

# Welcome

Reach **O**ut, Stay **S**trong **E**ssentials  
for Mothers of Newborns  
The **ROSE** Program

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ROSE



**ROSES**

The ROSE Sustainment Study

**REACH OUT**  
**STAY STRONG**  
**ESSENTIALS**

**ROSE**

**FOR NEW MOMS**



# Rationale for a Preventative Intervention for PPD

- Postpartum depression (PPD) is a common public health problem with serious and lasting consequences for mother and child.
- General prevalence of PPD is ~13% in the 12 weeks after childbirth.
- Health professionals have remained focused on identifying and treating perinatal depression after its onset rather than preventing it.

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# Rationale for a preventive intervention for PPD in low-income mothers

The need:

- Postpartum depression (PPD) affects 1 in 4 low-income mothers
- Low-income mothers are less likely to connect to PPD care (Mental health stigma, belief that they will not recover from their depressive symptoms, transport issues, lack of time)
- Negative effects of untreated PPD are more severe for low-income women:
  - Cognitive and language developmental delays in offspring from infancy to late childhood,
  - Reduced likelihood of preventative parenting behaviors (e.g., breastfeeding, well child visit attendance, and car seat use)

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# Pregnant Women in Poverty

- 47% of U.S. births are covered by Medicaid
- Low income is associated with birth risk factors and outcomes. A regional example:

	<b>Michigan</b>	<b>Genesee County</b>	<b>Flint</b>
2017 poverty rate	14.2%	18.3%	38.9%
Infant deaths/1000 live births	6.7	9	16.8
% low birth weight	8.8%	11.3%	13.2%
Births to mothers with no diploma or GED	11.9%	14%	26.1%
Births to mothers who smoked during pregnancy	17.1%	21.0%	28.7%
Births to unmarried mothers	42.6%	57.4%	82.2%

# ROSE

(**R**each **O**ut, **S**tay **S**trong, **E**ssentials  
for mothers of newborns)

- ROSE is a health education class administered to pregnant women individually or in small groups
- ROSE teaches interpersonal psychotherapy (IPT)--based skills for improving communication and building social support, identified risk factors for PPD.
- ROSE is presented as a course to minimize stigma and emphasize the program as an educational experience.

ROSE consists of four +/- 90-min group sessions (or ~60-min individual sessions) and a post-delivery individual booster/check-in session

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# ROSE

(**R**each **O**ut, **S**tay **S**trong, **E**ssentials  
for mothers of newborns)

- Designed for prenatal clinics and other agencies offering prenatal services (e.g., Healthy Start programs)
- Can be taught by non-mental health professionals (e.g., nurses, health educators, midwives)
- Intervention materials (educator manual, English and Spanish patient workbook)

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# Prevention Efforts during Pregnancy an Ideal Opportunity



Pregnancy offers a “window of opportunity”

- Frequent visits to health care provider
- Pregnant individuals may be unusually open to making positive changes
- During pregnancy there tends to be a focus on self-care

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ROSE is based mostly on  
Interpersonal Psychotherapy

Interpersonal Psychotherapy is  
the frontline treatment for  
postpartum depression

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# Why ROSE teaches interpersonal psychotherapy-based skills



- Interpersonal therapy targets those factors that play a role in the onset of postpartum depression
- Interpersonal therapy targets interpersonal difficulties commonly experienced by new and expecting mothers (e.g., low levels of social support; isolation, interpersonal disputes)

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# Goals of Interpersonal Psychotherapy

- Improve communication in relationships to alleviate conflict and transitions
- Change expectations of relationships
- Build or improve utilization of social support networks

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A background of soft-focus pink roses. The text is centered over the image.

