IMPROVING DISASTER MENTAL HEALTH PRACTICE THROUGH RESEARCH

CROSS-SITE EVALUATION OF THE CRISIS COUNSELING PROGRAM

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The Crisis Counseling Program

- Since the Crisis Counseling Assistance and Training Program (CCP) was authorized in 1974, FEMA has funded dozens of CCPs across the nation.
- CCPs assume most disaster survivors are naturally resilient. By providing support, education, and linkages to community resources, CCPS aim to hasten survivors' recovery from the negative effects of disaster.
- CCPs aim to bring services to where people are in their day-to-day lives – in their homes, neighborhoods, schools, churches, and places of work – a model of service delivery commonly referred to as outreach.

Why evaluate the CCP?

- Assist in management
- Document program achievements
- Gain insights into program functioning
- Provide “baseline” for evaluating innovations

CCP cross-site evaluation

Why evaluate?

- Document program achievements
- Gain insights into program functioning
- Provide "baseline" for evaluating innovations

CCP evaluation example

- Show national reach of the CCP post-Katrina
- Test the CCP model: "pathways to excellence"
- Examine effects of SCCS, a new model, in MS

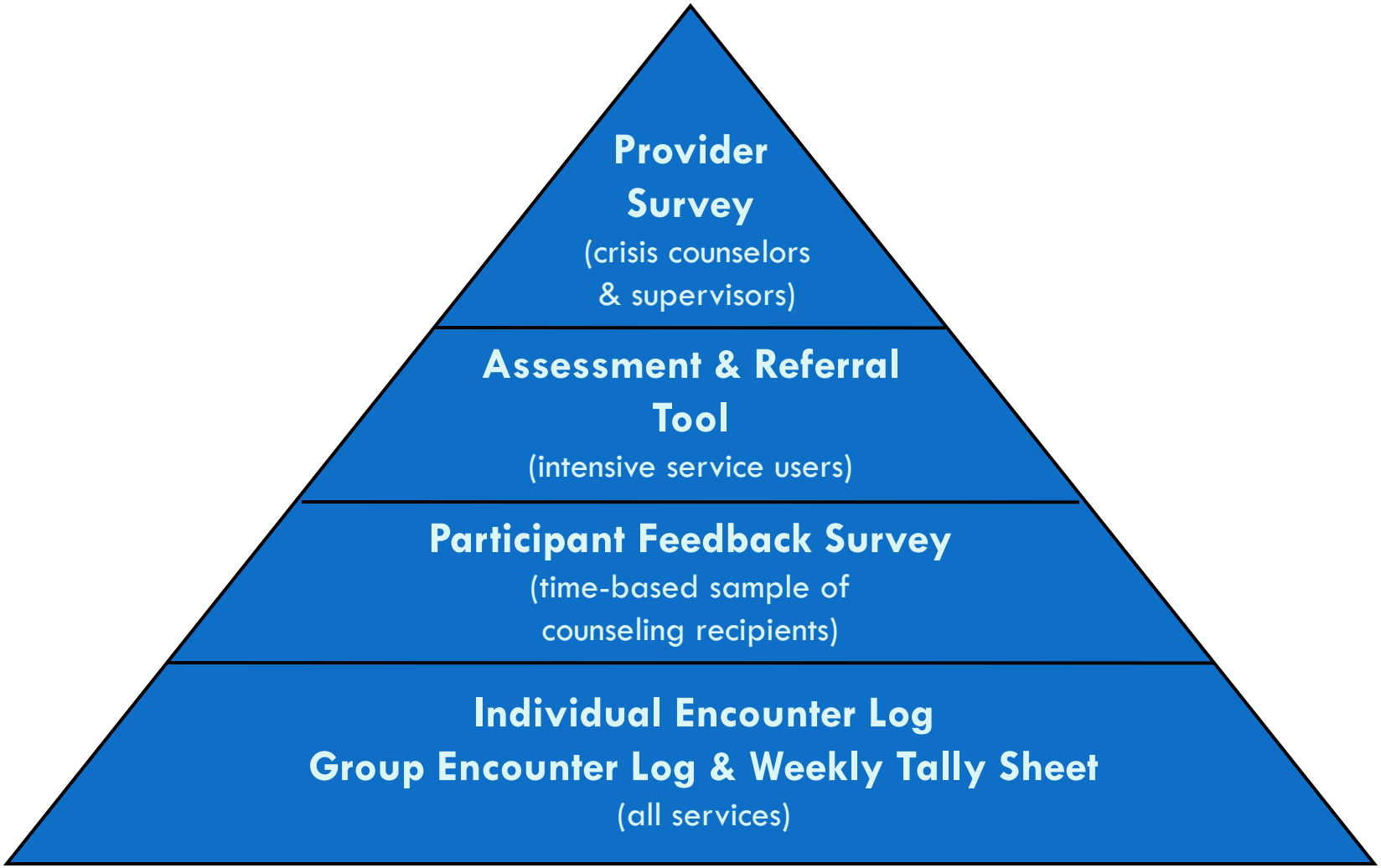
Steps leading to cross-site evaluation

Preliminary work and timeline

- Case studies of 4 large programs
  - dozens of qualitative interviews with CCP counselors & leaders (2002-04)
- Retrospective evaluation of 40 past programs
  - coding/analysis of applications, reports, & interviews with directors (2004-05)
- Cross-site evaluation plan
  - Toolkit drafts (2004-05)
  - OMB Review (Jun-Sep, 2005)
  - Creation of manual, databases, and training materials (Sep-Nov, 2005)
  - Implementation (Nov, 2005)
  - Revised tools, web-based data entry (going "live" in 2009)

CCP toolkit "pyramid"

A set of brief measures for multiple info needs



Documenting program achievements

National reach of the CCP after Hurricane Katrina

Reach of the CCP post-Katrina

CCP Mission

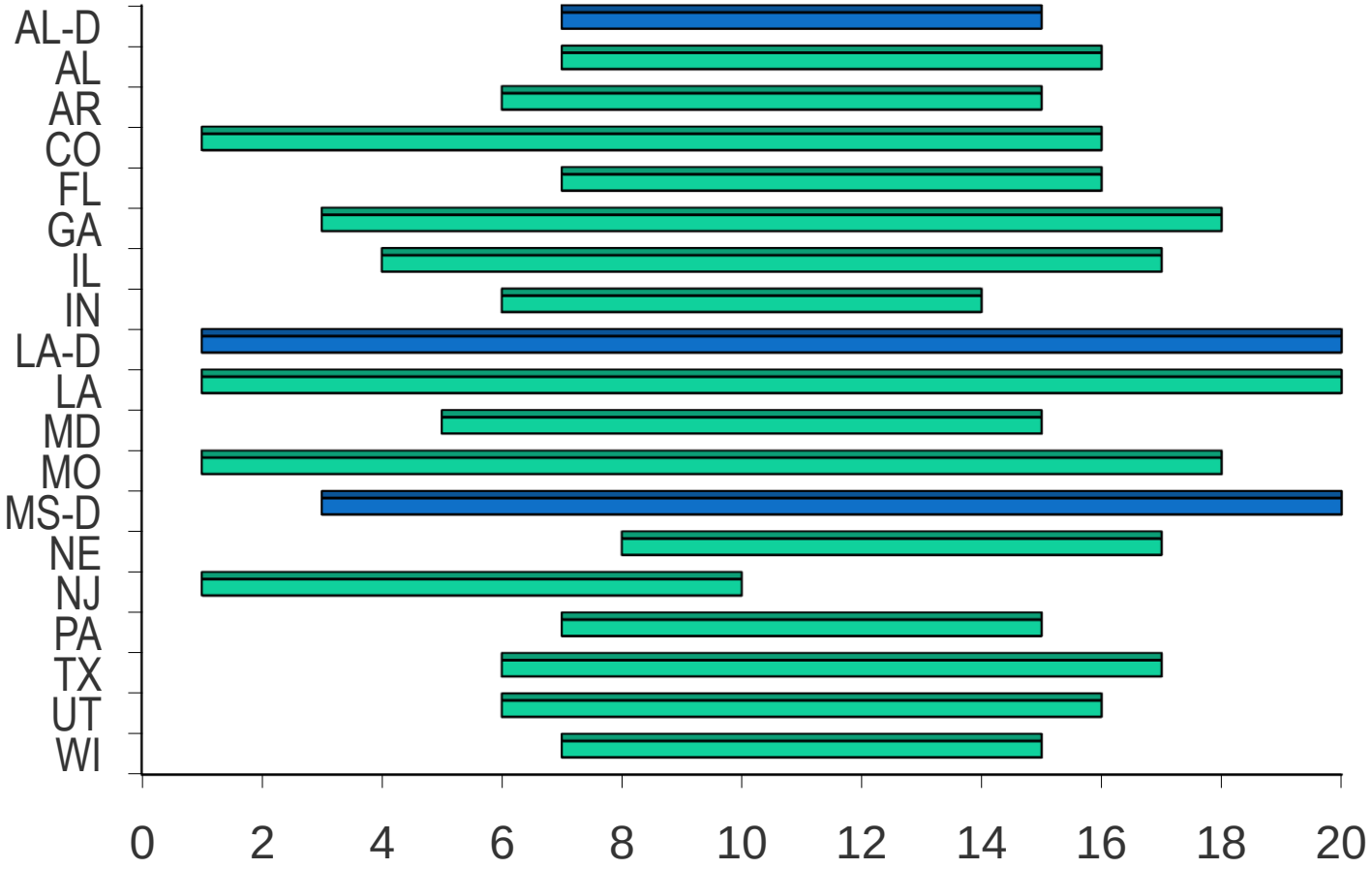
- The CCP's public health mission requires it to reach large numbers of people, who are diverse in ethnicity, age, and mental health needs.
- The disaster response mission requires it to do so with minimal delay.

