

# What's New in ResearchKit and CareKit

Session 232

Samantha Mravca, Health Team



ResearchKit



ResearchKit



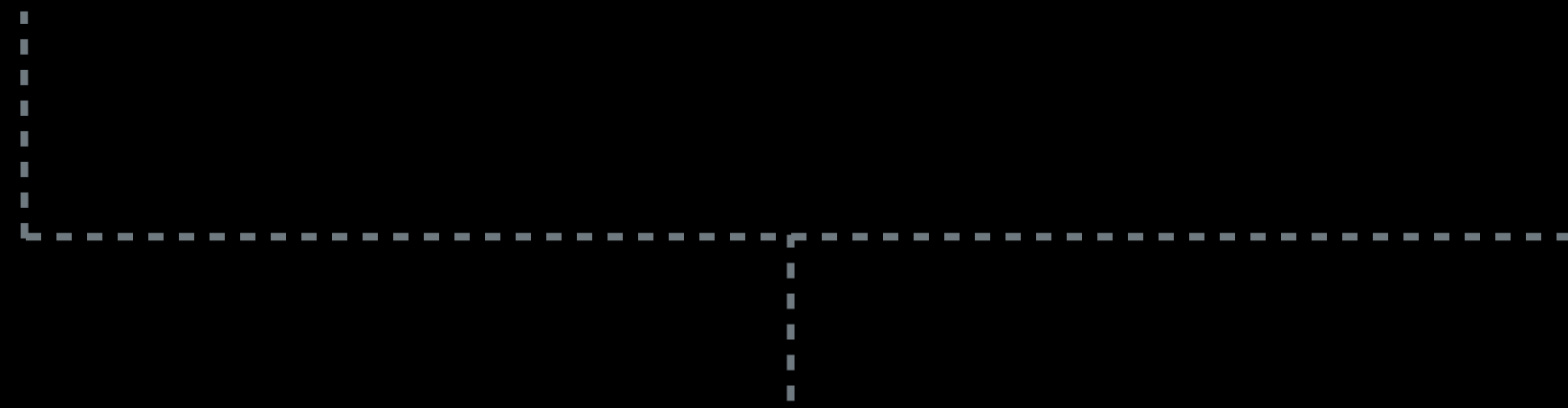
CareKit



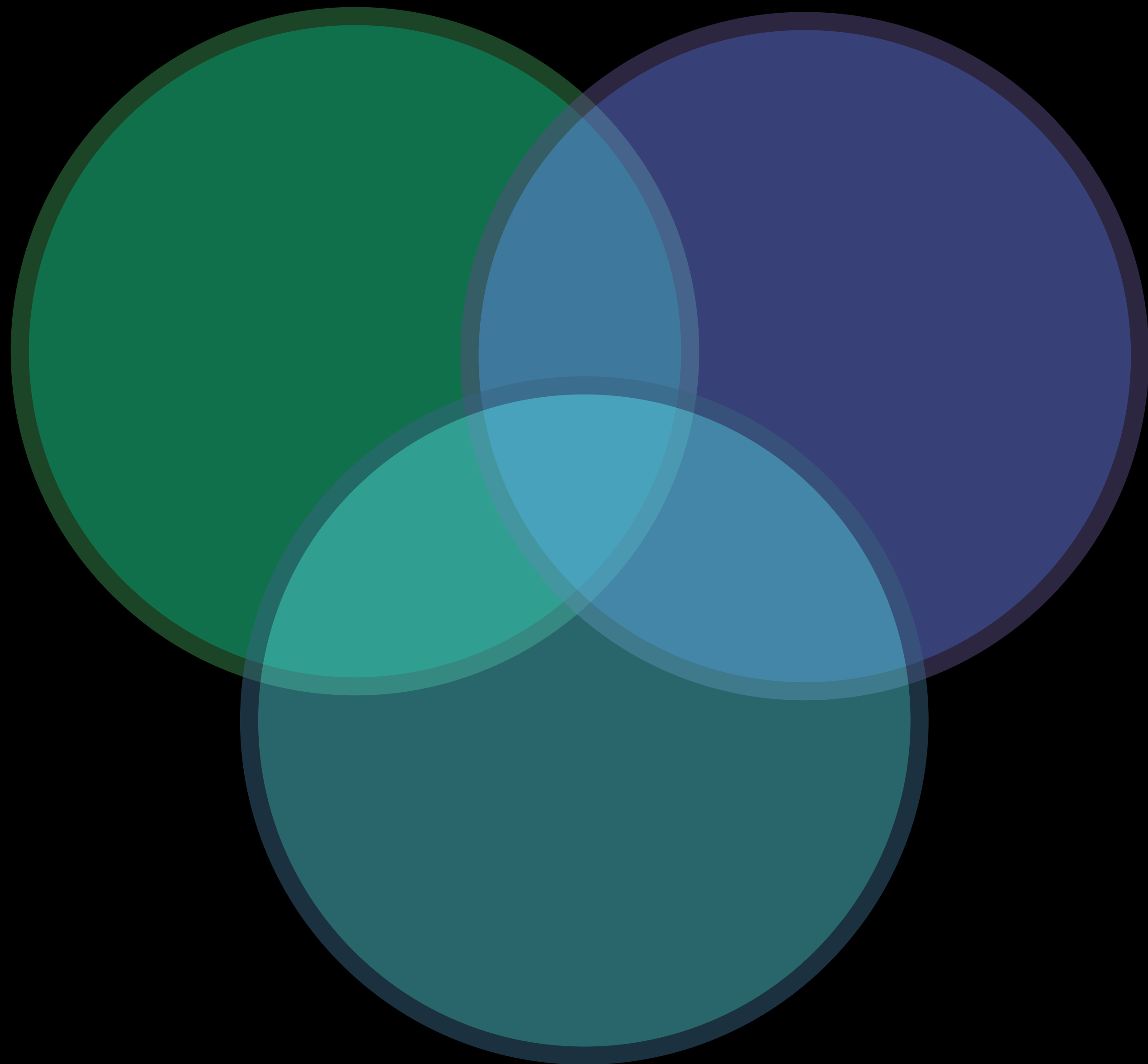
ResearchKit

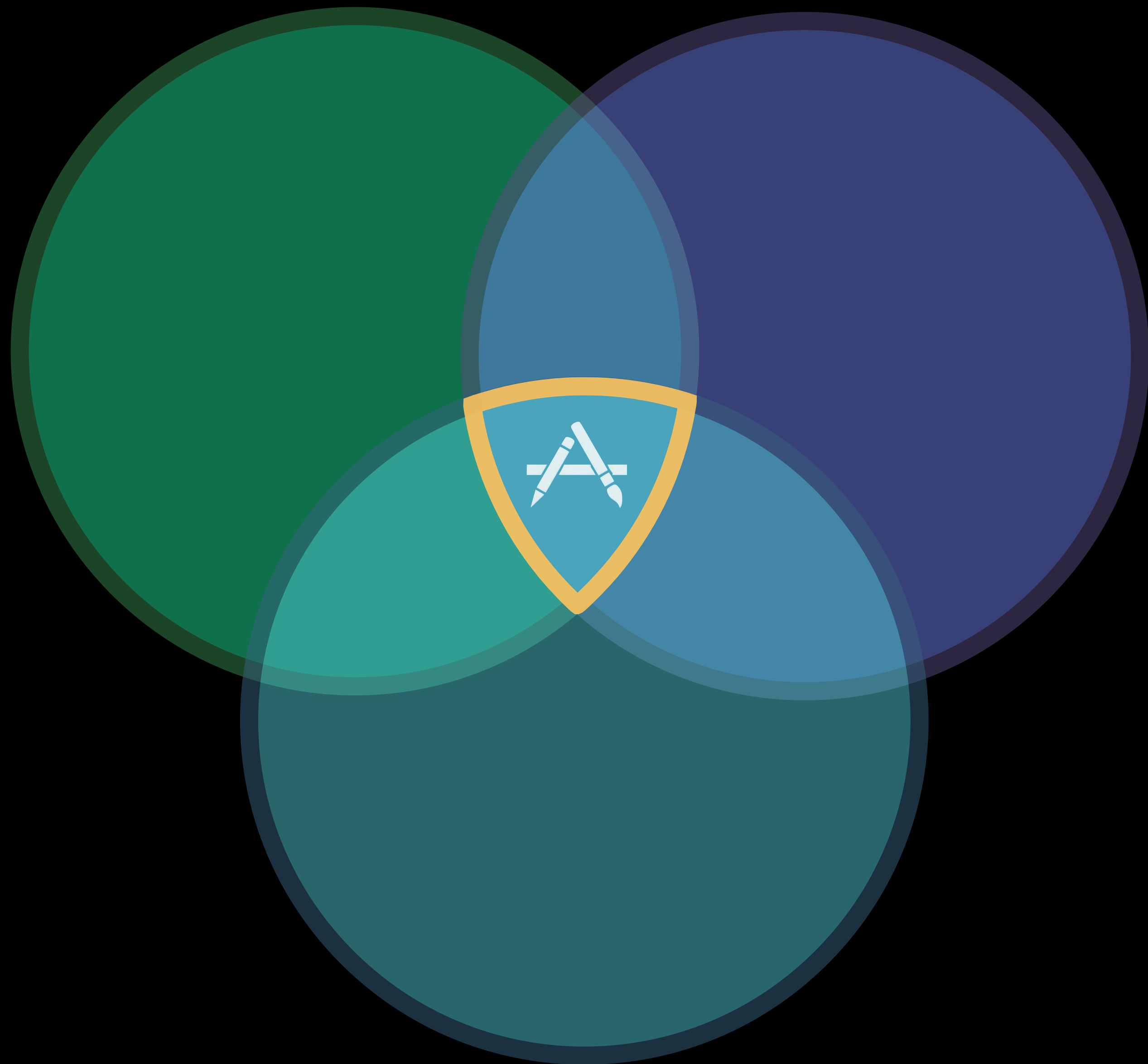


CareKit



HealthKit















MyAsthma

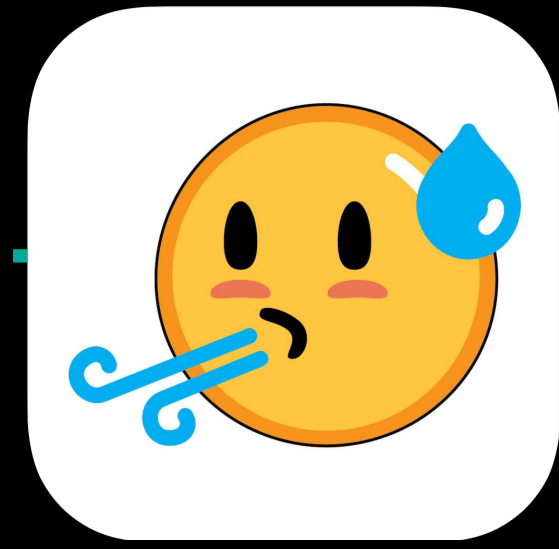






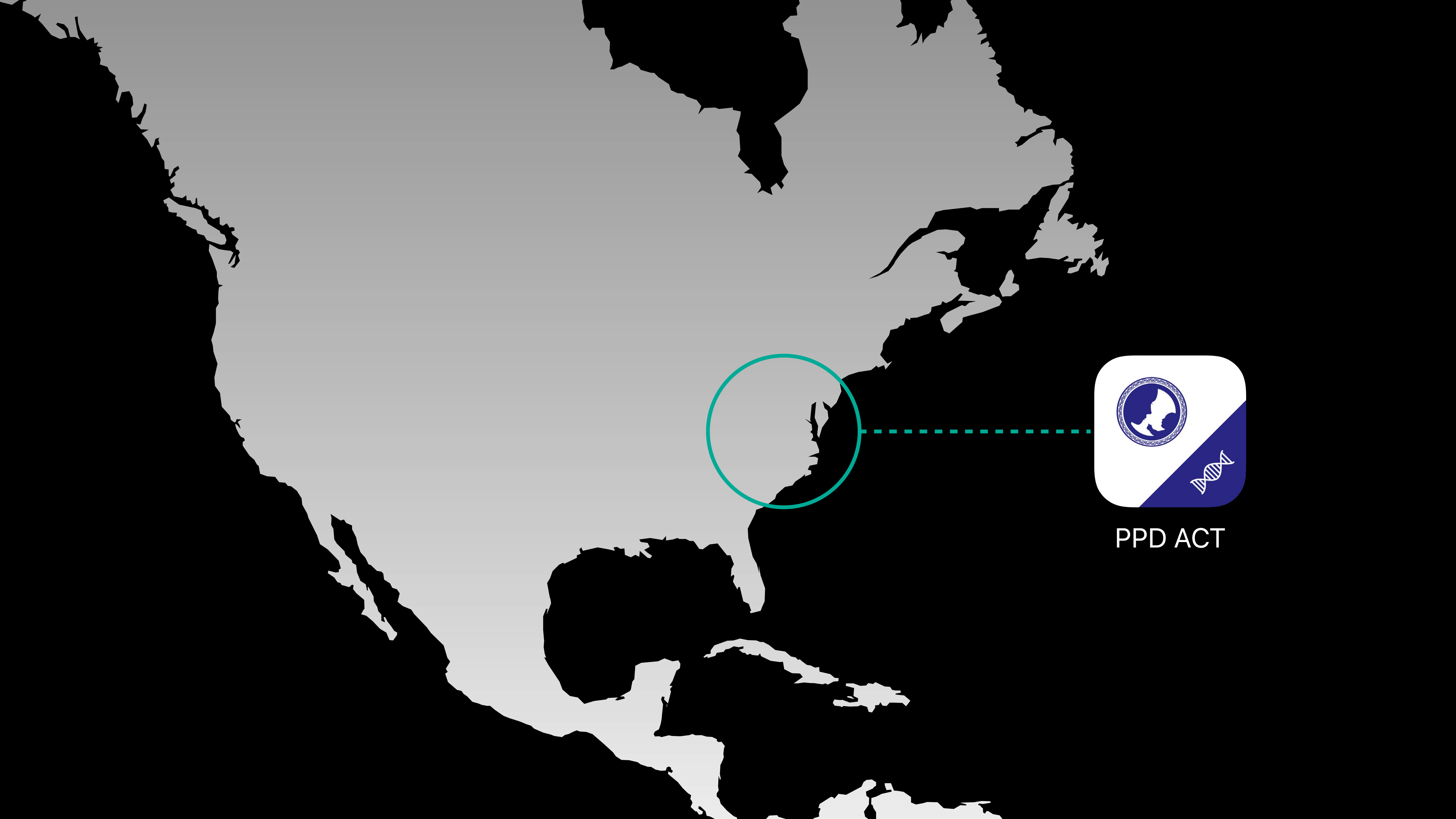
Itch Tracker





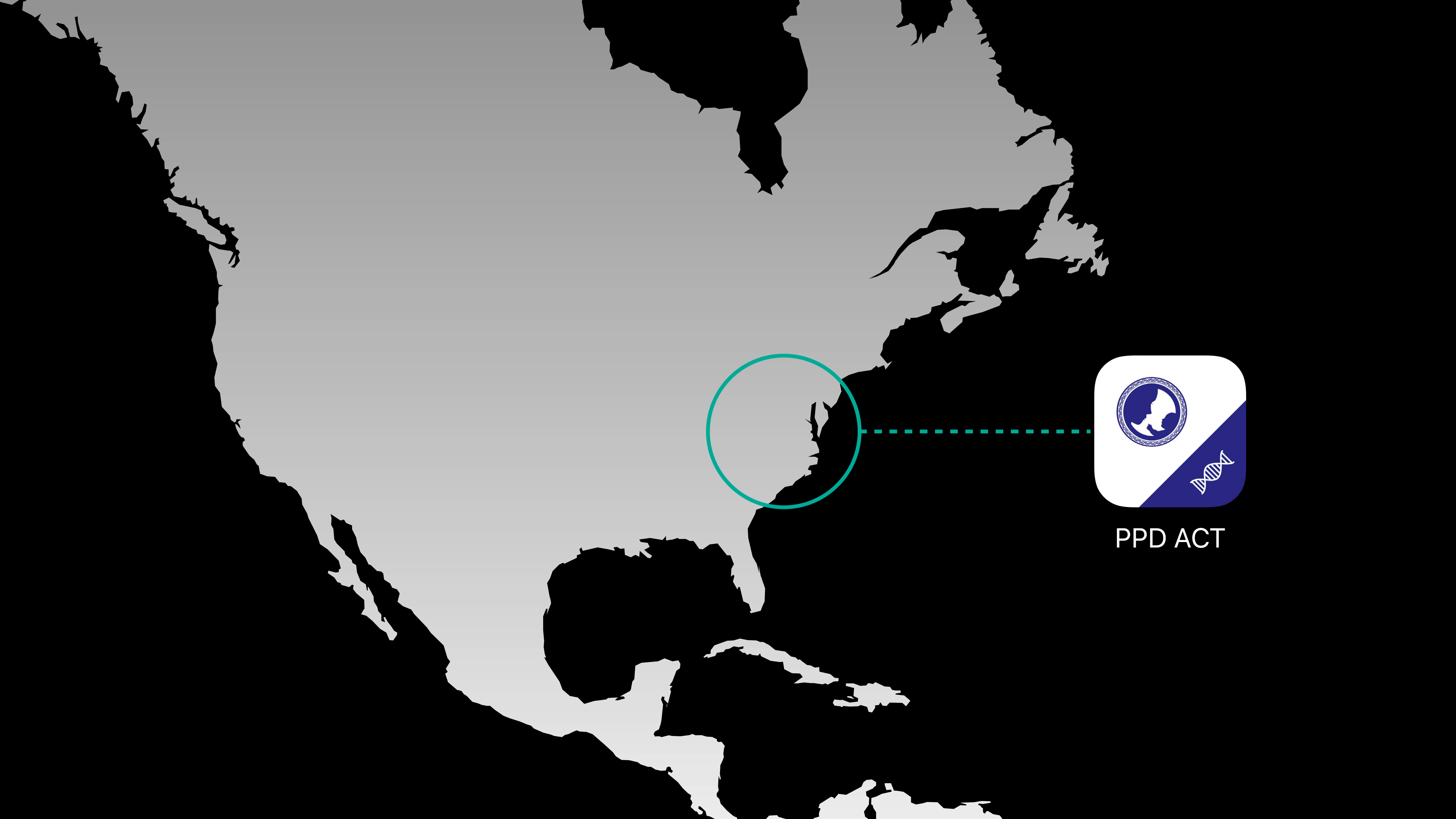
