**BUDGET JUSTIFICATION**

**PREFACE**

This is a multicenter study that involves 10 organizations. The budget justification for the applicant organization, which is the University of Massachusetts Medical School, appears first, followed by the budgets for the primary subcontractor sites, defined as sites with key personnel, including the Massachusetts General Hospital, Butler Hospital, and the University of Colorado Medical School, Denver. The budgets for the other six data collection sites follow (secondary subcontractor). The table below lists the participating institution, the institution’s role, personnel, and the personnel roles.

|  |  |  |  |
| --- | --- | --- | --- |
| **Institution** | **Institution’s Role** | **Personnel** | **Role** |
| 1. UMass Medical School | Applicant organization,data collection site | Boudreaux, Edwin D, PhD | Co-PI |
| Boyer, Ed, MD, PhD | Co-I |
| Sambamoorthi, Usha, PhD | Co-I, economist |
| Clark, Robin, PhD | Co-I, economist |
| Feldman, Barry, PhD | Training Director |
| Manton, Anne, PhD | Consultant |
| Quinnett, Paul, PhD | Consultant |
| 2. Mass General Hospital | Primary subcontract | Camargo, Carlos Jr., MD, DrPH | Co-PI |
| Tsai, Chu-Lin, PhD | Co-I, statistician |
| 3. Butler Hospital | Primary subcontract | Miller, Ivan, PhDUebelacker, Lisa, PhD | Co-PICo-I |
| 4. Univ. of Colorado, Denver | Primary subcontract,data collection site | Allen, Michael, MDGinde, Adit, MD | Co-ISite-PI |
| 5. Beth Israel Deaconess Medical Center | Secondary subcontract,data collection site | Lipton, Robert, PhD | Site-PI |
| 6. Earl K. Long Medical Center | Secondary subcontract,data collection site | Perret, Nelson, MD | Site-PI |
| 7. Memorial Hospital of RI | Secondary subcontract,data collection site | Uebelacker, Lisa, PhDJagminas, Liudvikas, MD | Site-PISite-Co I |
| 8. Maricopa Medical Center | Secondary subcontract,data collection site | LoVecchio, Frank, DO | Site-PI |
| 9. University of Arkansas for Medical Sciences | Secondary subcontract,data collection site | Holmes, Talmadge, PhD | Site-PI |
| 10. University of Nebraska Medical Center | Secondary subcontract,data collection site | Muelleman, Robert L., MD | Site-PI |

**BUDGET JUSTIFICATION FOR UNIVERISITY OF MASSACHUSETTS MEDICAL SCHOOL**

**(APPLICANT ORGANIZATION)**

 The total direct costs are calculated by adding the direct costs for the University of Massachusetts Medical School (UMass) and the direct costs from the consortium arrangements. The total direct costs do not include the Facilities and Administration (F/A) for the subcontracts, as per NIH policy. The total direct costs and total costs for each year are below the caps required by the RFA ($2,000,000/$3,000,000).

**Personnel**

 For UMass, fringe rates are calculated at 27.58% for medical school employees and 25% for clinical employees. The F/A rate is set at 64% in Year 1, and 64.5% thereafter.