Interpersonal Therapy

=

Build and use social support

+

Enhance communication



Role of social support for financially  
disadvantaged women referred to as

*"Strategies for survival in a hostile world." \**

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## ROSE Core Elements

### Psychoeducation on:

- Postpartum depression, postpartum blues
- Managing Stress in transition to motherhood
- Social support as a buffer against postpartum depression
- Relevant postpartum resources

### Teaching:

- Communication skills via role plays
- Stress management skills
- Building and enhancing social skills
- Review/reinforce skills at postpartum session

## ROSE Flexible Elements

- Group vs. individual
- Office vs. home visit vs. Telehealth
- Time during pregnancy
- Order of sessions
- Open enrollment of group
- Missed sessions can be made up
- Sessions can be split into shorter pieces or lumped together
- Any outpatient prenatal setting (OBGYN, FQHC, visiting nurses, healthy start programs, etc)
- Paraprofessional/non-mental health provider vs. mental health provider

# ROSE PPD Prevention Class

ROSE Program Outline		
During pregnancy	Session A	Interpersonal rationale for program, course outline, ground rules, signs/symptoms of “baby blues” and PPD.
	Session B	Stress management skills, managing the transition to motherhood, identifying positive supports.
	Session C	Teaches types of interpersonal conflicts common around childbirth and role plays techniques for resolving them.
	Session D	Skills for resolving interpersonal conflicts, setting goals, review
Postpartum booster		Reviews/reinforces previous sessions, problem-solves difficulties using skills, reviews available resources

The ROSE PPD prevention class is based primarily on principles of interpersonal psychotherapy (IPT), a frontline treatment for PPD

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# Class Member Workbook



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# ROSE Is Now An Evidence-Based Practice

Four randomized clinical trials have shown that ROSE significantly reduces risk of postpartum depression in low-income women by half.

## ROSE Studies:

- Significantly reduces cases of postpartum depression
- Used a validated diagnostic measure of postpartum depression
- Have replicated positive findings
- Tested in community settings with racially and ethnically diverse samples
- Tested in heterogeneous samples (e.g., teens and rural individuals)
- Samples were highly diverse

**ROSE prevents half of postpartum depression cases among low-income ROSE participants**

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## Randomized trials examining the effectiveness of ROSE in preventing PPD

Population	Sample size	% with PPD: ROSE	% with PPD: usual care	Time post-partum
Pregnant women on public assistance [29]	37	0%*	33%	12 weeks
Women on public assistance at risk for PPD [27] <sup>a</sup>	99	4%*	20%	3 months
Pregnant women on public assistance at PPD risk [28]	205	16%*	31%	6 months
Pregnant adolescents [39]	106	12.5%	25% <sup>b</sup>	6 months
African-American women at risk for PPD [40] <sup>a</sup>	36	Depressive symptoms decreased over time	No change in depressive symptoms	3 months

\* $p < .05$  between conditions

<sup>a</sup>Per Cooper Survey Questionnaire [76]

<sup>b</sup>Dose-matched control

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The New York Times

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## *Depression During and After Pregnancy Can Be Prevented, National Panel Says. Here's How.*

The task force of experts recommended at-risk women seek certain types of counseling, and it cited two specific programs that have been particularly effective.



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The ROSE Sustainment Study

# U.S. Preventive Services Task Force Recommended ROSE to Prevent PPD

ROSE (Reach Out, Stand strong, Essentials for mothers of newborns) was one of two PPD prevention interventions mentioned by name in the recommendation

- U.S. Preventive Services Task Force. Interventions to prevent perinatal depression: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2019;321(6):580-587.