CCP Evaluation

- Did the policy change in CCP eligibility substantially expand program reach?
- Did the CCP reach people in need?
- Did the counseling population match the area population?
- Did service volume show a sharp rise over time, as it must, given the brevity of these programs?

Katrina cross-site evaluation period

Months of data collection by program

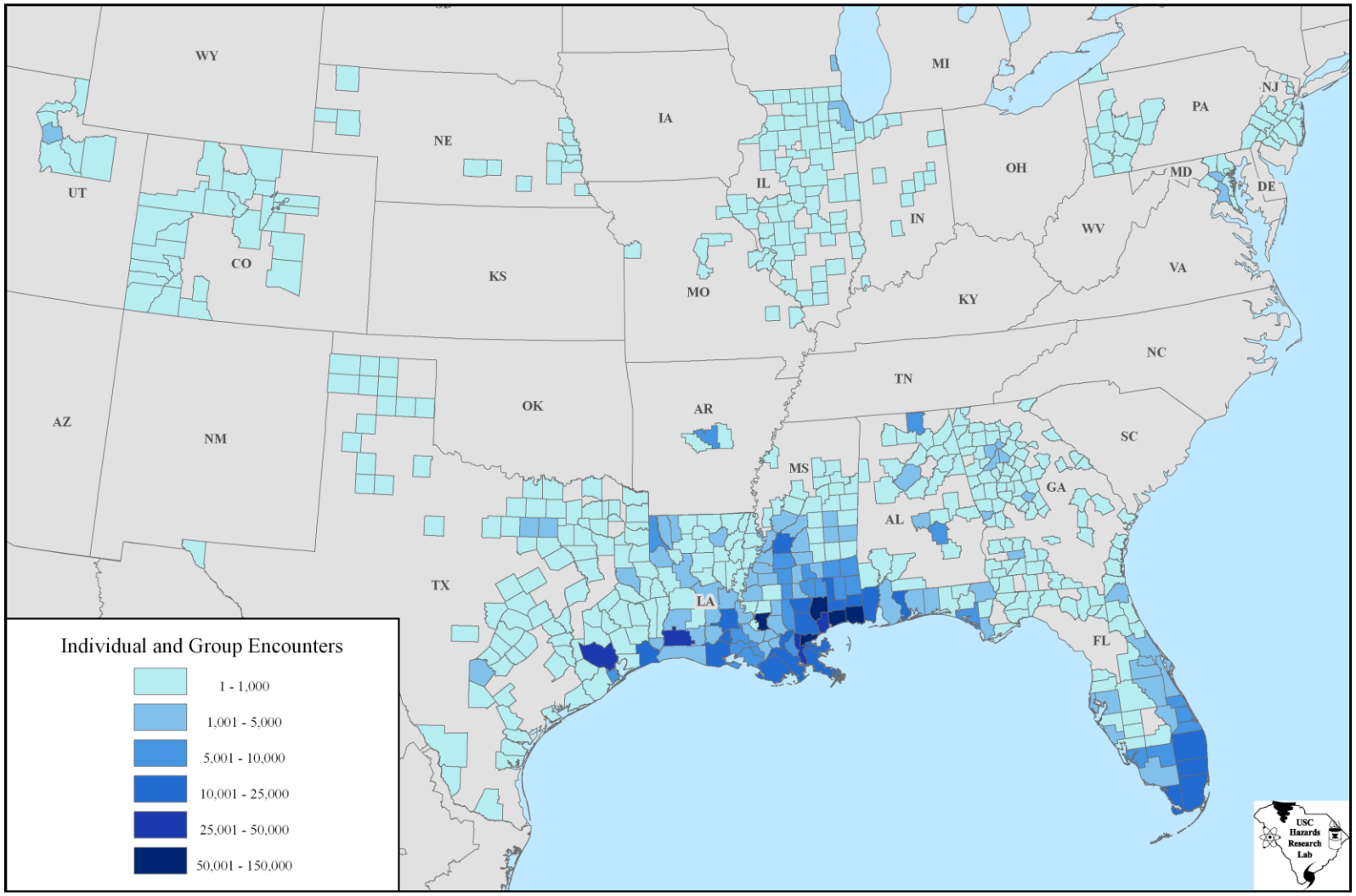


Total reach post-Katrina
(Nov 05 – Feb 07)

- 1.2 million encounters nationwide
- 936,000 (80%) in disaster-declared areas of Louisiana, Mississippi, and Alabama.
- 237,000 (20%) outside the disaster declarations
  - Undeclared programs expanded reach nationally by 25%
  - Four programs (Florida, Texas, Louisiana undeclared, and Georgia) together accounted for 80% of undeclared-program encounters.
  - If eligibility had been limited to states with declarations and contiguous states (9 programs, 7 states), the total reach still would have been over 1.1 million, 98% of the total.