**----Please check the current rates for fringe benefits and F/A.**

 **Edwin D. Boudreaux, PhD,** is a Co-Principal Investigator (Co-PI) and the Contact Principal Investigator for the study (3.6 calendar months in Years 1 and 5; 3.0 calendar months in Years 2 through 4). He is a clinical health psychologist who has been working in emergency medicine for 15 years. He is Professor of Emergency Medicine and Director of the Division of Research for the Department of Emergency Medicine at UMass. He has been a Steering Committee member for the Emergency Medicine Network (EMNet) and is currently chair of the Psychiatric Emergency Research Collaboration (PERC), which has a core mission to advance emergency mental health research. Nearly all of his clinical and research experiences have been within general medical EDs (i.e., those without a dedicated psychiatric ED). He has extensive experience with the screening, assessment, and management of suicide in the ED. As summarized in his biosketch and the Preliminary Studies sections of the proposal, he has published several prospective screening studies that have examined mood disorders and suicidal ideation among ED patients and has co-authored a paper with other EMNet investigators that examined epidemiological trends in ED visits for intentional self-harm using the National Hospital Ambulatory Medical Care Survey (NHAMCS). In addition to experience with mental health and suicide in the ED, he has considerable training and experience in screening, brief intervention, and referral to treatment (SBIRT) methodologies [e.g., R03 AA015129, R42 DA021455, K23 DA16698, R03 AA015129]. Finally, Dr. Boudreaux has published review articles and numerous original studies pertaining to continuous quality improvement methods and a range of ED patient outcomes, including pain management, tobacco quit-center referrals, and patient satisfaction. All of these experiences are relevant to the proposed studies. Dr. Boudreaux’s research on mental health issues in the ED setting led to his participation in the NIH’s Roundtable on Advancing Research on Neurological and Psychiatric Emergencies in December, 2008.

 As Co-PI, he will share responsibilities with Drs. Miller and Camargo for overseeing the execution of the two studies and ensuring that all milestones are achieved on time. Together, they will (a) set the agenda for all Steering Committee meetings; (b) finalize the research protocols, including the assessment instruments, enrollment and outcomes assessment schedules, study protocols, Manual of Procedures, and Intervention Manuals; (c) oversee the implementation of the study protocols, research personnel training, and data collection at all ten sites; (d) assist Drs. Tsai (statistician), Sambamoorthi (economist), and Clark (electronic database systems expert) with data analyses and interpretation; (e) coordinate scientific presentation and manuscript preparation efforts; (f) communicate with the collaborative NIH representative; and (g) complete all reporting requirements for NIH. Dr. Boudreaux’s effort is higher in Years 1 and 5 reflecting the greater effort needed to begin the study (Year 1) and to complete the data analyses and manuscript preparation (Year 5).

 **Edward Boyer, MD, PhD** is a Co-Investigator (0.6 calendar months in Years 1 and 5; 0.24 calendar months in Years 2 through 4). Dr. Boyer is an attending physician at University of Massachusetts-Memorial Medical Center where he is the Chief of the Division of Medical Toxicology and the Director of the Medical Toxicology Fellowship Training Pogram. Dr. Boyer is an Assistant Professor in Pediatrics at Children’s Hospital and a Lecturer in Pediatrics at Harvard Medical School and Staff Toxicologist to the Massachusetts Poison Control System. He is able to provide depth in the area of substance abuse, toxicology, and how they relate to suicidal behavior. He is the site-PI at the only recruitment site for a NIDA grant funded under an R01 mechanism entitled, Risk Factors For Severe Opioid-Related Overdose (ORO) [Wines R01 DA020030]. This investigation focuses on the assessment of suicidality of individuals presenting to the ED with the chief complaint of drug overdose. In addition, Dr. Boyer is the PI of a NIDA-funded R21 that recruited over 900 substance-abusing ED patients, many of whom had psychiatric comorbidities, including suicidal ideation. Finally, he can lend considerable expertise to the identification, recruitment, and study of patients in the difficult ED environment.

 **Usha Sambamoorthi, PhD** is a Co-Investigator (2.4 calendar months in Year 1; 0.6 calendar months in Years 2 through 4; 3.6 calendar months in Year 5). Dr. Sambamoorthi has 25 years of experience in health services research and is nationally known both as content and methods expert in health services research. Her primary appointment is in the Department of Psychiatry, UMASS Medical School. She holds secondary affiliations with VA HSR&D centers, School of Public Health, UMDNJ, Morehouse School of Medicine, Atlanta. She has doctoral level training in economics and has been principal, co-principal, and co-investigator on many NIH, AHRQ and VHA funded projects. Dr. Sambamoorthi is currently working on cost-effectiveness of depression treatment, longitudinal healthcare expenditures among veterans with diabetes, the interaction between physical and mental illness care, treatment of individuals with co-occurring medical, mental and/or substance use. Her research has demonstrated that the secondary data analyses with insurance claims (Medicaid, Medicare, VHA administrative data) are well suited to answer many of the urgent policy and service delivery questions.

