Rese	arch Su	baward Agree	ement		
	Ame	endment			
Pass-through Entity (PTE)			Subrecipi	ent	
PTE		Subrecipient	4540		
The University of North Carolina at Chapel Hill Address	Wake County Dep Address	partment of EMS			
104 Airport Drive, Suite 2200, CB #1	331 S. McDo	well Street			
City, State, Zip+4 (Country): hapel Hill, NC 27599-1350		City, State, Zip+4	4 (Country):		
PTE Principal Investigator (PI): Seth Glickman			ncipal Investigator (P	rl):	
PTE Federal Award No: 5R34MH107588-02	FAIN: R34MH10			deral Awarding Agency:	
Project Title: Novel Use of Mobile Integrated Emergencies				mes of Mental Health	
Subaward Period of Performance:	Amount	Funded	Amendment No:	Subaward No:	
Start Date: Aug 1, 2016 End Date: Jul 31, 2017		on: \$ 28,750.00		5102316	
Effective Date of Amendment:		unt of Federal		Subject to FFATA	
Jul 19, 2016	Funds Obli	gated to date: \$ 56	,883.00	Yes or No	
1.) Period of Performance: To extend the page 2.) Compensation: To provide incremental is not to exceed \$56,883. Carryover from the Subrecipient agrees to the addition of the Irac conditions included with this Amendment as Atta	funding in one budget n Divestmer	the amount of \$28 period to another i	,750. The total am is allowed.		
The following documents are incorporated into the Attachment A: Iran Divestment Act Certification Attachment B: Prime Award Attachment C: Scope of Work and Budget Attachment D: Subrecipient Commitment Form Administrative Contact Information: Contact Name: Deborah Sparrow The University of North Carolina at Chapel Hill		Agreement Amendr	ment as noted:		
Office of Sponsored esearch 104 Airport Drive, Suite 2200, CB 1350 Chapel Hill NC 27599-1350 Email: resadminosr@unc.edu Phone: (919) 966-3411					
All other terms and conditions	of this Su	baward Agreeme	nt remain in full	force and effect.	
By an Authorized Official of Pass-through E	Entity:	By an Auth	orized Official of S	Subrecipient:	
Name Terry Magnuson Title Vice Chancellor for Research	Date	Name:		Date	

Attachment A

UNC-Specific Special Terms and Conditions - Iran Divestment Act Certification

The Iran Divestment Act (S.L. 2015-118; SB455) ("the Act") prohibits state agencies and local governments from entering into contracts with an entity that has been identified by the North Carolina State Treasurer as being engaged in certain investment activities in the Iranian energy sector. Various resources are available on the North Carolina Department State Treasure website related to the Iran Divestment Act (https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx0. By signing this Amendment, the signatory hereby certifies that 1) as of the date of Authorized Official signature, the Subrecipient is not listed on the Final Divestment List created by the State Treasurer pursuant to N.C.G.S. 147-86.58, and 2) the signatory is duly authorized on behalf of the Subrecipient to make the foregoing statement.

Notice of Award



CLINICAL TRIAL PLANNING GRANT
Department of Health and Human Services
National Institutes of Health

Federal Award Date: 07/19/2016



NATIONAL INSTITUTE OF MENTAL HEALTH

Grant Number: 5R34MH107588-02 **FAIN:** R34MH107588

Principal Investigator(s): Seth Glickman, MD

Project Title: Novel Use of Mobile Integrated Emergency Medical Services to Improve Outcomes of Mental Health Emergencies

ANDREW STEVEN JOHNS UNIV OF NORTH CAROLINA CHAPEL HILL 104 Airport Road, Suite 2200 CB# 1350 Chapel Hill, NC 275991350

Award e-mailed to: resadminosr@unc.edu

Period Of Performance:

Budget Period: 08/01/2016 – 07/31/2017 **Project Period**: 09/01/2015 – 07/31/2017

Dear Business Official:

The National Institutes of Health hereby awards a grant in the amount of \$327,050 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to UNIV OF NORTH CAROLINA CHAPEL HILL in support of the above referenced project. This award is pursuant to the authority of 42 USC 241 42 CFR 52 and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Acceptance of this award including the "Terms and Conditions" is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

Each publication, press release, or other document about research supported by an NIH award must include an acknowledgment of NIH award support and a disclaimer such as "Research reported in this publication was supported by the National Institute Of Mental Health of the National Institutes of Health under Award Number R34MH107588. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health." Prior to issuing a press release concerning the outcome of this research, please notify the NIH awarding IC in advance to allow for coordination.