emojifit Diabetes



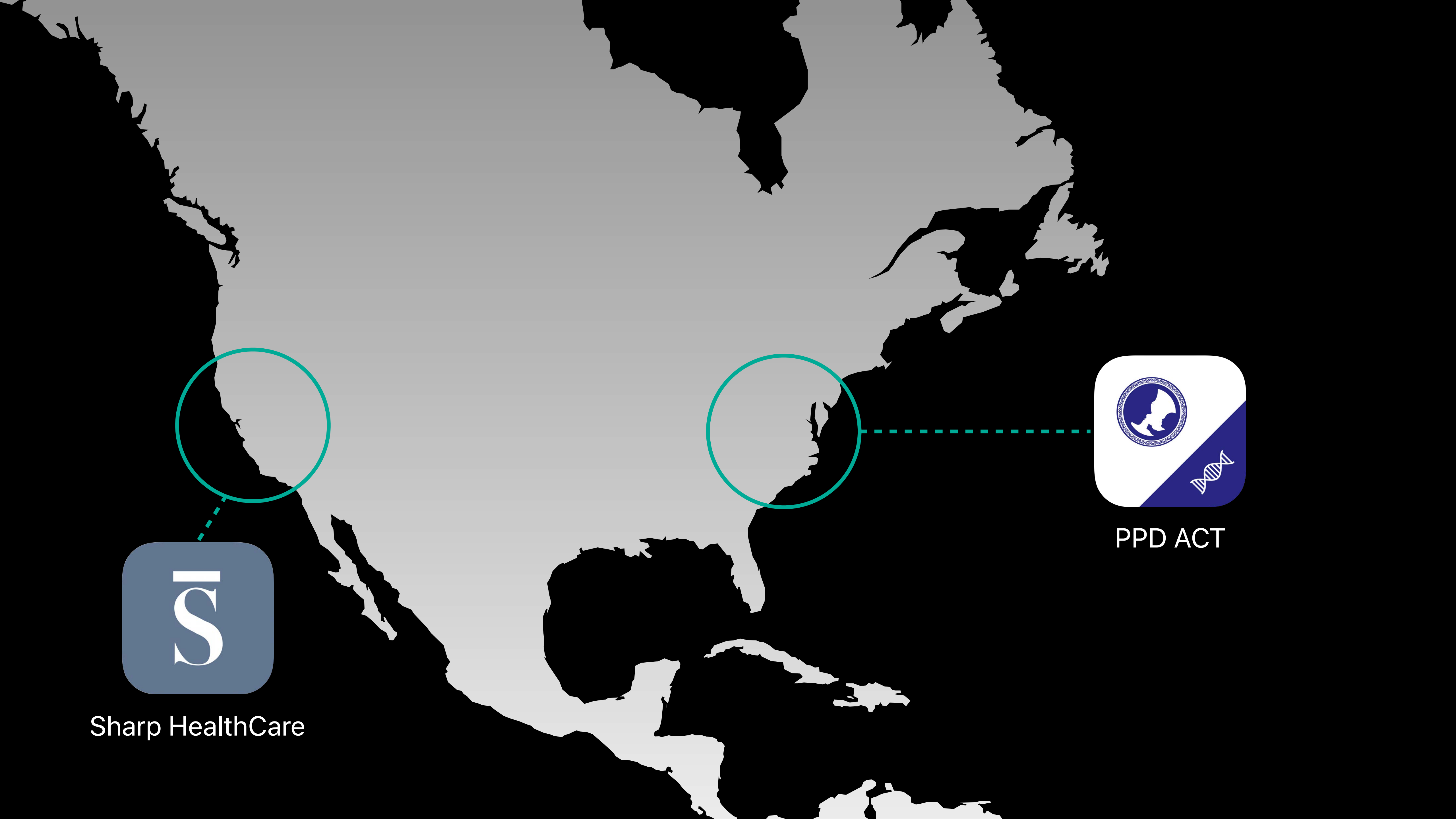


PPD ACT





PPD ACT



Sharp HealthCare



PPD ACT







CareCom

NYU Langone  
MEDICAL CENTER

ASAA  
ZZZ

JUNTENDO  
UNIVERSITY  
TOKYO  
1888

ONE  
DROP

UCSF

S

JUNTENDO UNIVERSITY  
TOKYO  
1888

EMEM SNIR  
JINS MEME

Nestlé  
Skin  
Health

New features

New features

CareKit prototyping tool

New features

CareKit prototyping tool

Community collaboration



# New Features



ResearchKit