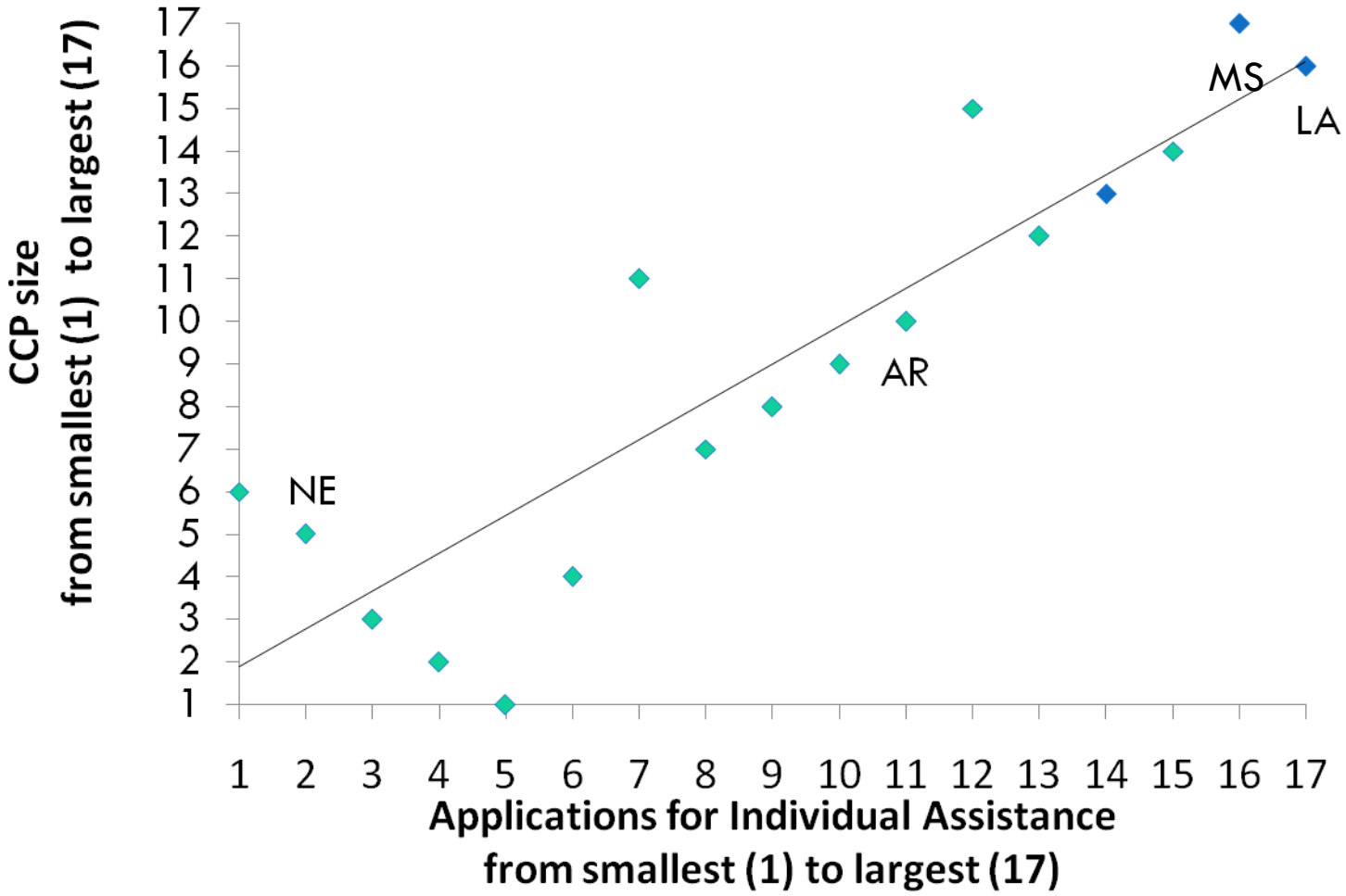
Total reach for all 2005 hurricanes

November 2005 – February 2007



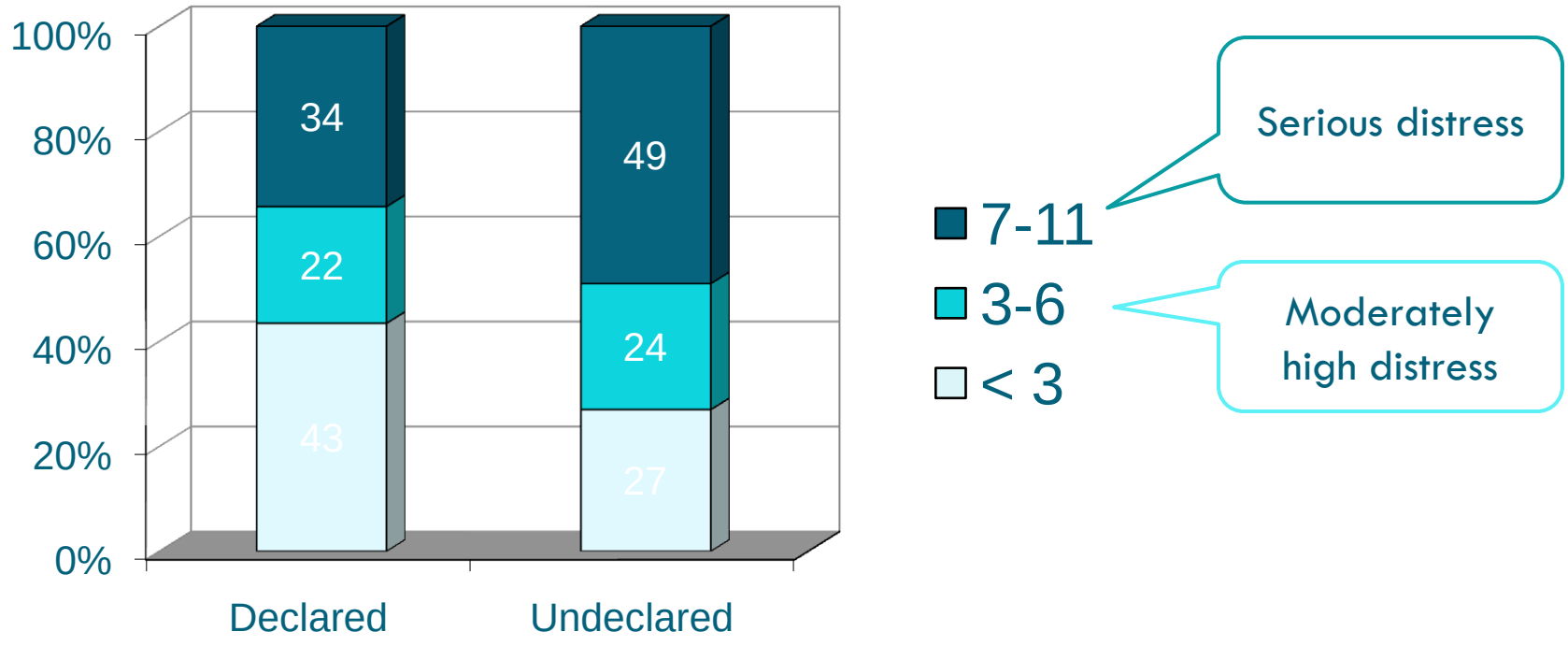
Reach by state-level need

CCP encounters by FEMA registrations



Reach by individual-level need

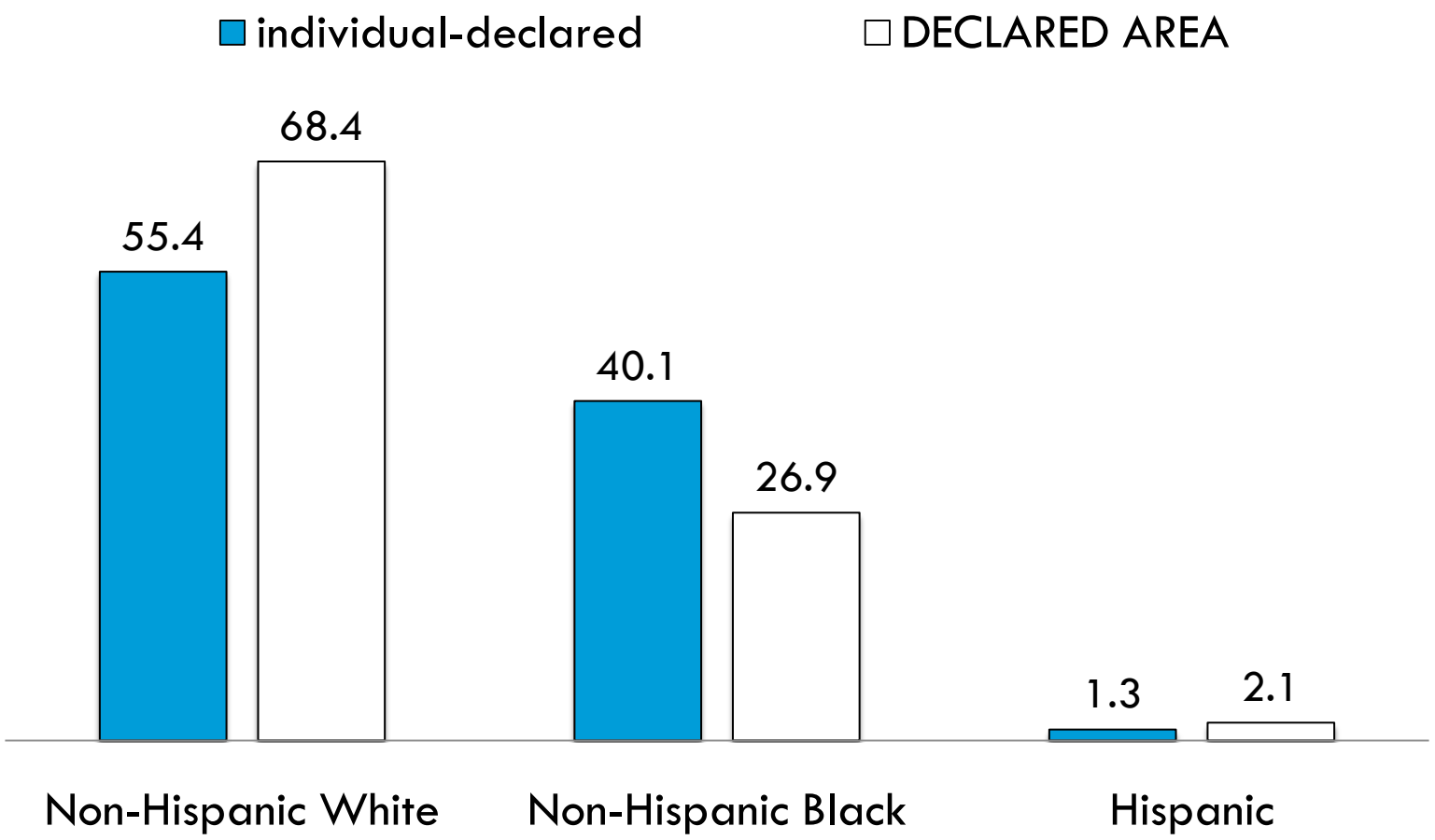
Number of intense reactions on Sprint-E*