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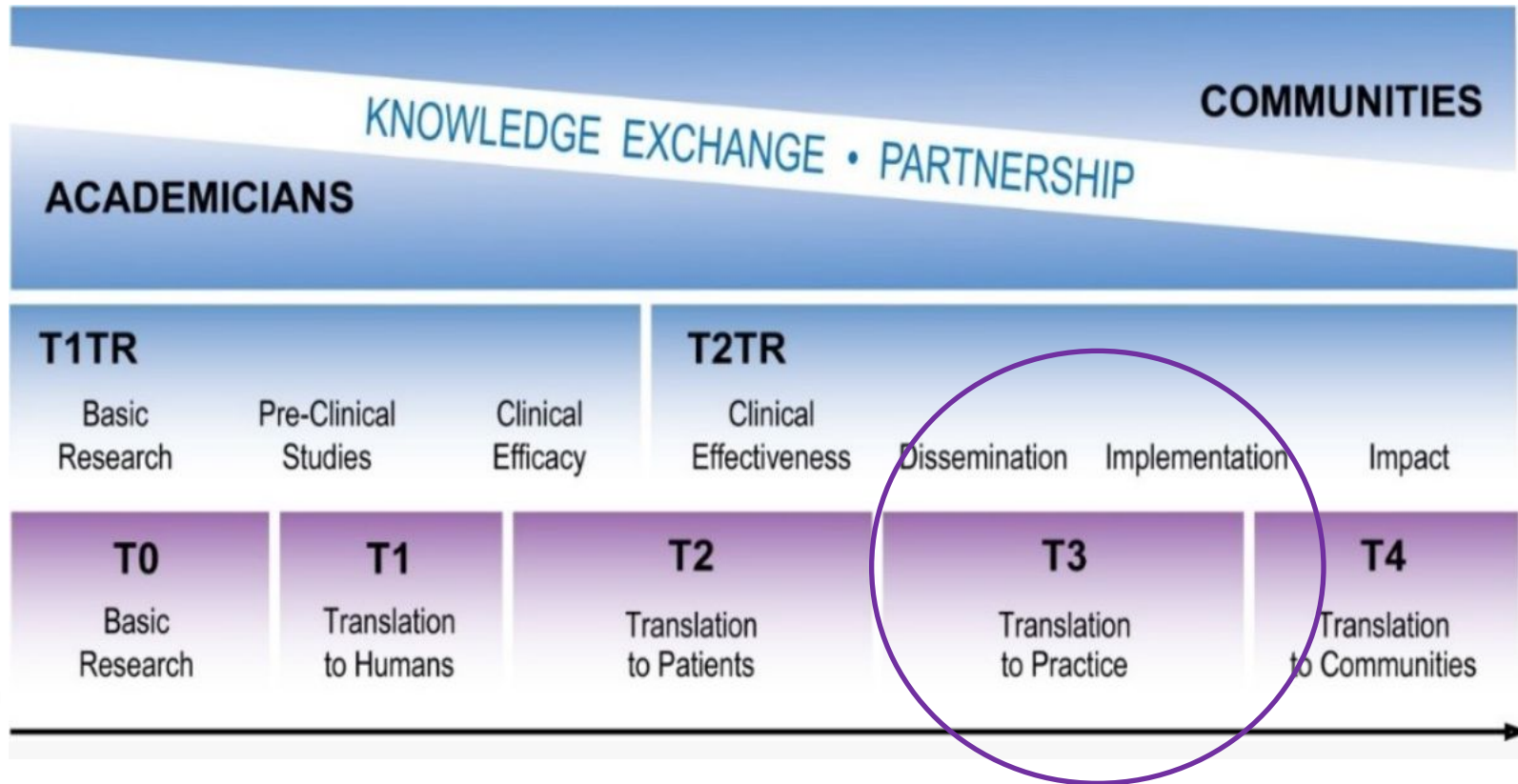
# Reminder:

Screening and treatment are  
important

Prevention is even better  
(especially for low-income moms)

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# The Next Step for ROSE is Implementation and Scale-up





# Implementation Trial of ROSE (R01 MH114883)

How much technical support is needed for agencies offering prenatal services to implement ROSE and sustain it over time?

The study enrolled 98 prenatal agencies across the US.



# ROSES

The ROSE Sustainment Study

Johnson et al. (2018). Protocol for the ROSE Sustainment (ROSES) Study. *Implementation Science*, **13**, 115.

# Implementation Science



Little is known about how well or under what conditions health innovations are sustained and their gains maintained once they are put into practice.

- The later-stage challenges of scaling up and sustaining evidence-supported interventions receive too little attention.