Award recipients must promote objectivity in research by establishing standards that provide a reasonable expectation that the design, conduct and reporting of research funded under NIH awards will be free from bias resulting from an Investigator's Financial Conflict of Interest (FCOI), in accordance with the 2011 revised regulation at 42 CFR Part 50 Subpart F. The Institution shall submit all FCOI reports to the NIH through the eRA Commons FCOI Module. The regulation does not apply to Phase I Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) awards. Consult the NIH website http://grants.nih.gov/grants/policy/coi/ for a link to the regulation and additional important information.

If you have any questions about this award, please contact the individual(s) referenced in Section

Sincerely yours,

IV.

Jane Z. Lin Grants Management Officer NATIONAL INSTITUTE OF MENTAL HEALTH

Additional information follows

SECTION I - AWARD DATA - 5R34MH107588-02

Award Calculation (U.S. Dollars)

Federal Direct Costs	\$225,000
Federal F&A Costs	\$102,050
Approved Budget	\$327,050
Total Amount of Federal Funds Obligated (Federal Share)	\$327,050
TOTAL FEDERAL AWARD AMOUNT	\$327,050
AMOUNT OF THIS ACTION (FEDERAL SHARE)	\$327.050

SUMMARY TOTALS FOR ALL YEARS					
YR THIS AWARD CUMULATIVE TOTALS					
2	\$327,050	\$327,050			

Fiscal Information:

CFDA Name: Mental Health Research Grants

CFDA Number: 93.242

EIN: 1566001393A1

Document Number: RMH107588A

PMS Account Type: P (Subaccount)

Fiscal Year: 2016

IC	CAN	2016		
MH	8022567	\$327,050		

NIH Administrative Data:

PCC: 82-SEPC / OC: 414E / Released: LINJZ 07/19/2016

Award Processed: 07/19/2016 07:02:12 PM

SECTION II - PAYMENT/HOTLINE INFORMATION - 5R34MH107588-02

For payment and HHS Office of Inspector General Hotline information, see the NIH Home Page at http://grants.nih.gov/grants/policy/awardconditions.htm

SECTION III - TERMS AND CONDITIONS - 5R34MH107588-02

This award is based on the application submitted to, and as approved by, NIH on the above-titled project and is subject to the terms and conditions incorporated either directly or by reference in the following:

- a. The grant program legislation and program regulation cited in this Notice of Award.
- b. Conditions on activities and expenditure of funds in other statutory requirements, such as those included in appropriations acts.
- c. 45 CFR Part 75.
- d. National Policy Requirements and all other requirements described in the NIH Grants Policy Statement, including addenda in effect as of the beginning date of the budget period.
- e. Federal Award Performance Goals: As required by the periodic report in the RPPR or in the final progress report when applicable.
- f. This award notice, INCLUDING THE TERMS AND CONDITIONS CITED BELOW.

(See NIH Home Page at http://grants.nih.gov/grants/policy/awardconditions.htm for certain references cited above.)

Research and Development (R&D): All awards issued by the National Institutes of Health (NIH) meet the definition of "Research and Development" at 45 CFR Part§ 75.2. As such, auditees should identify NIH awards as part of the R&D cluster on the Schedule of Expenditures of Federal

Awards (SEFA). The auditor should test NIH awards for compliance as instructed in Part V, Clusters of Programs. NIH recognizes that some awards may have another classification for purposes of indirect costs. The auditor is not required to report the disconnect (i.e., the award is classified as R&D for Federal Audit Requirement purposes but non-research for indirect cost rate purposes), unless the auditee is charging indirect costs at a rate other than the rate(s) specified in the award document(s).

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

An unobligated balance may be carried over into the next budget period without Grants Management Officer prior approval.

This grant is subject to Streamlined Noncompeting Award Procedures (SNAP).

This award is subject to the requirements of 2 CFR Part 25 for institutions to receive a Dun & Bradstreet Universal Numbering System (DUNS) number and maintain an active registration in the System for Award Management (SAM). Should a consortium/subaward be issued under this award, a DUNS requirement must be included. See http://grants.nih.gov/grants/policy/awardconditions.htm for the full NIH award term implementing this requirement and other additional information.

This award has been assigned the Federal Award Identification Number (FAIN) R34MH107588. Recipients must document the assigned FAIN on each consortium/subaward issued under this award.

Based on the project period start date of this project, this award is likely subject to the Transparency Act subaward and executive compensation reporting requirement of 2 CFR Part 170. There are conditions that may exclude this award; see http://grants.nih.gov/grants/policy/awardconditions.htm for additional award applicability information.

In accordance with P.L. 110-161, compliance with the NIH Public Access Policy is now mandatory. For more information, see NOT-OD-08-033 and the Public Access website: http://publicaccess.nih.gov/.

This award represents the final year of the competitive segment for this grant. See the NIH Grants Policy Statement Section 8.6 Closeout for complete closeout requirements at: http://grants.nih.gov/grants/policy/policy.htm#gps.