* from Participant Feedback Survey approximately 8 & 12 months post-event, *N* ≈4,000

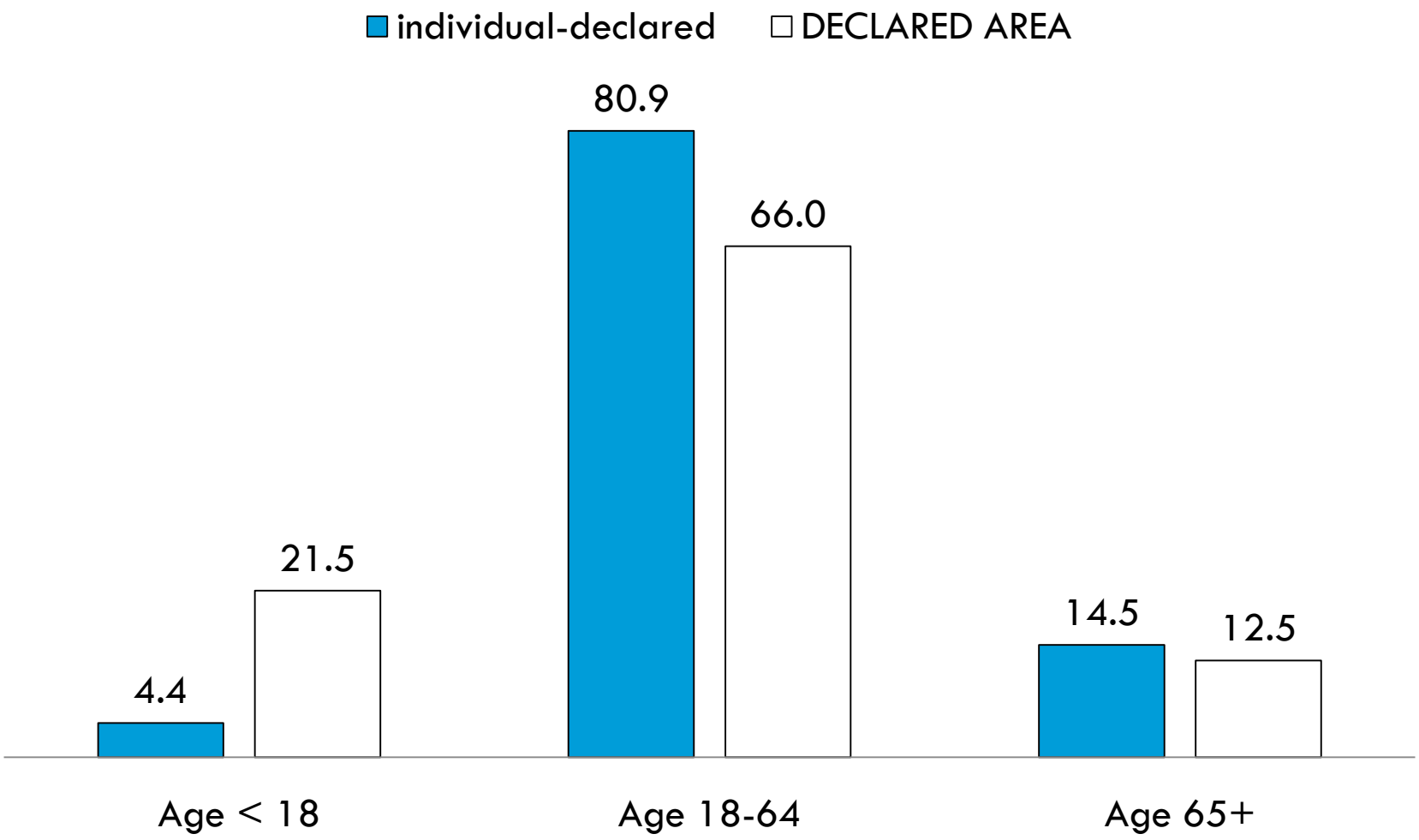
Population reach-declared programs

Ethnicity (%) of CCP population compared to area



Population reach-declared programs

Age (%) of CCP population compared to area



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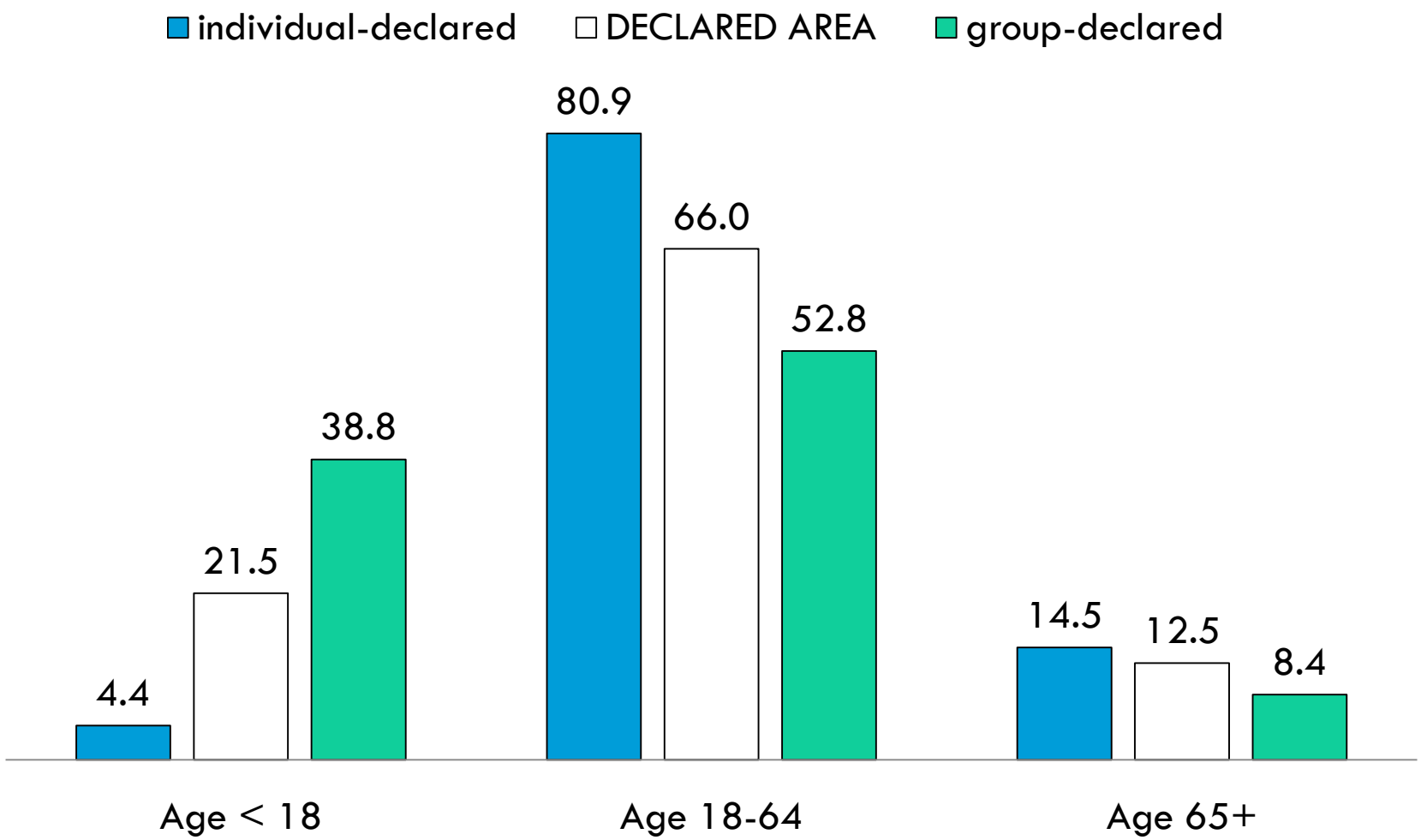
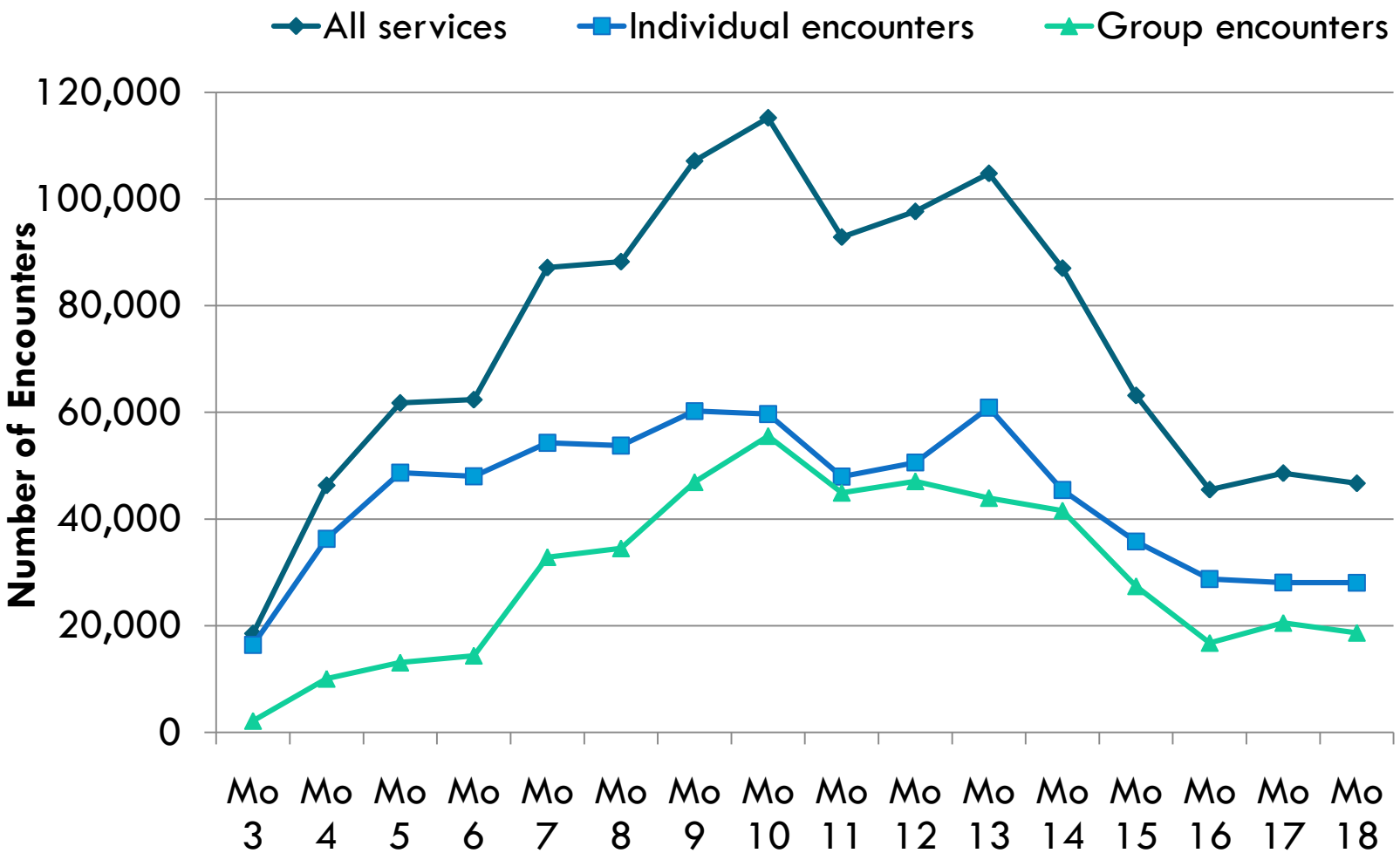