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# ROSE Sustainment Study

*How much technical support is needed for agencies offering prenatal services to implement ROSE and sustain it over time, and what are the costs and benefits of this support?*

Implementation conditions. We offer:

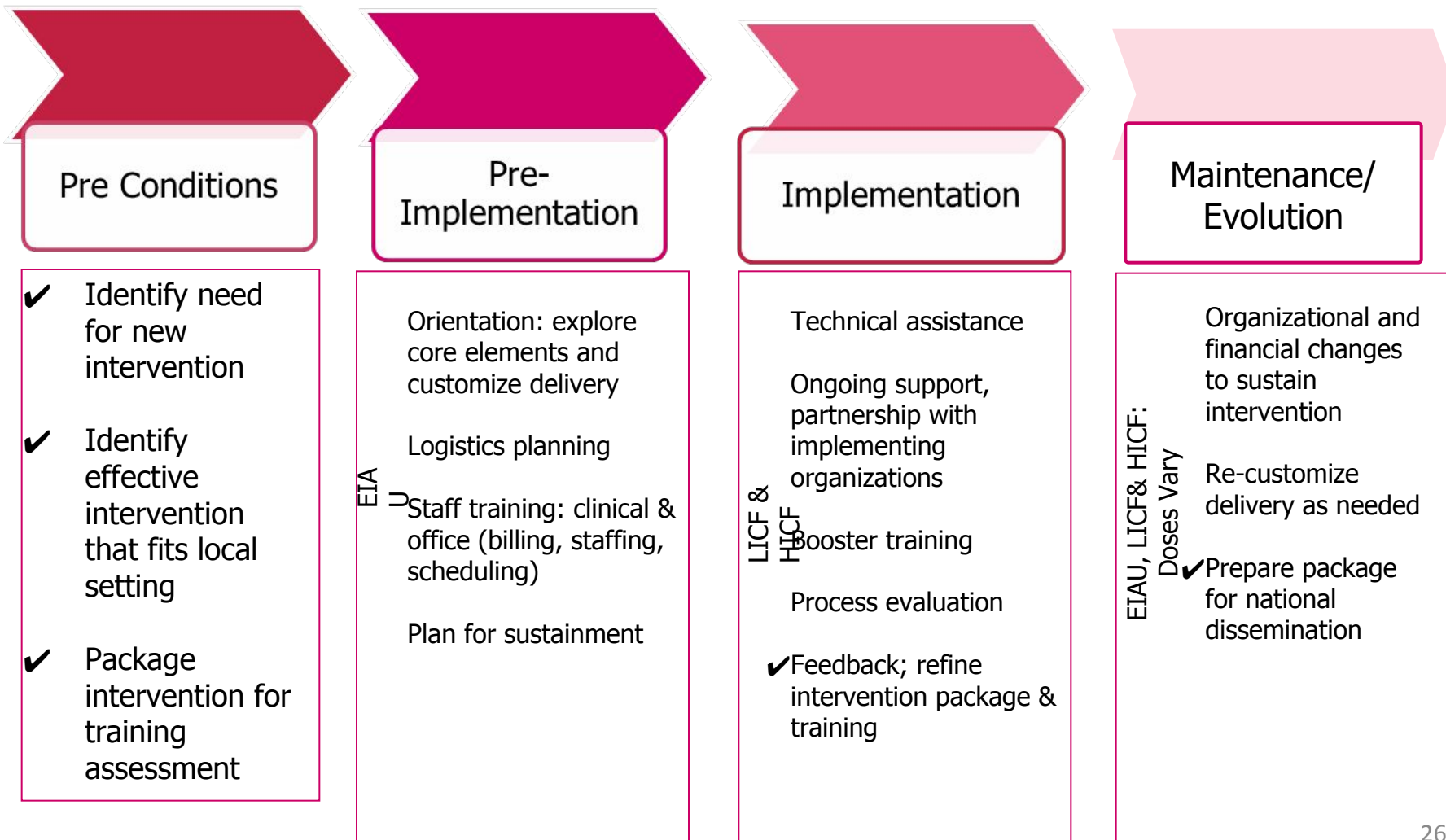
1. Enhanced implementation as usual (EIAU)
2. Low-intensity (quarterly) coaching and feedback (LICF)
3. High-intensity (monthly) coaching and feedback (HICF)

Outcomes:

