

Biofeedback

Breathing

Program

Recommended procedure for
the Edgecombe County Jail



Participant Intake Procedures & Collection of Baseline Data

1 Receive consent using this sheet.

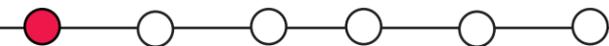
Through these procedures, participants will be informed about how their confidentiality will be protected, possible benefits and risks of participating, their autonomy to withdraw from the program without penalty, and their right to request that their data is omitted from analysis.

2 Create a HeartCloud account.

With help from the Data Manager, if necessary, they will create a HeartCloud account for the participant and choose a username that will not identify the participant associated with it. HeartCloud is HeartMath's server which syncs and saves data from the Inner Balance app. The Program Implementer will log in to the associated HeartCloud account on a tablet under the participant's tablet account so that the participant can easily access the Inner Balance app and so that their data can be synced.

3 Complete the base- line questionnaire

After intake procedures are completed, participants will complete the baseline participant questionnaire. This questionnaire will measure symptoms of anxiety and depression, along with overall emotional wellbeing. The Program Implementer will be responsible for administering baseline participant questionnaires before the intervention preparation session.



Preparation For Biofeedback Intervention

1 Introduce the concepts

Before participants begin practicing with the Inner Balance devices, they must be introduced to the concepts of HRV, coherence, and biofeedback.

2 Intervention Prep Session

They must also learn how to use the Inner Balance app. The Program Implementer will introduce these concepts to each participant during a 30-minute Intervention Preparation session. During this session, the participant will have the chance to engage with an initial biofeedback session under the guidance of the Program Implementer. They will also be introduced to a brief audio session within the Inner Balance app called "Quick Coherence Guide," which demonstrates how to practice mindful breathing techniques without the use of a biofeedback device. Ideally, this preparation session should be conducted with one participant at a time, so that participants will have ample opportunity to ask questions and to practice with the app. However, these sessions may be conducted with small groups of 2 to 4 participants, at ECSO's discretion, depending on time constraints and other circumstances.

Use your checklist: The Program Implementer will have an intervention preparation checklist on hand to make sure that they cover each part of the biofeedback introduction. The checklist will include a question asking about whether or not participants were engaged during the initial biofeedback session (e.g. "Was the participant watching the screen and breathing with the breath pacer?"). The Program Implementer should utilize this checklist to document the introduction and engagement, and to add it to the program log. See Appendix C for an example of a checklist that could be used.

3 Long biofeedback sessions

After learning about the components of biofeedback, participants will be encouraged to engage with either a 5-8 minutes long biofeedback session twice a day or a 10-15 minutes session once a day for the duration of the pilot. They will also be encouraged to practice mindful breathing techniques on their own, without the use of a biofeedback device, whenever they would like, but ideally at least once a day.



And So It Begins: Biofeedback Intervention

1 Individual daily sessions

Once a participant has been introduced to biofeedback, they will be free to practice with the app on their own time. Ideally, participants will either engage in two biofeedback sessions per day of 5-8 minutes, or one 10-15 minutes session once a day, every day for the duration of the four-week program. Achieving at least 10-15 minutes of biofeedback practice each day is ideal, but depending on feasibility, participants may

2 Device sign-ups rules

Currently at ECSO, customers have access to Samsung tablets from 10:00am-3:00pm, and from 7:00pm-10:00pm. Since customers are not allowed to sign out a tablet more than once during one of these periods, they will have to engage in biofeedback once in the morning or early afternoon, and once in the evening, if they are to complete two biofeedback sessions a day. There is already a process in place at ECSO for customers to sign out a tablet for personal use. Sign out processes for Inner Balance Bluetooth devices could be incorporated into this existing process.

3 Designating a safe space

When practicing with Inner Balance, participants should be encouraged and allowed to utilize dedicated spaces that will give them privacy to be able to focus on their breathing without distraction. The process for using this space will need to be determined by ECSO and clearly communicated to participants, and it will be within ECSO's discretion to allow more than one participant to use the dedicated space at a time. Additionally, this could be a good space to keep educational materials on stress, HRV, and coherence, as well as tips on using the Inner Balance app and practicing mindful breathing techniques without biofeedback devices.