Reach by time

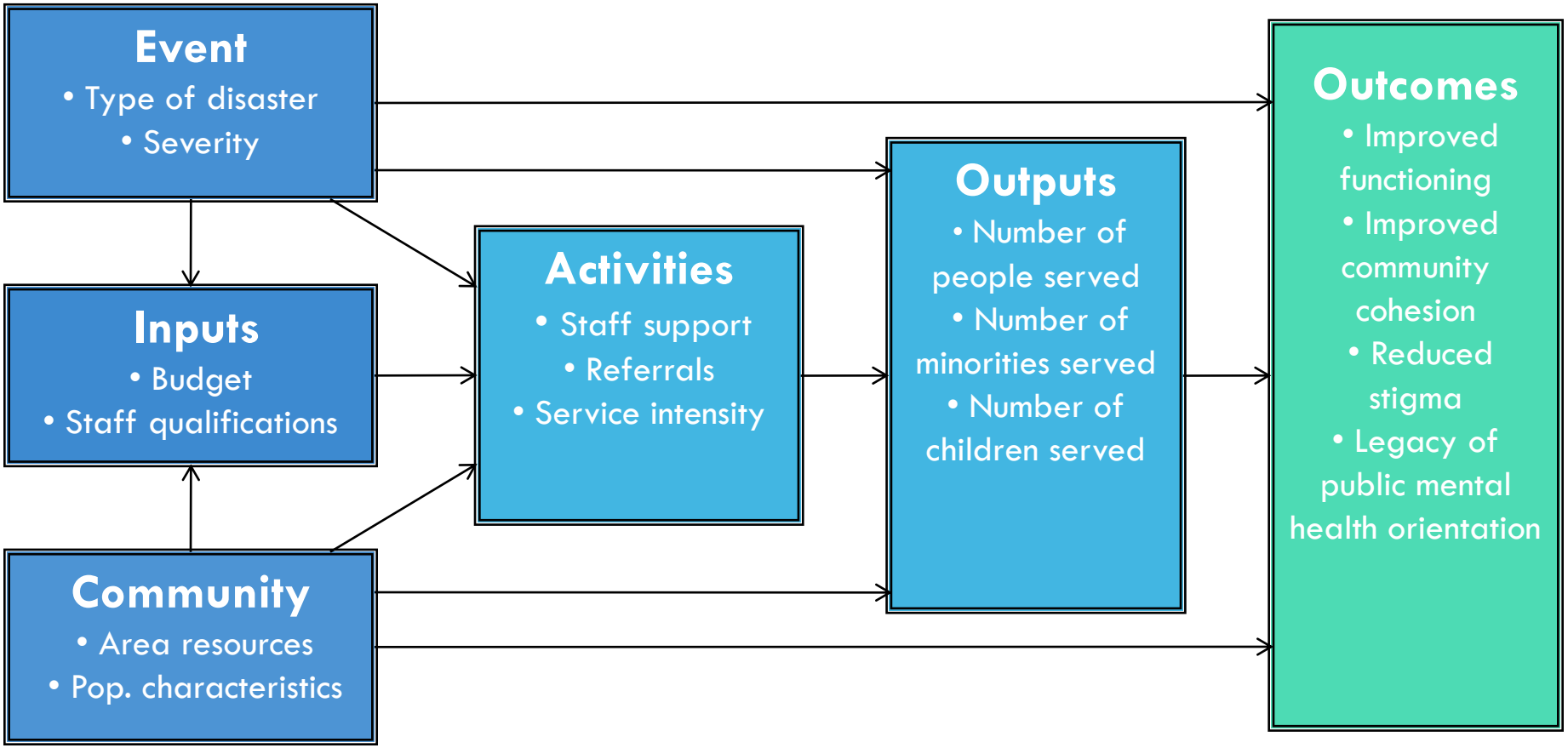
Rapid growth in service delivery was evident



Gaining insights for practice

Pathways to excellence

The CCP "logic model"



Testing the CCP model

- The scope of Katrina/Rita/Wilma provided an unprecedented opportunity to examine how natural variations in service delivery influenced participants' outcomes.
- This enabled us to examine longstanding but untested assumptions that underlie the crisis counseling approach to postdisaster mental health service provision.
- 50 counties were included in the analysis. Data from 132,733 individual counseling encounters, 805 provider surveys, and 2,850 participant surveys were aggregated and merged and used to study counseling outcomes at the county level.