 In many analyses of health services use, a critical issue has been the development and implementation of appropriate analytic models. Therefore, she has also been involved in developing techniques to deal with a variety of statistical modeling problems in analyzing utilization and other outcomes over time. She has authored and co-authored a number of published articles using statistically sophisticated techniques to advance methodology in health services research, such as the application of survival models, hierarchical linear models, selection models, nested logit models, and robust regression techniques for longitudinal data.

 Dr. Sambamoorthi is well aware of the limitations of claims data and uses multiple data sources to triangulate answers to research questions and to drive policy. Therefore, some of her current research also involves use of publicly available data sources such as the Behavioral Risk Factor Surveillance Survey, Medical Expenditure Panel Survey, National Ambulatory Medical Care Survey, and National Health Interview Survey. Dr. Sambamoorthi will provide (a) content expertise in the field of healthcare services research and health economics; (b) advise on outcome assessment using electronic administrative databases; and (c) data analysis for the comparative health evaluation.

 **Robin Clark, PhD** is a Co-Investigator (0.6 calendar months in Years 1 and 5; 0.24 calendar months in Years 2 through 4). He is Senior Director of Research at the Center for Health Policy and Research at UMass and Associate Professor of Family Medicine and Community Health. He is a healthcare services researcher and health economist. He has conducted numerous cost-effectiveness analyses of healthcare interventions and has taught graduate courses in economic evaluation for 15 years. Dr. Clark is highly experienced in analysis of large electronic databases, including medical insurance claims and healthcare systems administrative and billing data. He will work with Dr. Sambamoorthi to help design, implement, and analyze the data that are derived from the electronic databases, including aims related to studying morbidity, mortality, medical utilization, and economics.

 **Barry Feldman, PhD** is Director of Training (2.4 calendar months in Years 1 through 3; 0.6 calendar months in Years 4 and 5). Barry is Director of Psychiatry Services in Public Safety for UMass Memorial Healthcare and Assistant Professor of Psychiatry at the UMass Medical School. He provides senior leadership to the UMass Memorial Medical Group and the Medical School to address strategic planning and the management of clinical services provided to individuals working in public safety (i.e., police, corrections, fire, EMS), and emergency medicine personnel. Dr. Feldman is an experienced educator in suicide prevention, who regularly provides related training to the UMass Psychiatry Department’s clinical staff. In addition, he provides suicide assessment and intervention trainings for mental health clinicians, physicians, nurses, and substance abuse counselors for the Massachusetts Department of Public Health, the New York State Office of Mental Health, and the State of Connecticut. Dr. Feldman also conducts workshops and in-service trainings for law enforcement, emergency responders, healthcare providers, and educators on the topic of suicide. He is a nationally recognized educator and trainer in police suicide prevention and a content expert for the Massachusetts Chiefs of Police Association for a wide range of programs to enhance psychological services to law enforcement personnel at all levels. Dr. Feldman is a licensed clinician with expertise in suicide prevention, trauma recovery, substance abuse, and crisis intervention and stabilization services, primarily for emergency responders and their families. He is an approved trainer for the American Association of Suicidology, the Suicide Prevention Resource Center and is a certified trainer for the International Critical Incident Stress Foundation (ICISF). Dr. Feldman has served on the Stewardship Committee of the Massachusetts Coalition for Suicide Prevention for the past several years and currently serves as the Coalition Co-Chair.

 Dr. Feldman will service as the Training Director for the EDSSIT. Together with Dr. Quinnett (Consultant), he will help to tailor the QPR trainings to reflect the clinical protocols proposed by the study. He will be active in training the site trainers and in coordinating the training of each site’s clinical staff.