4 Ensuring daily data transfers

After each session, the Inner Balance app will record the date, length, average coherence score, and an achievement score for the session. These data will be synced to the HeartCloud. The Data Manager will be responsible for ensuring that HeartMath data are successfully transferred to and stored in a central, secure location for future analysis, per the data management procedures developed during pre-implementation.

Stay tuned: The Inner Balance app contains audio sessions for guided meditation, which can help guide participants in the practice of mindful breathing. It also teaches them techniques that they can use on their own, without the help of an app or audio file. ROI or a third party will develop posters and/or pamphlets with information on mindful breathing techniques as well as reminders to practice these techniques, especially when feeling angry or stressed. Data on mindful breathing practice will be based on participant self-report at midline and endline.



Collection Of Midline & Endline Data

1 Midline and endline questionnaires

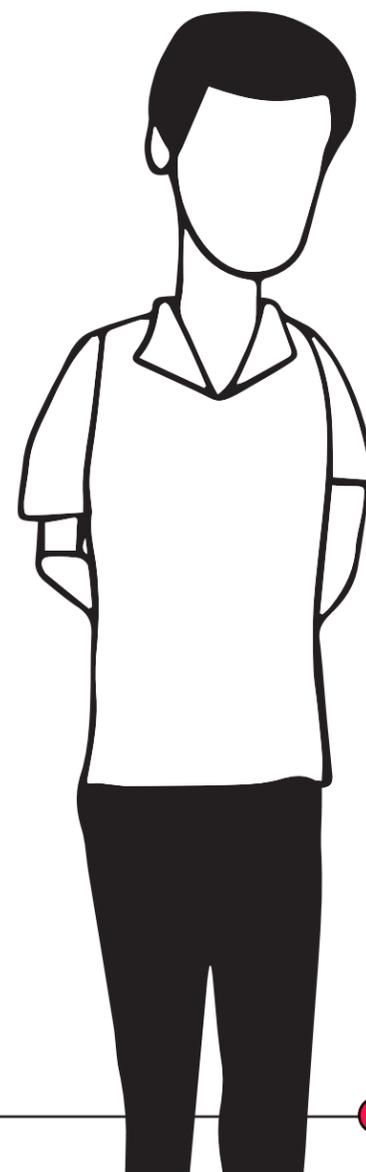
The Program Implementer will administer a midline questionnaire to each participant two weeks after the participant's first biofeedback session. They will administer an endline questionnaire to each participant four weeks after each participant's first biofeedback session. More information about these questionnaires can be found in the evaluation section of this document, and in Appendix D.

2 Context

As mentioned in Step 1, Part F of the implementation procedures, after the end of the four-week intervention, the Program Coordinator should revisit the context section of the program log. He or she will document any events, changes in policy or organizational structure, or new initiatives started during the course of implementation.