Hypotheses drawn from model

- The quality of area-level counseling outcomes would be influenced by service characteristics, including
  - service intensity (% of visits > 30 min. or follow-up)
  - service intimacy (% of visits in homes)
  - frequency of referrals, especially to psychological services
  - provider job stress
- These service characteristics, in turn, would be influenced by
  - event characteristics (severity of losses in the area)
  - community characteristics (urbanicity)
  - program inputs (% of providers with advanced degrees)

Assessing counseling outcomes

- The Counseling Outcomes and Experiences Scale assessed the extent to which the counselor (a) created an encounter characterized by respect, cultural sensitivity, and sense of privacy and (b) achieved realistic immediate outcomes (e.g., reducing stigma of help-seeking, normalization of reactions, increased coping skills) as perceived by the participant.
- The COES has 10 items ($\alpha = .95$) scored on a 10-point scale from *worst* = 1 to *best* = 10, yielding a maximum score of 100.

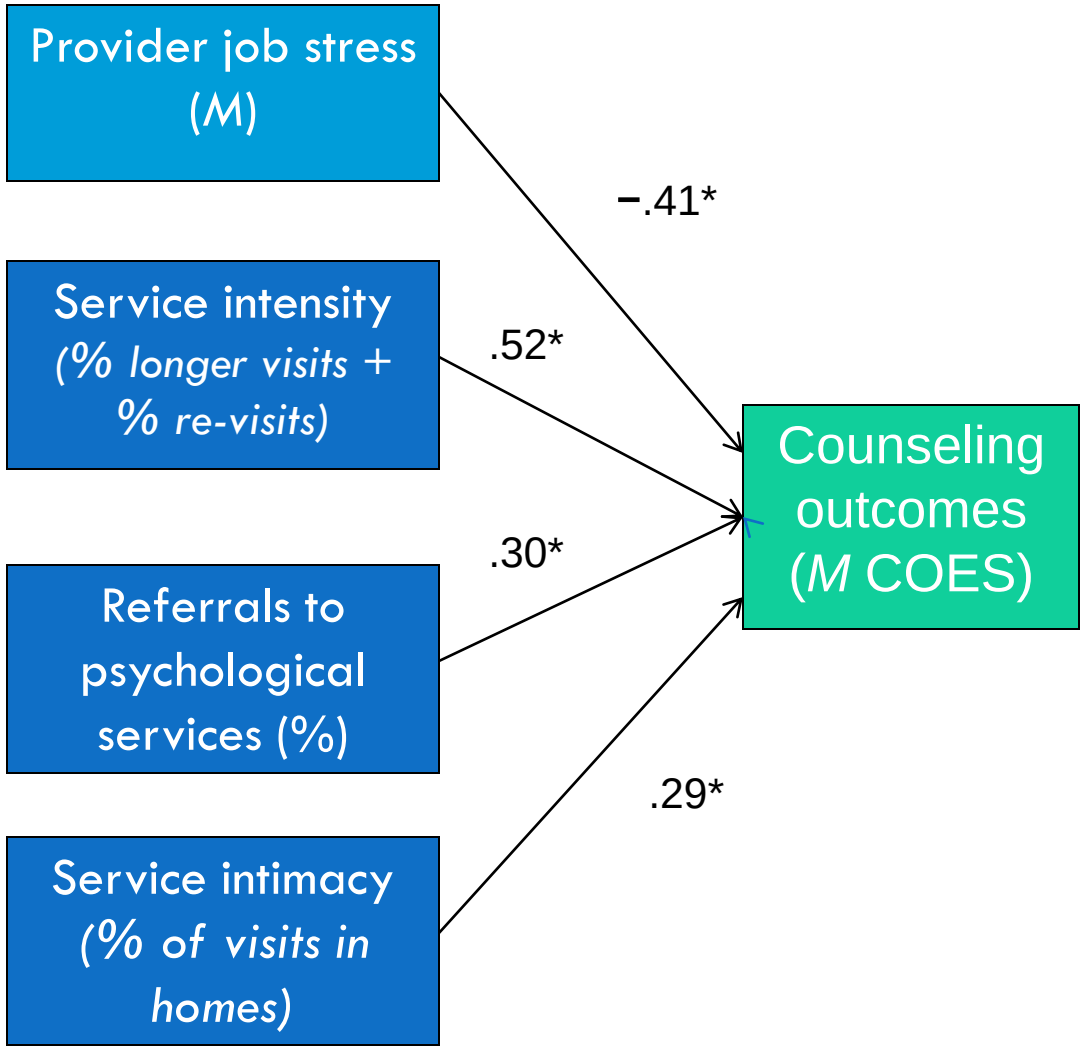
Service characteristics and outcomes

Variability across 50 declared counties

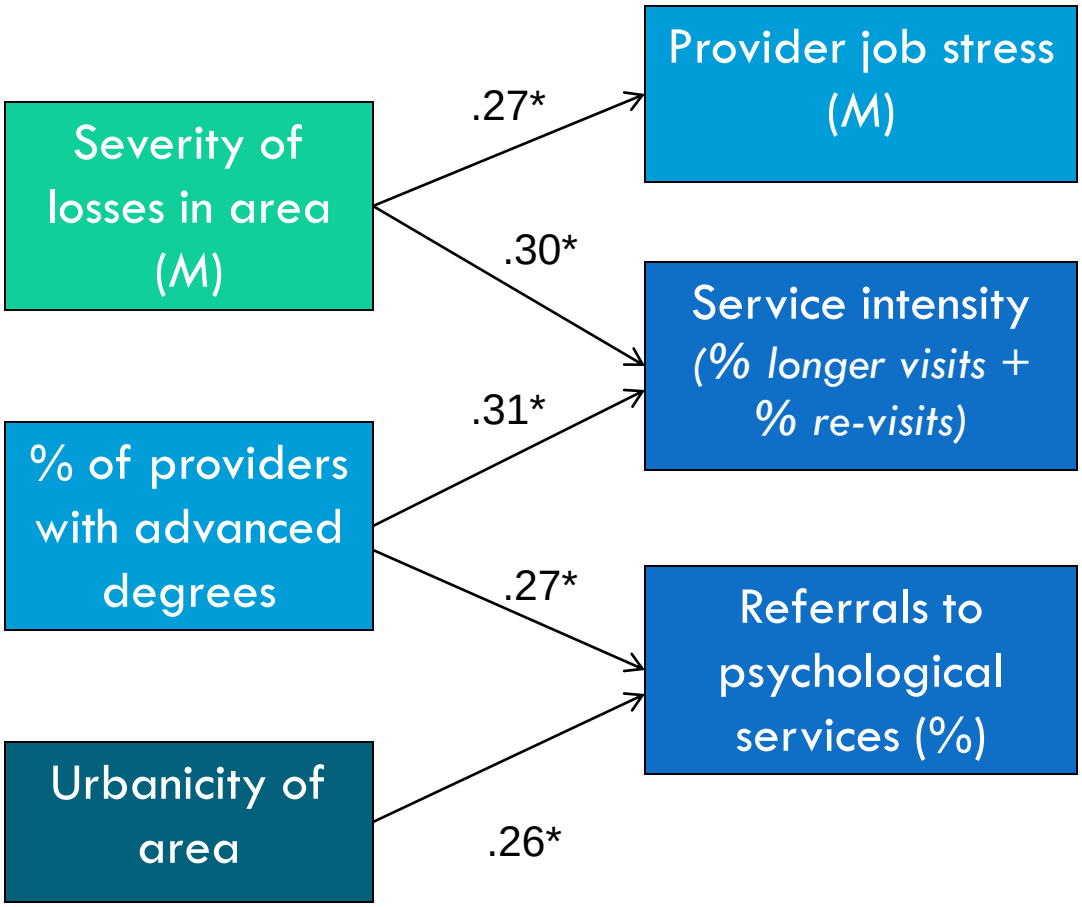
Data source and variable	*Minimum*	*Maximum*	*Mean*
Encounter logs			
% of encounters > 30 minutes	< 1	73	22
% of encounters 2nd or greater	< 1	67	20
% of encounters in homes	18	97	58
% referred to psychological services	0	17	3
Provider survey			
% of providers with advanced degrees	0	73	24
Mean Job stress	5	15	8
Participant survey			
Mean # losses	1	6	3
Mean COES score	62	97	87
Archival sources			
Urbanicity	40% rural, 40% medium city, 20% metro		