 A **TBN UMass Project Manger** (6.0 calendar months in Years 1 through 4; 3.0 calendar months in Year 5) will work closely with Ashley Sullivan, MPH, the EMNet Project Manager at Massachusetts General Hospital. The two Project Managers will have weekly and as needed telephone meetings. The EMNet Project Manager (Ms. Sullivan) will be the primary person responsible for the day-to-day activities related to data collection at the ten sites (i.e., prospective enrollment, chart reviews, administrative database follow-up). The UMass Project Manager will be the primary person responsible for the day-do-day activities related to the 1, 3, 6, 9, and 12 month outcome follow-up telephone calls, which will be centralized at the UMass Division of Mental Health Services’ call center. The UMass Project manager will work closely with the call center supervisor to accomplish this. In addition to these overall project management responsibilities, the UMass Project Coordinator will supervise all research assistants collecting data in the UMass ED. Effort is higher in Years 1 through 4 reflecting the greater effort needed to manage active data collection during those years.

 **TBN research assistants** (12 calendar months in Years 1 and 5; 24 calendar months in Years 2 through 4) will be responsible for (a) collecting data during the active enrollment for the UMass site; (b) carrying out the quality assurance and data safety and monitoring plans for the UMass site; (c) implementing attrition-reduction efforts, including validating contact information using a variety of sources; (d) conducting the require chart abstractions; (e) carrying out the administrative database and state vital statistics registry reviews for the UMass site; and (f) assisting the call center staff with managing the outcomes calls for the 10 sites, including interfacing with the individual sites to collect additional contact information and reconcile missing information when needed. The expanded effort in Years 2 through 4 reflects the heavier burden of participant enrollment and other data collection tasks in those years.

 A **TBN call center supervisor** (1.2 calendar months in Years 1 and 5; 2.4 calendar months in Year 2; 3.6 calendar months in Years 3 and 4) will be responsible for ensuring the 1, 3, 6, 9, and 12 month follow-up calls are completed on time and the quality assurance procedures are implemented properly. This will include monitoring a random selection of 10% of the calls and implementing performance improvement protocols for deficient callers. The call center supervisor’s effort is greatest in Years 3 and 4 due to the peak in call volume. He or she will act as back-up during peak call periods.

 **Call center technicians** (12 calendar months in Years 1 and 5; 24 calendar months in Year 2; and 36 calendar months in Year 3 and 4) will be responsible for making the 1, 3, 6, 9, and 12 month follow-up calls. To the degree possible, they will be blinded to the baseline assessment, study hypotheses, and phase of the study. They will use a Computer Assisted Telephone Interview (CATI) system (Sawtooth, Inc.). They will retrieve the contact information from the study’s centralized web portal, place a minimum of 5 calls spaced over 3 days at 3 different time periods, and complete the follow-up assessments. They will document the outcome of each call and will liaison with the UMass research assistants to reconcile wrong numbers or missing information. In order to accurately staff the project, we have estimated the call volume based on anticipated enrollment using a spreadsheet that is attached to the end of the UMass budget justification (**see Table One**).

 **Clinician on call** (1.2 calendar months in Years 1 and 5; 2.4 calendar months in Years 2 through 4). A clinician must be on call when outcomes calls are being made in order to manage active suicidal ideation according to the Human Participants Protection Plan. These clinicians will be licensed mental health professionals affiliated with the UMass Department of Psychiatry who have been trained on the protocols and will have access to the necessary information from each site, including local telephone numbers for the police department and locations of EDs in the region.