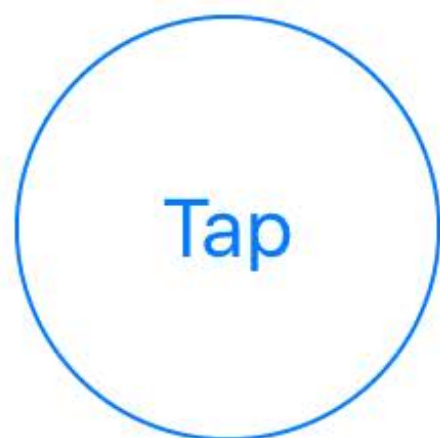
9:41 AM

100%

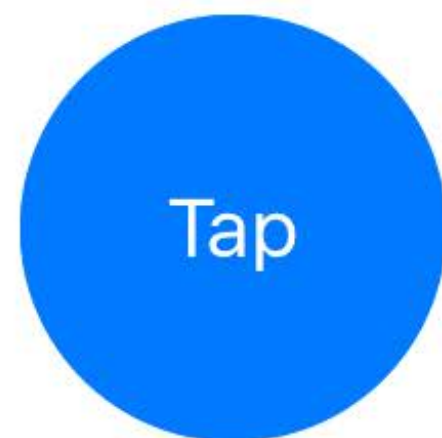
Step 5 of 6

[Cancel](#)

Every time you start hearing a sound, tap the left or right button to indicate which ear you hear the sound in.



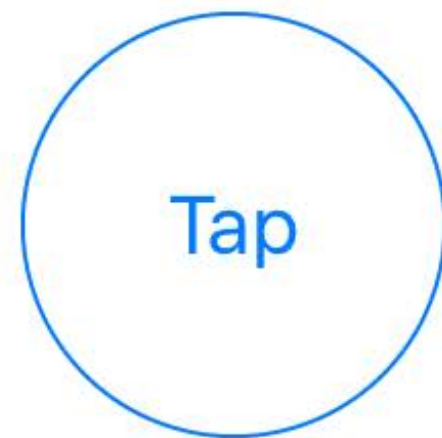
Left Ear



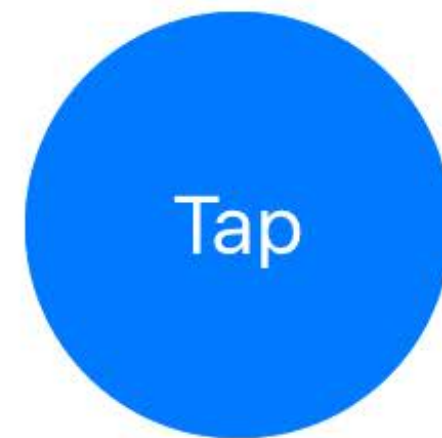
Right Ear

# Tone Audiometry

Every time you start hearing a sound, tap the left or right button to indicate which ear you hear the sound in.