A final expenditure Federal Financial Report (FFR) (SF 425) must be submitted through the eRA Commons (Commons) within 120 days of the expiration date; see the NIH Grants Policy Statement Section 8.6.1 Financial Reports, http://grants.nih.gov/grants/policy/policy.htm#gps, for additional information on this submission requirement. The final FFR must indicate the exact balance of unobligated funds and may not reflect any unliquidated obligations. There must be no discrepancies between the final FFR expenditure data and the Payment Management System's (PMS) quarterly cash transaction data. A final quarterly federal cash transaction report is not required for awards in PMS B subaccounts (i.e., awards to foreign entities and to Federal agencies). NIH will close the awards using the last recorded cash drawdown level in PMS for awards that do not require a final FFR on expenditures or quarterly federal cash transaction reporting. It is important to note that for financial closeout, if a grantee fails to submit a required final expenditure FFR, NIH will close the grant using the last recorded cash drawdown level. If the grantee submits a final expenditure FFR but does not reconcile any discrepancies between expenditures reported on the final expenditure FFR and the last cash report to PMS, NIH will close the award at the lower amount. This could be considered a debt or result in disallowed costs.

A Final Invention Statement and Certification form (HHS 568), (not applicable to training, construction, conference or cancer education grants) must be submitted within 120 days of the

expiration date. The HHS 568 form may be downloaded at: http://grants.nih.gov/grants/forms.htm. This paragraph does not apply to Training grants, Fellowships, and certain other programs—i.e., activity codes C06, R13, R25, S10.

Unless an application for competitive renewal is submitted, a final progress report must also be submitted within 120 days of the expiration date. Instructions for preparing a Final Progress Report are at: http://grants.nih.gov/grants/funding/finalprogressreport.pdf. Any other specific requirements set forth in the terms and conditions of the award must also be addressed in the final progress report. Institute/Centers may accept the progress report contained in competitive renewal (type 2) in lieu of a separate final progress report. Contact the awarding IC for IC-specific policy regarding acceptance of a progress report contained in a competitive renewal application in lieu of a separate final progress report.

NIH strongly encourages electronic submission of the final progress report and the final invention statement through the Closeout feature in the Commons, but will accept an email or hard copy submission as indicated below.

Email: The final progress report and final invention statement may be e-mailed as PDF attachments to: NIHCloseoutCenter@mail.nih.gov.

Hard copy: Paper submissions of the final progress report and the final invention statement may be faxed to the NIH Division of Central Grants Processing, Grants Closeout Center, at 301-480-2304, or mailed to:

National Institutes of Health
Office of Extramural Research
Division of Central Grants Processing
Grants Closeout Center
6705 Rockledge Drive
Suite 5016, MSC 7986
Bethesda, MD 20892-7986 (for regular or U.S. Postal Service Express mail)
Bethesda, MD 20817 (for other courier/express deliveries only)

NOTE: If this is the final year of a competitive segment due to the transfer of the grant to another institution, then a Final Progress Report is not required. However, a final expenditure FFR is required and should be submitted electronically as noted above. If not already submitted, the Final Invention Statement is required and should be sent directly to the assigned Grants Management Specialist.

In accordance with the regulatory requirements provided at 45 CFR 75.113 and Appendix XII to 45 CFR Part 75, recipients that have currently active Federal grants, cooperative agreements, and procurement contracts with cumulative total value greater than \$10,000,000 must report and maintain information in the System for Award Management (SAM) about civil, criminal, and administrative proceedings in connection with the award or performance of a Federal award that reached final disposition within the most recent five-year period. The recipient must also make semiannual disclosures regarding such proceedings. Proceedings information will be made publicly available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)). Full reporting requirements and procedures are found in Appendix XII to 45 CFR Part 75. This term does not apply to NIH fellowships.

Treatment of Program Income:

Additional Costs

SECTION IV - MH Special Terms and Conditions - 5R34MH107588-02

AWARD NOTICE:

This award has been made in response to the application submitted under the Funding Opportunity Announcement RFA MH-15-330, which can be referenced at: http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-15-330.html.

CONSORTIUM/CONTRACTUAL COSTS:

This award includes funds for consortium activity with Community Care of North Carolina. Each consortium is to be established and administered in accordance with the NIH Grants Policy Statement dated March 31, 2015. No foreign performance site may be added to this project without the written prior approval of the National Institute of Mental Health.

STAFF CONTACTS

The Grants Management Specialist is responsible for the negotiation, award and administration of this project and for interpretation of Grants Administration policies and provisions. The Program Official is responsible for the scientific, programmatic and technical aspects of this project. These individuals work together in overall project administration. Prior approval requests (signed by an Authorized Organizational Representative) should be submitted in writing to the Grants Management Specialist. Requests may be made via e-mail.