Pathways to excellence

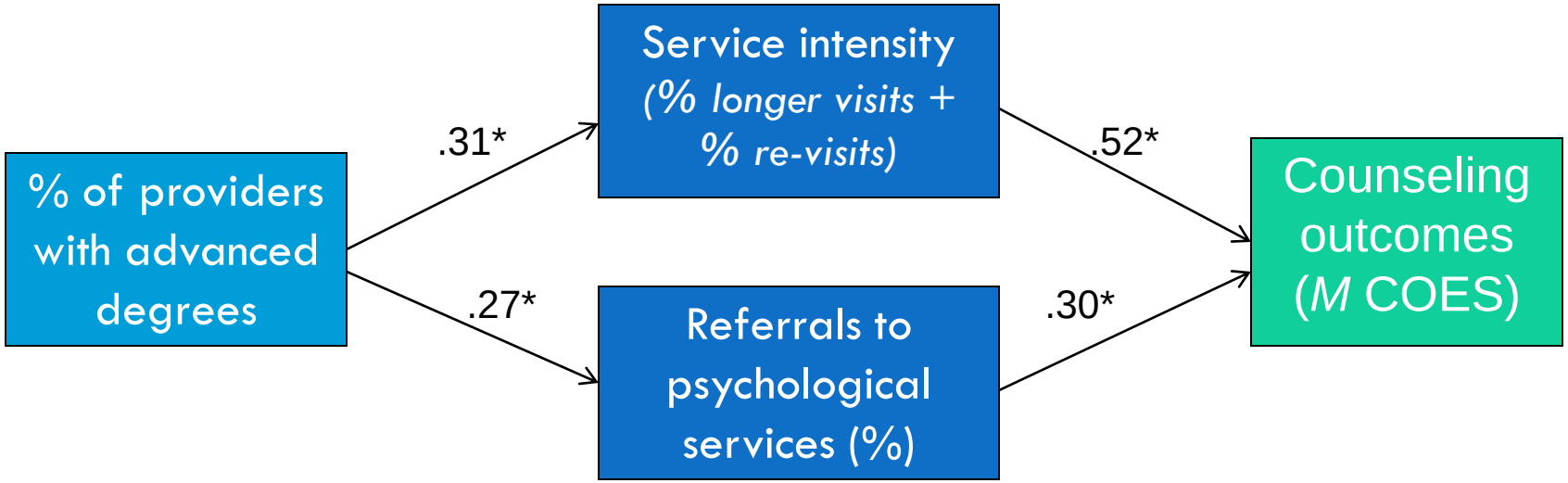
- These variables explained a striking 52% of the variance in area-level counseling outcomes, $p < .001$.
- Each variable made a strong, independent contribution.
- Average participant ratings improved as service intensity, service intimacy, and referral frequency increased, and as provider job stress decreased.



Pathways to excellence



Pathways to excellence



Provider education had a significant *indirect* effect on counseling outcomes because it increased both service intensity and the frequency of psychological referrals, which were both associated with good area outcomes.

Implications of model results

- Increase the overall intensity of services by spending more time with participants and/or following up with them more often;
- Increase the overall intimacy of services by choosing settings, such as homes, that foster privacy and focus;
- Increase the frequency of referrals to psychological services;
- Reduce counselor job stress, especially in badly stricken areas, which may be accomplished best by increasing the resources they have to do their jobs; and
- Employ an adequate number of professional counselors to provide expert supervision, advice, and triage.

Testing innovations

Specialized Crisis Counseling Services (SCCS) in Mississippi

Mississippi *Project Recovery* SCCS
Jan-April, 2007

- The model: A masters-level counselor trained in a variety of intervention techniques and a resource coordinator worked together as a team. There was no set number of "sessions," and each had to stand alone. SCCS, like RCCS, emphasized outreach to the community.
- 346 adults were referred to SCCS on the basis of their scores on the Adult Assessment and Referral Tool.
- 281 (81%) participated in SCCS.
- Participants averaged 4 (range 0-19) counseling encounters and 4 (range 0 -18) resource encounters.

SCCS activities

Counseling activities

- Supportive counseling = 621
- Goal setting = 595
- Psycho-education = 418
- Pleasant activity scheduling =222
- Relaxation = 207
- MH/SA referrals = 189
- Breathing techniques = 106

Resource activities

- Housing = 2976
- Financial = 1624
- Physical health =1068
- Employment = 940
- Social support = 902
- Transportation = 462
- Recreation = 296

SCCS evaluation

- Project Recovery largely made use of the existing toolkit in its evaluation.
  - minimized the time and effort required to plan and implement the SCCS component, and
  - allowed performance of the new SCCS program to be compared to that of the regular crisis counseling services (RCCS) program.
- An exception to standard procedures allowed participants to be assigned IDs that were used on all of their encounter logs and assessment tools.
- An anonymous participant survey was implemented in both programs during the same week.
- A subset of SCCS participants was re-administered the Adult Assessment & Referral Tool (Sprint-E) .

SCCS evaluation hypotheses

- SCCS participants would exhibit higher needs than RCCS participants
  - data sources = Encounter Logs and Participant Survey
- SCCS participants would report superior outcomes and experiences
  - data source = Participant Survey conducted during one week in March
- SCCS participants would show significant reductions in distress, and the amount of improvement would increase as the level of program participation increased
  - data source = Assessment & Referral Tool, administered twice).

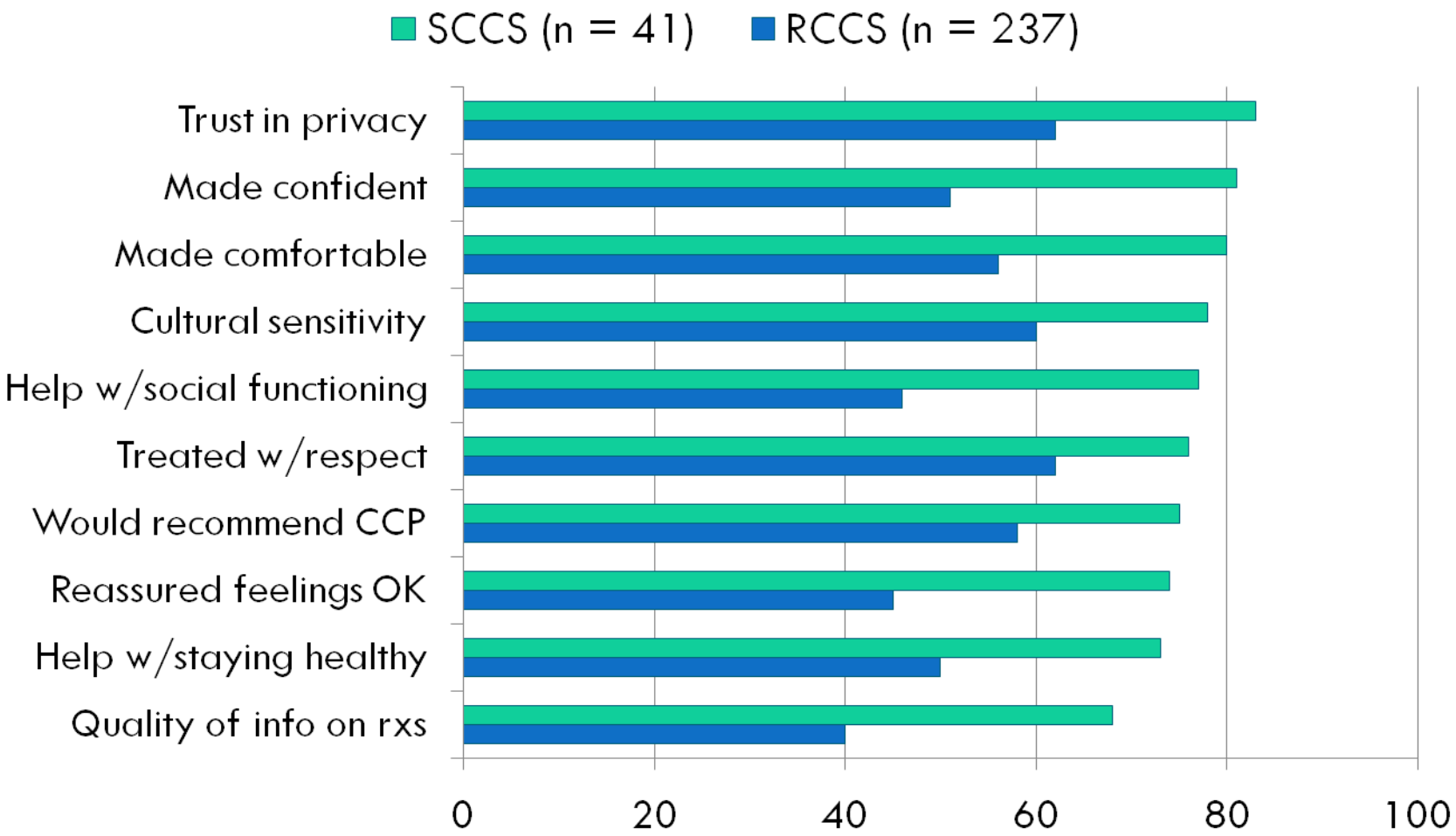
SCCS vs. RCCS participants

Risk factors

	SCCS	RCCS
Encounter log data		
% female	75%	60%
% middle-aged	67%	51%
% African American	31%	29%
% predisaster MH problem	34%	3%
% predisaster trauma	32%	6%
Participant survey data		
% < high school education	28%	21%
Mean # of disaster stressors	5.6	4.5
Mean # intense reactions (range 0-11)	7.8	4.1