**Consultants**

 **Anne Manton, PhD,** is a Consultant (30 days in Year 1; 20 days in Years 2 through 5 @ $150.00/hour). She has a doctorate degree in nursing and will be a member of the Steering Committee. She is eminently qualified to help guide this project from the nursing perspective. Dr. Manton has been involved with emergency nursing and emergency care for more than three decades. During that time, she has fulfilled a variety of roles in the emergency setting, including clinical nurse, educator, and manager. She has served in a number of leadership roles in the **Emergency Nurses Association (ENA)** at the local, state, and national levels, including **national president**. With other members of ENA’s Research Committee, Dr. Manton designed, implemented, and analyzed ENA’s first two multi-site research studies. As a consequence of her work in the ED, Dr. Manton became increasingly interested in the care of psychiatric patients, and undertook graduate studies to become a Board Certified Psychiatric-Mental Health Nurse Practitioner. She currently practices in that role at an urgent care psychiatric walk-in clinic. She will (a) provide content expertise in the domain of emergency nursing, (b) attend all Steering Committee meetings; and (c) assist with developing an approach to implementation that is consistent with general ED procedures.

 **Paul Quinnett, PhD,** is a Consultant (10 days in Years 1 through 5 @ $150.00/hour). He is a clinical psychologist and has been studying suicide for 30 years. He is the President and CEO of the QPR Institute, an educational organization dedicated to patient safety and preventing suicide using a public health approach. Author of seven books and an award-winning journalist, he is also Clinical Assistant Professor for the University of Washington Department of Psychiatry. Together with his colleagues, he has developed and tested a public health awareness and basic intervention program that teaches ordinary citizens and non-mental healthcare professionals how to recognize suicide warning signs and how to Question, Persuade and Refer (QPR) those identified to be at elevated risk for suicide. Using a train-the-trainer model, more than 250,000 American adults have been trained in QPR. The staff and faculty of the QPR Institute have researched and tested their techniques. It has been registered as a best practice with the federally-funded Suicide Prevention Resource Center. The QPR Institute will be responsible for training 2 trainers at each site (site trainers), who will then provide training to all nursing staff at their respective site. Dr. Quinnett will serve as a consultant on the proposed study, lending insight into the science and training of suicide screening, assessment, and management.

**Equipment**

None.

**Supplies**

 We are requesting funds in year 1 for ten mobile computers (Tablet PCs or laptop computers on wheels, depending on the site’s preferences) with wireless internet cards (10 X $3,500 = $35,000) for bedside data collection in the ED.

 We are requesting general office supplies for printing, postage paid envelopes, reminder cards, posters, and miscellaneous supplies. Year 1: $5,000; Year 2: $1,000 with a 3% cost of living adjustment in Years 3-4; Year 5: $800.00 for presentation printing costs + 1093 misc. supplies = $1,893.00.

**Travel**

Year 1

Steering Committee: Travel costs budgeted at the following rates for 8 individual for 2 meetings:

 -Hotel: $200/night (1 individual) = $400

 -Airfare: $350/person (1 individual) = $700.

 -Ground travel and incidentals: $150 (8 individuals) = $2400

 Total = $3,500

Site investigator’s meeting: 1 in person meeting, 20 individuals, 2 nights hotel, airfare, incidentals: $900/person X 1 meeting X 20 individuals = $18,000

Co-PI meetings: 4 in person meetings at UMass, 2 people who need to travel (CAC, VM), incidentals and mileage costs: $100/person X 4 meetings X 2 = $800

Year 2 (See year 1 for cost breakdown of hotel, airfare, and incidentals)

Travel costs are budgeted at the following rates for 8 individual for 1 meeting:

 -Hotel: $200/night (1 individual) = $200

 -Airfare: $350/person (1 individual) = $350.