Left Ear

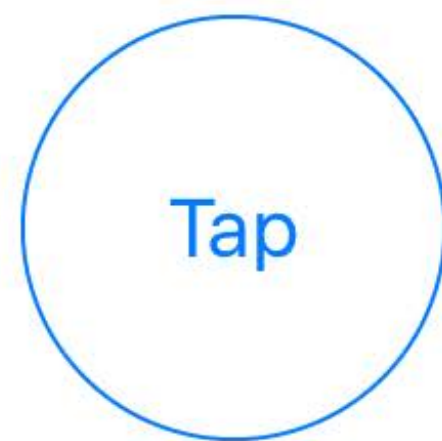


Right Ear

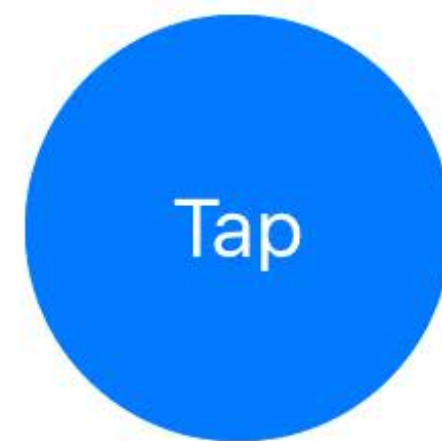
# Tone Audiometry

Hearing test

Every time you start hearing a sound, tap the left or right button to indicate which ear you hear the sound in.



Left Ear



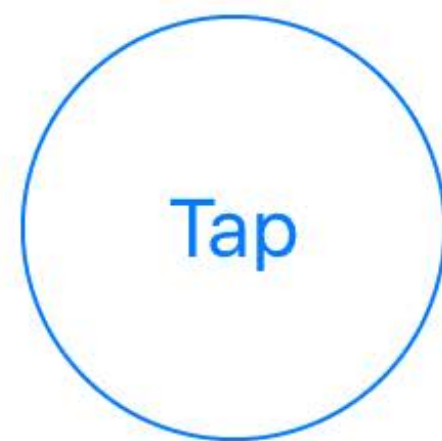
Right Ear

# Tone Audiometry

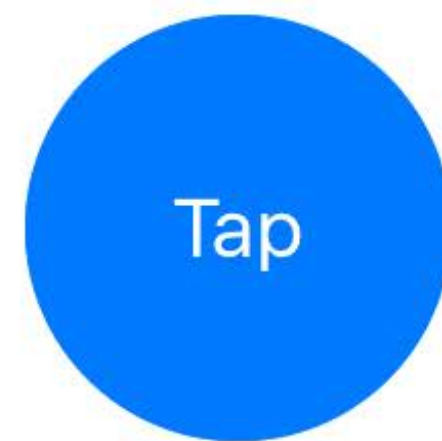
Hearing test

Different audio frequencies

Every time you start hearing a sound, tap the left or right button to indicate which ear you hear the sound in.