COES ratings by program

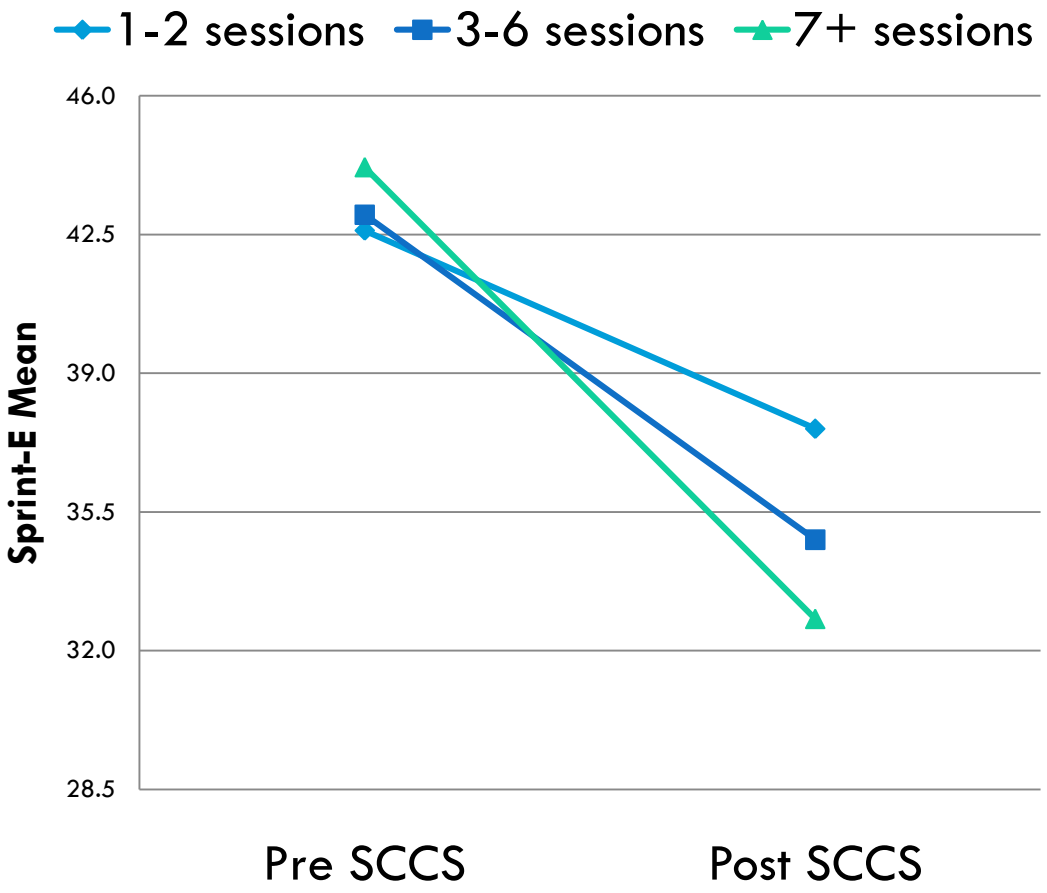
% "excellent" (9-10)



All differences were statistically significant at $p < .05$.

Distress levels pre- vs. post-SCCS

- The 129 SCCS participants who were assessed twice averaged 8 intense reactions Pre-SCCS and 5 intense reactions Post-SCCS, a "large" effect, $d = 0.86$.
- In addition to main effect of time, there was a significant interaction: the greater the number of visits received, the greater the improvement.



SCCS evaluation conclusions

- Mississippi was able to implement this evaluation rapidly by relying on a pre-existing set of tools and procedures.
- The SCCS evaluation was flawed in many ways, but it provided sufficient support to justify further refinement and testing of the approach.
- Earlier introduction of SCCS would allow a greater number of persons to participate and would allow those who do to experience relief more quickly.
- SCCS is an intermediate intervention that cannot fully meet the severity of mental health needs likely to be present after a catastrophic disaster. One third of SCCS participants needed additional treatment at program's end.

Evaluation aims revisited

A researcher's reflections

CCP evaluation aims

Evaluation aim	Was it achieved?
Assist in management	?
Document program achievements	✓
Gain insights into program functioning	✓
Provide “baseline” for evaluating innovations	✓

Use of evaluation for management

Issues

- "Data for decisions" approach assumes there are choice-points that can be informed by data
  - Many program decisions determined by variety of federal guidelines and local "political" considerations, not data
  - But some decisions about resource allocation could be facilitated by improved information about: who is providing what services to what types of people where and when; and systematic feedback from providers and participants
- For data to be useful data entry has to be fast & accurate and there must be local capacity to analyze data
  - Issues with both in CCPs.

Local vs. standardized evaluation

Disadvantages

- The choice (at this point) not between evaluation or no evaluation but between local or standardized evaluation. There are many disadvantages to a standardized approach:
  - It is inherently less responsive to local concerns.
  - "Buy in" is a moving target; the parties keep changing.
  - Local programs are likely to think they would have done it better; they feel constrained or imposed upon.
  - It can become enmeshed in larger federal-state-local conflicts/control issues.
  - The "cross-site evaluator" may have much responsibility but little authority
  - Training at all levels is essential (for managers who should be *using* data, as well as counselors who are *collecting* data).

Local vs. standardized evaluation

Advantages

- Despite these issues, we believed standardized offered many advantages:
  - Study of past evaluations showed most were flawed; difficult to combine results because of inconsistencies in definitions, what data were collected, and how.
  - Local CCPs depend on the status of the national program, which is poorly understood and predictably called upon to defend itself after major disasters.
  - Planning evaluation takes TIME, which is something most CCPS lack (e.g., can takes weeks or months for all parties to agree on wording of questionnaires).

Local *and* standardized evaluation

The ideal

- The ideal model would combine local and cross-site approaches. The latter would address routine, common aspects, and free the former to make creative advances.
- This hasn't happened yet, but perhaps it can in the future if federal policy-makers, local leaders and practitioners, and researchers can cross the "divides" and work together effectively.

Conclusions

- It is hoped that the findings of this cross-site evaluation will be useful to program leaders and others who care about the mental health needs of disaster survivors.
- To see the full benefits of a standardized evaluation approach requires a long-term perspective. Many of the advantages arise from the cumulative record and the evolving norms and benchmarks it provides.
- Despite the magnitude of the present effort, we are only at the beginning of what should become an ongoing process of documenting achievements, building an evidence base for disaster mental health programs, and promoting and testing innovations in service delivery.

Special Issue of *Administration and Policy in Mental Health & Mental Health Services Research* (May 2009)

- Norris and Rosen, *Innovations in Disaster Mental Health Services and Evaluation: National, State, and Local Responses to Hurricane Katrina (Introduction)*
- Norris and Bellamy, *Evaluation of a national effort to reach Hurricane Katrina survivors and evacuees: The Crisis Counseling Assistance and Training Program*
- Norris et al., *Service characteristics and counseling outcomes: Lessons from a cross-site evaluation of crisis counseling after Hurricanes Katrina, Rita, and Wilma*
- Rosen et al., *Factors predicting crisis counselor referrals to other crisis counseling, disaster relief, and psychological services: A cross-site analysis of post-Katrina programs*
- Jones et al., *Piloting a new model of crisis counseling: Specialized Crisis Counseling Services in Mississippi after Hurricane Katrina*
- Hamblen et al., *Cognitive Behavioral Therapy for Postdisaster Distress: A community based treatment program for survivors of Hurricane Katrina*
- Watson and Ruzek, *Academic/State/Federal Collaborations and the Improvement of Practices in Disaster Mental Health Services and Evaluation*
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