 -Ground travel and incidentals: $150 (8 individuals) = $1200

 Total = $1,750

Co-PI meetings: 4 in person meetings at UMass, 2 people who need to travel (CAC, VM): $824 (3% cost of living adjustment)

Year 3 (See year 1 for cost breakdown of hotel, airfare, and incidentals)

Steering Committee: Costs reflect a 3% cost of living adjustment after Year 2: $1,803

Train-the-trainer: 1 in person meeting, 12 total individuals, (2 each from 4 sites, 2 project managers, 2 trainers) 2 nights hotel, airfare, incidentals: $900/person X 1 meeting X 12 individuals = $10,800

Co-PI meetings: 4 in person meetings at UMass, 2 people who need to travel (CAC, VM): $849 (3% cost of living adjustment)

Scientific meetings: 3 Co-PIs, 1 meeting, 3 nights hotel, airfare, incidentals X 2: $1,250/person X 3 = $3,750

Year 4 (See year 1 for cost breakdown of hotel, airfare, and incidentals)

Steering Committee: Costs reflect a 3% cost of living adjustment after Year 2: $1,857

Train-the-trainer: 1 in person meeting, 12 total individuals, (2 each from 4 sites, 2 project managers, 2 trainers) 2 nights hotel, airfare, incidentals: $900/person X 1 meeting X 12 individuals = $10,800

Co-PI meetings: 4 in person meetings at UMass, 2 people who need to travel (CAC, VM): $874 (3% cost of living adjustment)

Year 5 (See year 1 for cost breakdown of hotel, airfare, and incidentals)

Steering Committee: Costs reflect a 3% cost of living adjustment after Year 2: $1,912

Co-PI meetings: 4 in person meetings at UMass, 2 people who need to travel (CAC, VM): $900 (3% cost of living adjustment)

Scientific meetings: 3 Co-PIs, 1 meeting, 3 nights hotel, airfare, incidentals: $1,250/person X 3 = $3,863 (3% cost of living adjustment)

**Other**

Year 1

Automation of data collection tools: $90,908

UMass Meeting costs: meeting room, AV equipment, refreshments for 2 Steering Committee meetings, 1 site investigator meeting, 4 Co-PI meetings: $228.50/meeting X 7 = $1,600

Conference call line: 6 cents/minute, 30 hours X 60 minutes X 0.06 = $108/year

Computer Assisted Telephone Interview License (Sawtooth, Inc): Annual base $2,120 X 4 months = $530

Year 2

Automation of data collection tools: $24,275

UMass Meeting costs: meeting room, AV equipment, refreshments for meetings: $200

Conference call line: $111/year

Computer Assisted Telephone Interview License (Sawtooth, Inc): Annual base $2,120 X 12 months, 4 lines = $2120

Participant remuneration (3 calls @ $30, 2 calls @$40): $170 X 59 participants = $10,030

Food (2 trainings at $50) and incentive for nurse trainings ($50 each, 25 nurses): $100 + $1,250 = $1,350

Year 3

Train-the-Trainer QPR workshop registration: (4 sites, 2 each, + 2 project staff/trainers), 10 individuals X $500.00 = $5000

Automation of data collection tools: $25,244

UMass Meeting costs: meeting room, AV equipment, refreshments for meetings: $206

Conference call line: $115/year

Computer Assisted Telephone Interview License (Sawtooth, Inc): Annual base $2,184 X 12 months, 4 lines = $2184

Participant remuneration (3 calls @ $30, 2 calls @$40): $170 X 59 participants = $10,030

Food (2 trainings at $50) and incentive for nurse trainings ($50 each, 25 nurses): $100 + $1,250 = $1,350

Year 4

Train-the-Trainer QPR workshop registration: (4 sites, 2 each, + 2 project staff/trainers), 10 individuals X $500.00 = $5000

Automation of data collection tools: $27,033

UMass Meeting costs: meeting room, AV equipment, refreshments for meetings: $212

Conference call line: $118year

Computer Assisted Telephone Interview License (Sawtooth, Inc): Annual base $2,249 X 12 months, 4 lines = $2,249

Year 5

Automation of data collection tools: $27,301

UMass Meeting costs: meeting room, AV equipment, refreshments for meetings = $219

Conference call line: $122/year

Computer Assisted Telephone Interview License (Sawtooth, Inc): Annual base $2,317 X 12 months, 4 lines = $2,317

Participant remuneration (3 calls @ $30, 2 calls @$40): $170 X 59 participants = $10,030