3 Qualitative interviews

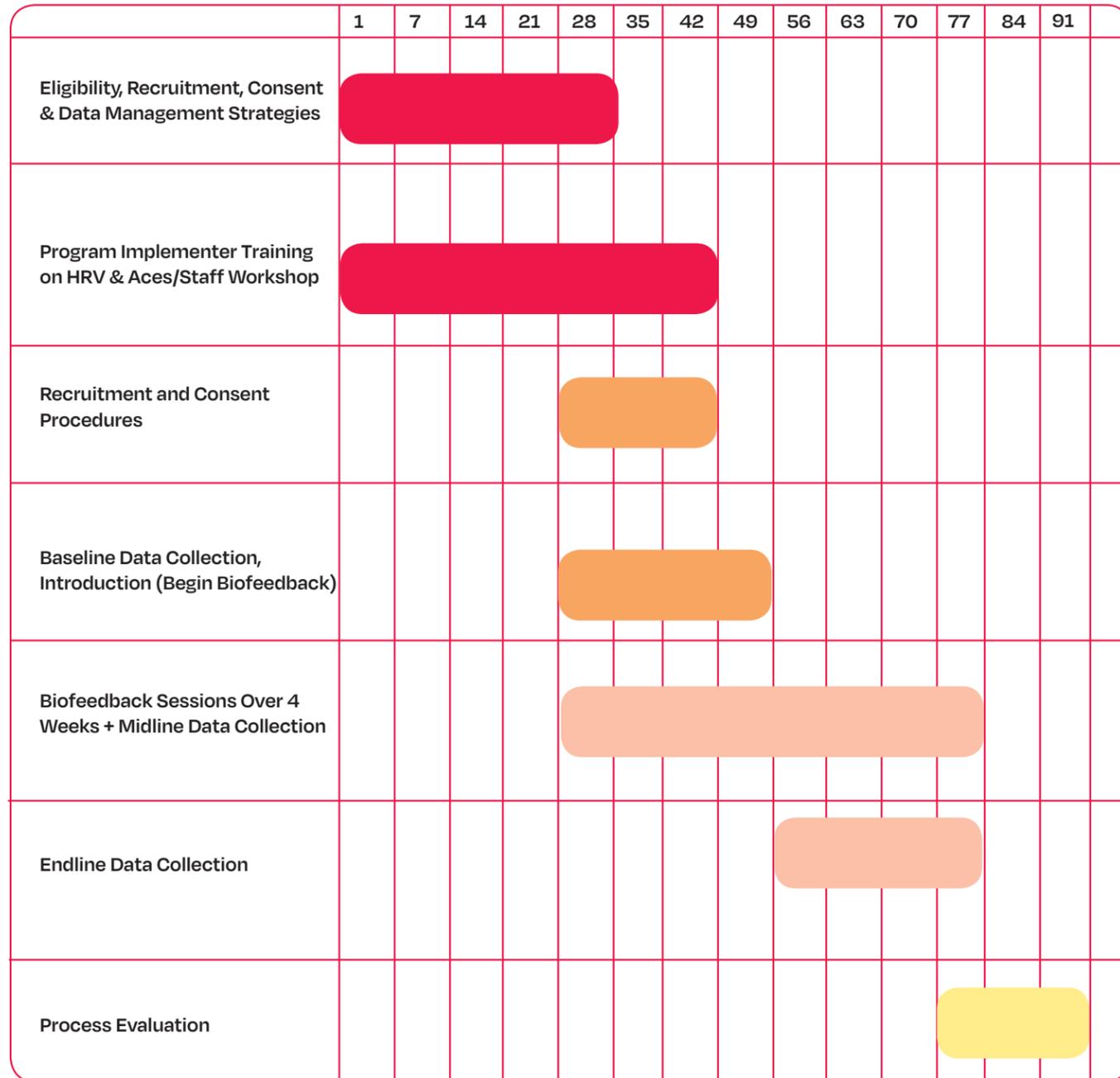
At the end of the program, ROI will conduct brief qualitative interviews with staff to learn more about perceived feasibility, acceptability, and barriers and facilitators to implementation of this pilot program and of a potential future full-scale program. They will ask about adaptations made to the program and other staff concerns about sustainability and scale-up. Qualitative interviews should be conducted with, at a minimum, the Program Coordinator and Program Implementer(s). If time and resources allow, it may also be useful to interview other program staff, as well as other ECSO staff that were not directly responsible for program implementation, but who may have interacted with aspects of the program.