Left Ear



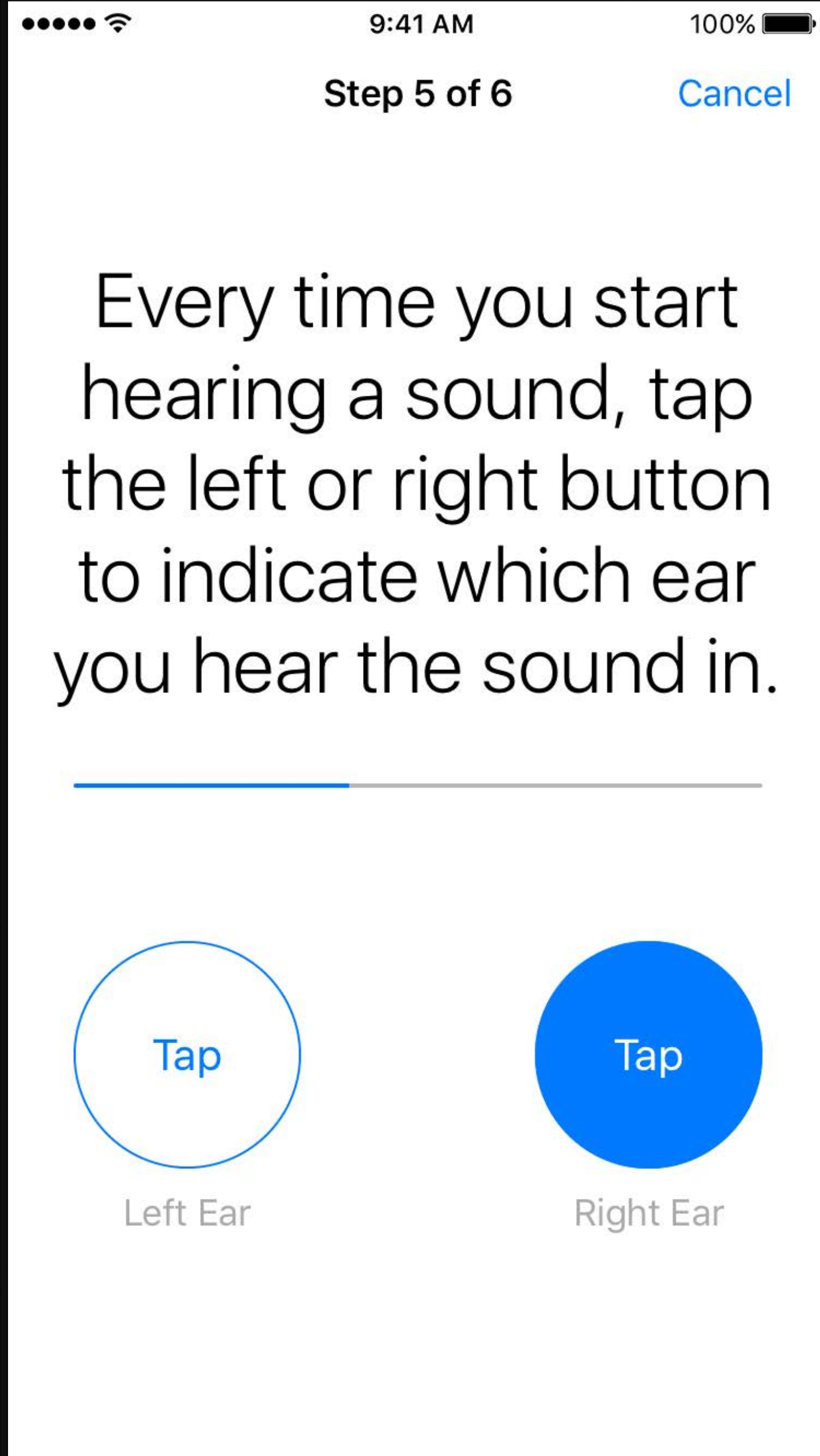
Right Ear

# Tone Audiometry

Hearing test

Different audio frequencies

Left and right channels



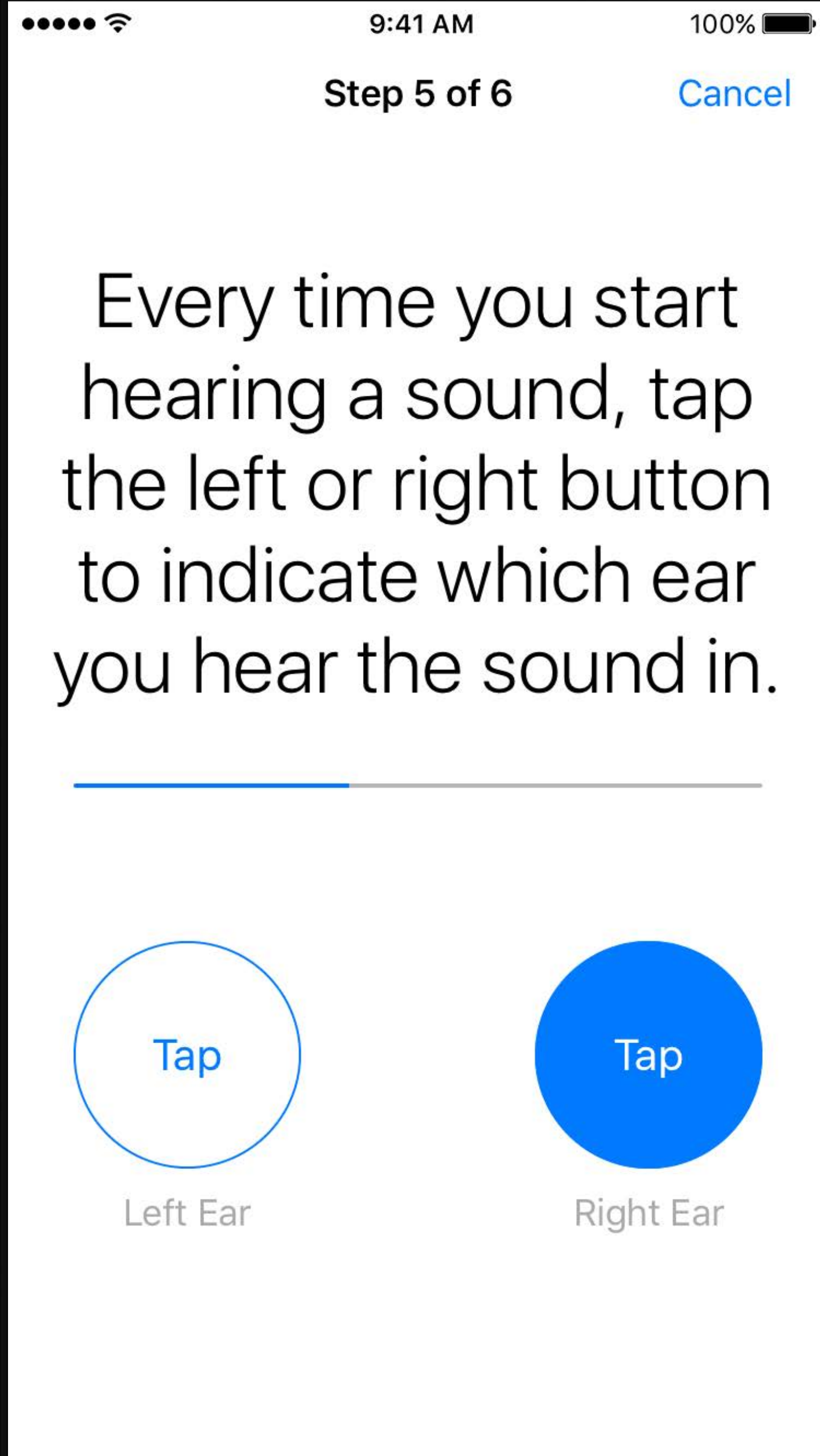
# Tone Audiometry

Hearing test

Different audio frequencies

Left and right channels