**Consortium**

Consortium arrangement will be made with the following institutions

 1. Massachusetts General Hospital, Boston MA – EMNet Coordinating Center

 2. Butler Hospital, Providence RI

 3. University of Colorado Denver, Aurora CO

 4. Beth Israel Deaconess Medical Center, Boston MA

 5. Earl K. Long Medical Center, Baton Rouge, LA

 6. Maricopa Medical Center, Phoenix AZ

 7. Memorial Hospital of Rhode Island, Pawtucket RI

 8. University of Arkansas for Medical Sciences, Little Rock AR

 9. University of Nebraska Medical Center, Omaha NE

**STATEMENT OF WORK**

**Edwin Boudreaux, PhD,** will commit 3.6 calendar months in Years 1 and 5; 3.0 calendar months in Years 2 through 4. As Co-PI, he will share responsibilities with Drs. Miller and Camargo for overseeing the execution of the two studies and ensuring that all milestones are achieved on time. Together, they will:

 (a) set the agenda for all Steering Committee meetings

 (b) finalize the research protocols, including the assessment instruments, enrollment and outcomes assessment schedules, study protocols, Manual of Procedures, and Intervention Manuals

 (c) oversee the implementation of the study protocols, research personnel training, and data collection at all ten sites

 (d) assist Drs. Tsai (statistician), Sambamoorthi (economist), and Clark (electronic database systems expert) with data analyses and interpretation

 (e) coordinate scientific presentation and manuscript preparation efforts

 (f) communicate with the collaborative NIH representative; and

 (g) complete all reporting requirements for NIH.

**Edward Boyer, MD, PhD** is a Co-Investigator (0.6 calendar months in Years 1 and 5; 0.24 calendar months in Years 2 through 4. He will provide:

 (a) content expertise in the identification, recruitment, and study of patients in the difficult ED environment;

 (b) content expertise in substance abuse, toxicology, and self-poisoning; and

 (c) assist with scientific presentation and manuscript preparation efforts.

**Usha Sambamoorthi, PhD** is a Co-Investigator (2.4 calendar months in Year 1; 0.6 calendar months in Years 2 through 4; 3.6 calendar months in Year 5). She will provide:

 (a) content expertise in the field of healthcare services research and health economics;

 (b) advise on outcome assessment using electronic administrative databases;

 (c) data analysis for the comparative health evaluation; and

 (d) assist with scientific presentation and manuscript preparation efforts.

 **Robin Clark, PhD** is a Co-Investigator (0.6 calendar months in Years 1 and 5; 0.24 calendar months in Years 2 through 4). He will work with Dr. Sambamoorthi to:

 (a) help design, implement, and analyze the data that are derived from the electronic databases, including aims related to studying morbidity, mortality, medical utilization, and economics; and

 (b) assist with scientific presentation and manuscript preparation efforts.

 **Barry Feldman, PhD** is Director of Training (2.4 calendar months in Years 1 through 3; 0.6 calendar months in Years 4 and 5). He will:

 (a) help to design the training programs;

 (b) train the site trainers; and

 (c) assist with each site’s training plan for clinical nurses and physicians.

 **Anne Manton, PhD,** is a Consultant and Steering Committee member (30 days in Year 1; 20 days in Years 2 through 5 @ $150.00/hour). She will:

 (a) provide content expertise in the domain of emergency nursing;

 (b) attend all Steering Committee meetings;

 (c) assist with developing an approach to implementation that is consistent with general ED procedures; and,

 (c) assist with scientific presentation and manuscript preparation efforts.

 **Paul Quinnett, PhD,** is a Consultant (10 days in Years 1 through 5 @ $150.00/hour). Dr. Quinnett will:

 (a) serve as a content expert in the science and training of suicide screening, assessment, and management; and

 (b) liaison with Dr. Feldman and the rest of the project team to tailor the QPR protocols for the ED setting and for the specifics of the study.