Grants Management Specialist: Jane Z. Lin

Email: linja@mail.nih.gov Phone: 301-443-2229 Fax: 301-480-1956

Program Official: Susan Azrin

Email: azrinst@mail.nih.gov Phone: 301-443-3267 Fax: 301-443-4045

SPREADSHEET SUMMARY

GRANT NUMBER: 5R34MH107588-02

INSTITUTION: UNIV OF NORTH CAROLINA CHAPEL HILL

Budget	Year 2
TOTAL FEDERAL DC	\$225,000
TOTAL FEDERAL F&A	\$102,050
TOTAL COST	\$327,050

Facilities and Administrative Costs	Year 2
F&A Cost Rate 1	52%
F&A Cost Base 1	\$196,250
F&A Costs 1	\$102,050

WAKE COUNTY EMS SUBCONTRACT

Scope of Work

- Serve as a content expert to the project as it pertains to Emergency Medical Services (EMS) and Mobile Integrated Health Care
- Assist the project team in data acquisition responsibilities. This includes obtaining a list of EMS-WakeBrook patient records to be used in the study.
- Provide EMS medical services for Serious mental illness (SMI) patients, which is characterized by recurrent crises, excessive morbidity, and premature mortality. Emergency departments (ED) are overburdened with SMI patients with acute mental health crises. Of the 95 million visits made to the ED by adults in the U.S. in 2007, 12.0 million (12.5 percent of total visits) were due to an underlying primary mental health disorder. The ED-based care of patients with SMI in crisis is costly, inefficient, and of poor quality. The average ED length of stay for a patient in North Carolina with SMI is 62 hours, 15 times longer than the typical ED patient. There is an urgent need to identify alternative crisis intervention strategies that better match patient needs and health care resources.

Increased involvement of EMS may be one way to reduce ED utilization by rapidly and safely triaging appropriate SMI patients in crisis to treatment settings other than the ED. This would also improve the quality of care that these patients receive by ensuring that they receive the "right care" in the "right place" at the "right time." Indeed, the 9-1-1 system is frequently used by patients, families, law enforcement and medical providers for SMI patients in crisis. Recently EMS in Wake County, NC (population 1.3 million) implemented a highly novel, mobile integrated health pilot program to reduce ED use and improve care quality for patients with SMI in crisis. In this program, paramedics with advanced training in behavioral health respond to all 9-1-1 calls identified as an acute mental health crisis. After performing an initial prehospital patient assessment and excluding an emergency medical condition per EMS protocols, they transport appropriate patients to a dedicated crisis and assessment services unit located within a nearby, community mental health center (WakeBrook) instead of taking them to the ED. Since 2011, this novel, pilot EMS program has evaluated over 5000 patients in crisis, approximately half of whom were diverted away from the ED.

Our long term goal is to evaluate whether this patient-centered care model leads to higher quality care, better outcomes, and lower initial and total treatment costs for SMI compared to ED-based treatment. This R34 proposal will build a foundation for this future work. To our knowledge, Wake County is the only location nationally where such a care model is being used. This provides a unique opportunity to study its initial implementation. In this proposal, we will construct and analyze a novel database linking EMS, clinical, and Medicaid claims data. We will examine key implementation outcomes (accuracy of the triage algorithm, acceptability of the intervention) and patient-level treatment outcomes. These learnings will be used in a subsequent R01 application to perform a robust comparative effectiveness evaluation

of quality, outcomes, and costs of the EMS program, in relation to ED-based treatment, and to determine challenges and opportunities related to broader implementation of this new care model.

- Record and data collection expertise in developing data linkage algorithms that will support
 the development of a patient-level database that spans the full spectrum of care from prehospital to outcomes.
- Participate in conducting interviews with key stakeholders (such as providers, patients, families, and administrators) in order to measure the acceptability of the intervention.
- Assist in data analysis to measure the accuracy, safety, efficiency, and cost-effectiveness of the triage algorithm.

Subconfract-Budget

Description	Year 1	Year 2	Total
Personnel Salary	22,688	21,780	44,468
Personnel Benefits	5,445	6,970	12,415
Total Project Cost	28,133	28,750	56,883

Year One Budget

Personnel	FTE	Current Base Salary	Project Salary		Total Cost to Project	Role
Jeff Williams, MD	0.12	181,500	22,688	5,445	28,133	Assoc. Medical Director
Total	0.03		5,445	1,718	7,163	

The fringe benefits are calculated at 24% of the project salary during year one.

Yéar Two Budget

Personnel	FTE	Current Base Salary	Project Salary	Fringe Benefits	Total Cost to Project	Role
Jeff Williams, MD	0.12	181,500	21,780	6,970	28,750	Assoc. Medical Director
Total	0.03		5,445	1,718	7,163	

The fringe benefits are calculated ot 32% of the project salary during year two.