Progressive increase in volume



# Tone Audiometry

Hearing test

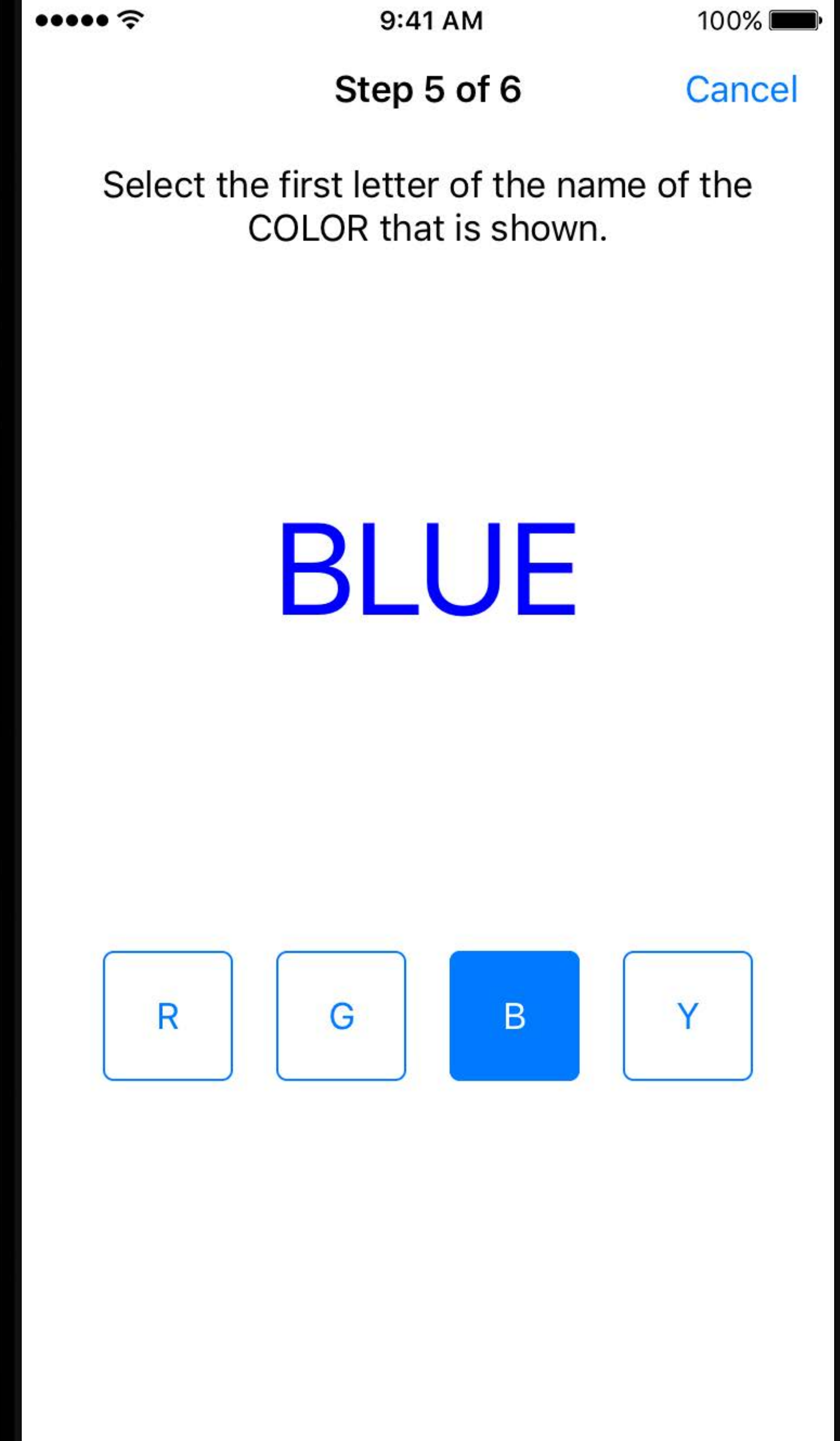
Different audio frequencies

Left and right channels

Progressive increase in volume

Left and right buttons

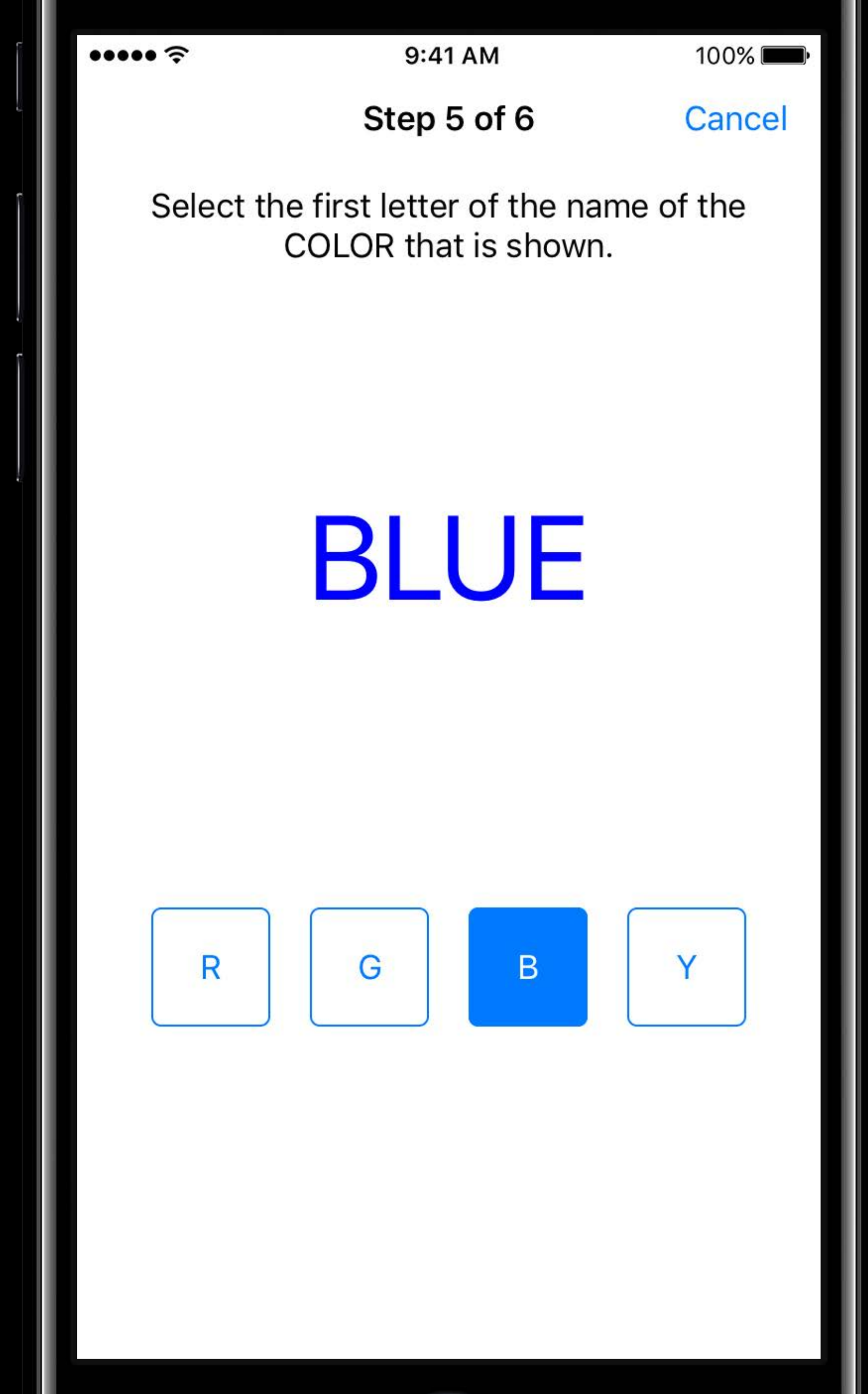
