs Non-Governmental
4. Alignment of ideals and ideas
5. Financials
6. Long-term commitment to sustainable care
7. Avoid ‘medical tourism’
8. Within your area of specialty and expertise

WILLIAM NOVICK MD

- Pediatric Cardiothoracic Surgeon
- Professor of International Child Health at the University of Tennessee, Memphis
- In 1993, started a charity to provide pediatric cardiac surgical services in Memphis for children during the war in the former Yugoslavia
- Led to “on-site” training programs

NOVEMBER 2003

- **Me:** Hi Dr. Novick. I am a 2nd year pediatric cardiology fellow. I am interested in volunteering as a cardiologist for one of your missions. I have sent you my CV.
- **Dr. Novick:** Great! I saw your CV. I’ll need you to be my cardiologist for a trip to the Sudan coming up in February.
- **Me:** I would be happy to help. Who will be my attending?
- **Dr. Novick:** Ha! In a country of 40 million people, YOU have MORE formal pediatric cardiology training than anyone in the Sudan. So YOU are the attending. And by the way, don’t call this a mission. We are going to a very traditional Islamic country… words carry weight.
NOVICK CARDIAC ALLIANCE

- NGO committed to developing systems of pediatric cardiac care
- Partners with government and private entities to establish, develop, build, and sustain pediatric cardiac programs
- Collaborate, Educate, Innovate, Sustain

SCREENING PARTNERS

- Site visit by invitation
- Local buy in – allocation of personnel, administrative support, and data collection
- Commitment for a 5 year program to bring advanced cardiac training
- Identify personnel to train (nurses, physicians, ancillary)
- Identify equipment needs

UNDESERVED AREAS

DEVELOPING SYSTEMS

- Establishing need and capacity after a site visit (WHO population statistics, incidence of CHD, fertility rate)
- Coordinate NCA teams of up to 15 volunteer members drawn from dozens of countries from around the world (cardiac surgeon, anesthesia, perfusion, PICU, cardiologist, RN’s, RT, and bio-med engineer)
- Each team member pairs off with their local counterpart for one-on-one knowledge sharing

NOVICK CARDIAC ALLIANCE

- 20-25 Trips/year each lasting 2 weeks
- Each trip includes 10 days of procedures
- Average 20.7 children/trip
- Average 420 cases/yr in the OR 520 cases/yr in the Cath lab
- 9,000 operative cases and 5,000 Cath lab cases June 2018
- Programs in Ecuador, Honduras, Nicaragua, Dom Rep, Ukraine, Russia, Libya, Iraq, Iran, Morocco, Sudan, Egypt, Nigeria, Pakistan, India, China

MOTIVATION

Complex Medical Systems in Poor Countries... A conundrum
RIPPLE EFFECT
Complex Cardiac Care
(Surgery, Cardiology, Cath, Perfusion)
- Anesthesia
- Respiratory Care
- Intensive Care
- Radiology
- Nursing
Other Pediatric Care
- Anesthesia
- Respiratory Care
- Intensive Care
- Radiology
- Nursing

MEASURING IMPACT
• Data Reporting – Society of Thoracic Surgery
• Risk Stratification:
  STAT Category 1 – 0.3%
  STAT Category 2 – 1.4%
  STAT Category 3 – 8%
  STAT Category 4 – 12%
  STAT Category 5 – 28%

TOBRUK AND BENGHAZI, LIBYA 2012-2017
N= 720
(CAT 1,2,3 = 90%)
STAT CATEGORY 1 – 0.7% (0.3%)
STAT CATEGORY 2 – 4.3% (1.4%)
STAT CATEGORY 3 – 15.7% (8%)
STAT CATEGORY 4 – 22% (12%)
STAT CATEGORY 5 – 40% (28%)

PUBLICACION AND MEETINGS
• Mine data for presentation at national and international meetings
• Collaborate with partner physicians to publish innovative and cost-effective strategies for managing CHD
• Mentor US and Canadian residents and fellows to publish and to foster a life-long commitment to professional volunteerism
• Camaraderie with physicians around the world

USEFUL LESSONS LEARNED
• Natural history and late-presentation of CHD
• Volume of CHD
• Innovative and cost-effective treatment
• Less reliance on expensive testing

USEFUL LESSONS LEARNED
• Complex medical systems are similar the world over
• Systems around the world are all striving to provide complex and more expensive care to more patients as populations expand
• Challenges abroad can help with problem-solving at home
WORKING FROM HOME

- Fundraising
- Serving on the Board
- Recruiting volunteers
- Volunteer work as part of professional identity

THANK YOU