Pilot Implementation Timeline

3 Month Expected Duration

➔ **Figure 3: GANTT Chart of Pilot Program**



➔ **Table 2: Duration of Pilot Program Activities**

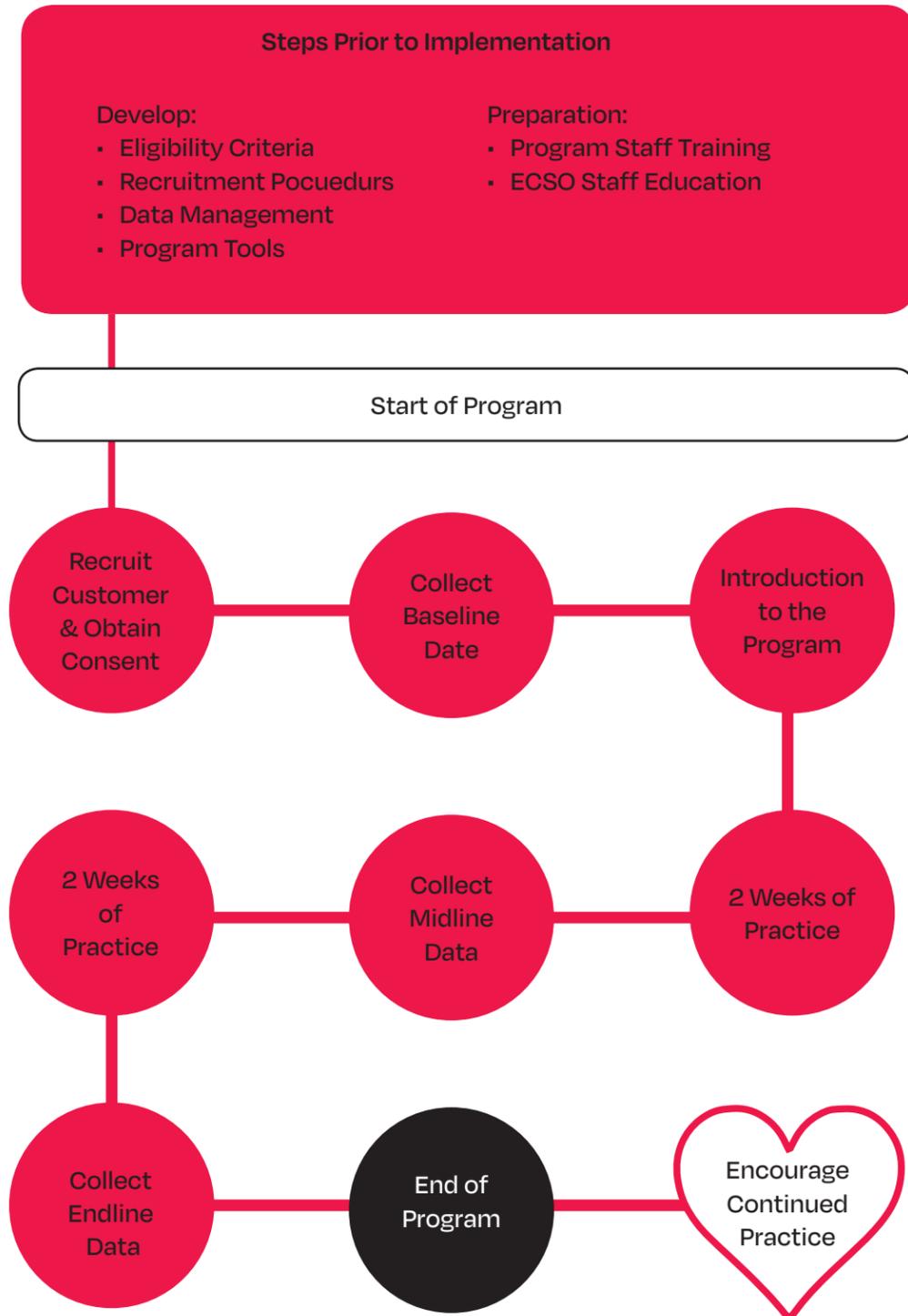
Participant	Start Day	End Day	Duration	Weeks
Recruitment and Consent Procedures	1	28	28	0-4th week
Baseline Data Collection	1	42	42	0-6th week
Intervention Preparation	28	42	14	4th-6th week
Biofeedback and Mindful Breathing	28	49	21	4th-7th week
Midline Data Collection (after 14 days of prac-	28	77	49	7 weeks
Biofeedback and Mindful Breathing	57	77	21	8th-11th week
Endline Data Collection (after 28 days of practice)	77	91	14	11th-13th Week



Customer Participation Timeline

4-5 Week Expected Duration

➔ **Figure 4: Participant Flow**



➔ **Table 3: Duration of Participant Activities**

Participant Steps	Day
Recruitment and Consent Procedures	1
Baseline Data Collection	1-3
Intervention Preparation	1-3
Biofeedback and Mindful Breathing Practice	3-17
Midline Data Collection (after 14 days of practice)	17
Biofeedback and Mindful Breathing Practice	18-31
Endline Data Collection (after 28 days of practice)	31