# Stroop





# Stroop

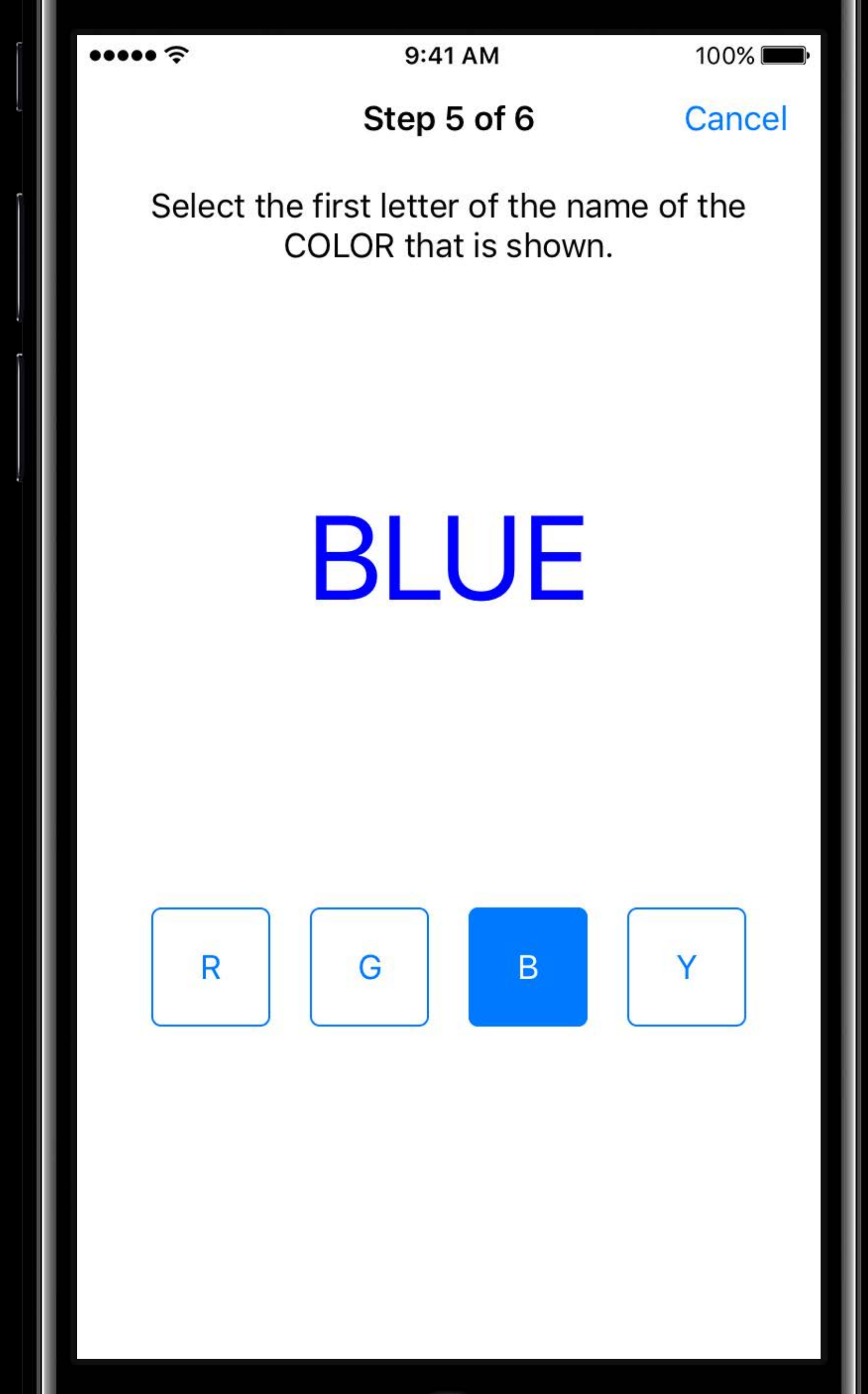
Selective attention



# Stroop

Selective attention

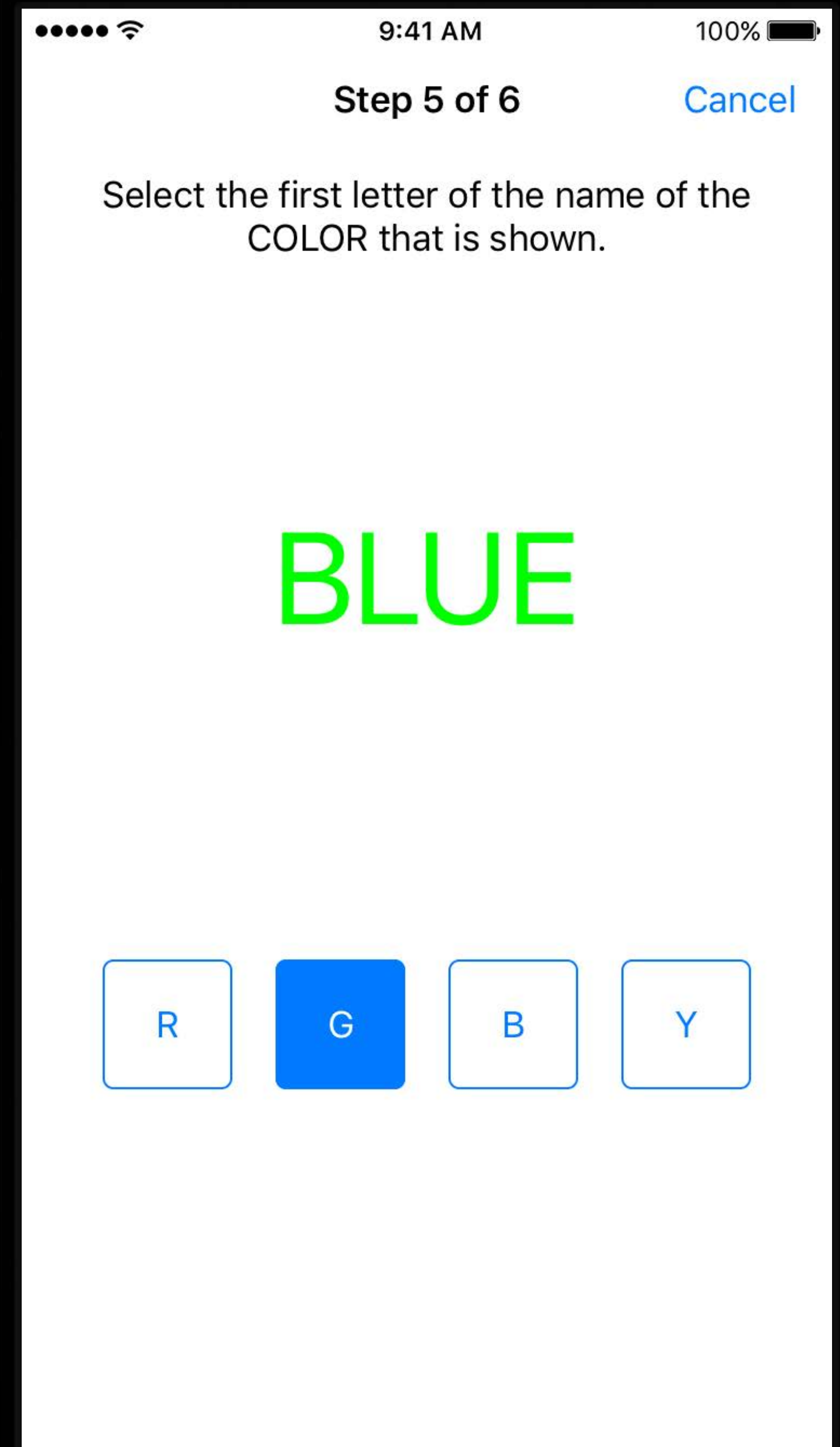
Concordant



# Stroop

Selective attention

Concordant and discordant



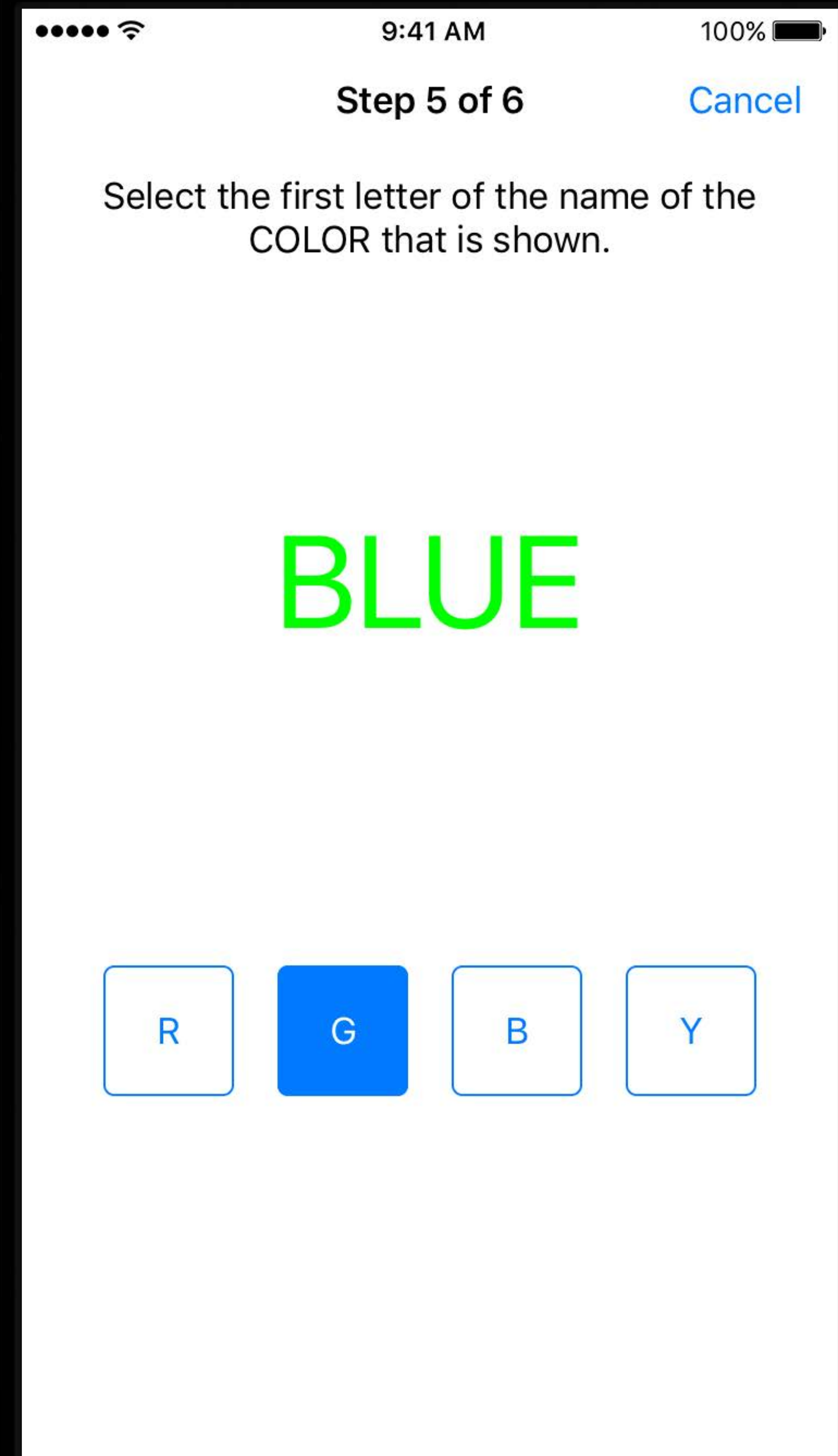
# Stroop

Selective attention