- How long is ROSE sustained with adequate fidelity?
- Reach (# of patients receiving ROSE at each agency)
- Health impact (overall agency PPD rates over time)
- Costs and cost-effectiveness of EIAU, LICF, HICF
- Agency capacity and ownership of ROSE efforts

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# ROSES' Implementation Interventions is based on Replicating Effective Programs (REP)



# Enhanced Implementation As Usual (EIAU)

## Three initial meetings via video:

- 1.5 hour overall orientation with key operational and clinical staff
  - Present an explanation of ROSE core and adaptable elements
  - Collaboratively problem-solve and discuss how to best use and adapt ROSE to specific clinic setting
  - Using study-provided tools, develop a written, tailored implementation plan
- 3.5 hour training of ROSE facilitators
  - Train on how to deliver ROSE
  - Provide highly scripted manual, workbook of handouts (in English and Spanish), copy of PowerPoint slides and videotaped training session
- 30 minute training with operational staff
  - Provide technical assistance to reduce administrative barriers to uptake of ROSE (e.g., reimbursement, identification and referral procedures, identification of providers , transport).

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# Coaching and Feedback (LICF)

## Three components via videoconference:

- “Booster” meetings for additional clinical and operational support.
- Feedback on fidelity, overall PPD rates at the agency, operational successes and challenges
- “Collaborative Board” meeting with study investigators and other sites implementing ROSE to celebrate successes and problem-solve challenges

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# Lessons Learned to Date

- Some agencies serving low-income women struggle with basic infrastructure
  - Structural challenges at the agency (changing buildings, losing staff, agency closing)
  - Agencies are dynamic systems
  - Support these agencies
- CPT codes for preventive services could be improved
- Payors should reimburse health education codes (e.g., 98960-98962)

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# Lessons Learned to Date

- It's better if ROSE can be integrated into the regular workflow and not set up a new process (agency already has a group or individual infrastructure).
- Champions/leadership in training, usually higher degree of participation
- Videoconference provision of ROSE was working fine in rural areas, even before COVID
- With COVID, most agencies just kept delivering ROSE the way they were any other services (including by phone)

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# Practice approaches ROSE has taken to address racial, ethnic, socioeconomic disparities

- ROSE was developed for low-income women; 47% of births in US are covered by Medicaid
- ROSE was created as a class that teaches useful skills for all moms, rather than as “treatment,” to avoid stigma
- ROSE was tested and validated in diverse populations
- ROSE can be taught by visiting nurses and community health workers, as well as other kinds of providers, making the intervention feasible for many kinds of organizations
- Because of USPSTF recommendation, ROSE is reimbursable under ACA

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# Practice approaches ROSE has taken to address racial, ethnic, socioeconomic disparities

- ROSE is structured and easy to learn
- ROSE can be delivered via videoconference; making it easier for rural programs
- ROSE uses principles (relationship skills, social support, self-care) that translate well across many cultures
- The ROSE workbook is available in Spanish with translation to more languages underway
- ROSE materials are attractive and easy to understand
- The fundamental stance of ROSE is affirming
- ROSE materials are offered for free

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# ROSE implementation approaches to address racial, ethnic, socioeconomic disparities

- We have reached out to agencies that serve at least half low-income women (Healthy Start, visiting nurses, WIC, FQHCs, OBGYN clinics, doula and midwife groups, etc.)
- Many of the agencies enrolled in ROSES are run by or employ several minority providers
- Our research staff is diverse
- Agency sustainability plans emphasize involving and empowering agency staff as part of the agency change process

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# ROSE implementation approaches to address racial, ethnic, socioeconomic disparities

- The intervention is very flexible (group/individual, office/videoconference/home visit, splitting up sessions) and therefore can be offered as best fits the agency
- Participating agencies include urban, rural, frontier, home visiting, WIC, physicians' offices, Healthy Start, tribal agencies, and more
- We adapt the clinical training to interventionists' level of experience

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**Free program resources and training videos  
are available at:**  
**<https://www.womenandinfants.org/rose-program-postpartum-depression>**

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