Concordant and discordant

Returns

- Pass/Fail



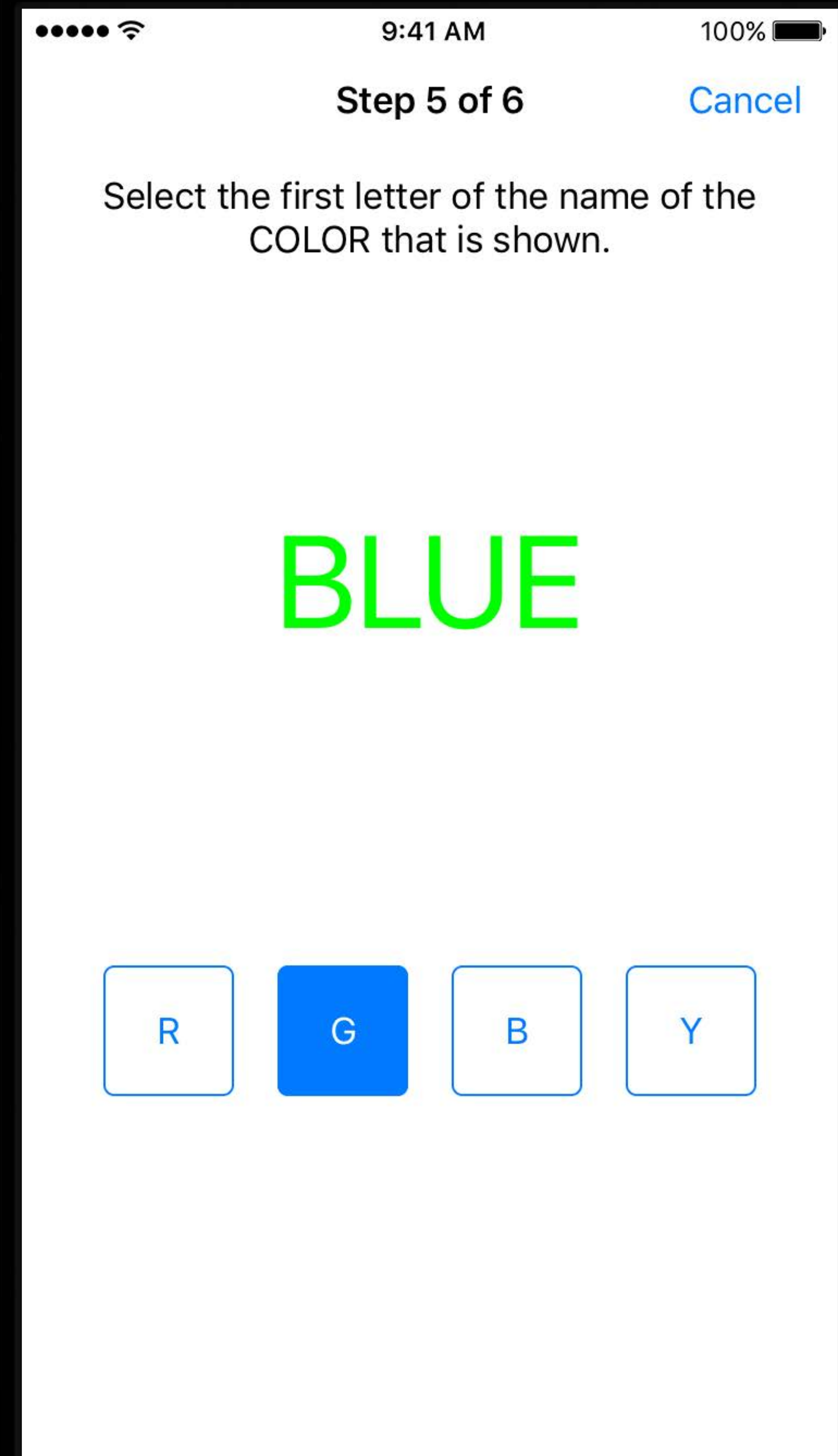
# Stroop

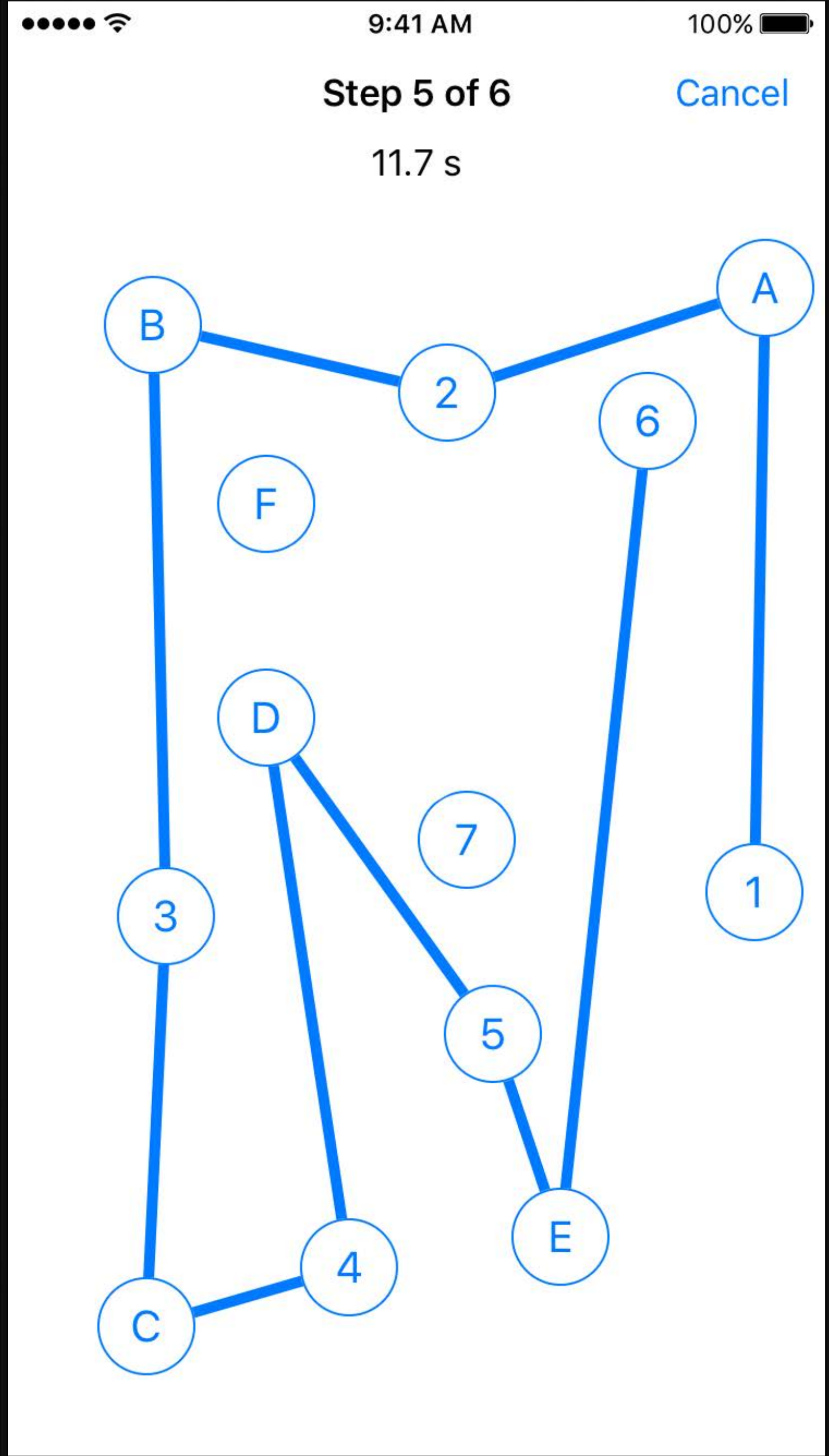
Selective attention

Concordant and discordant

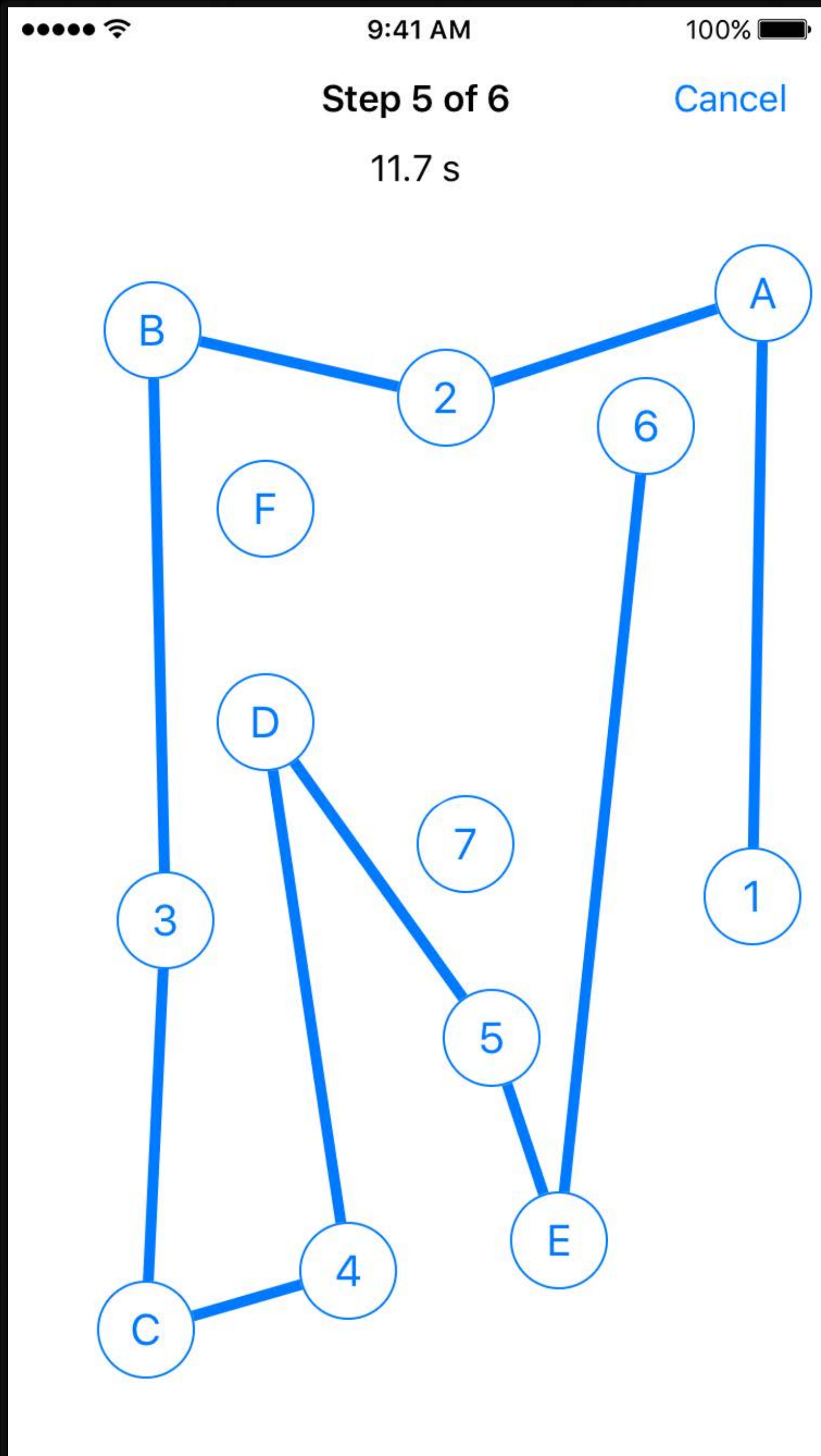
Returns

- Pass/Fail
- Time to complete



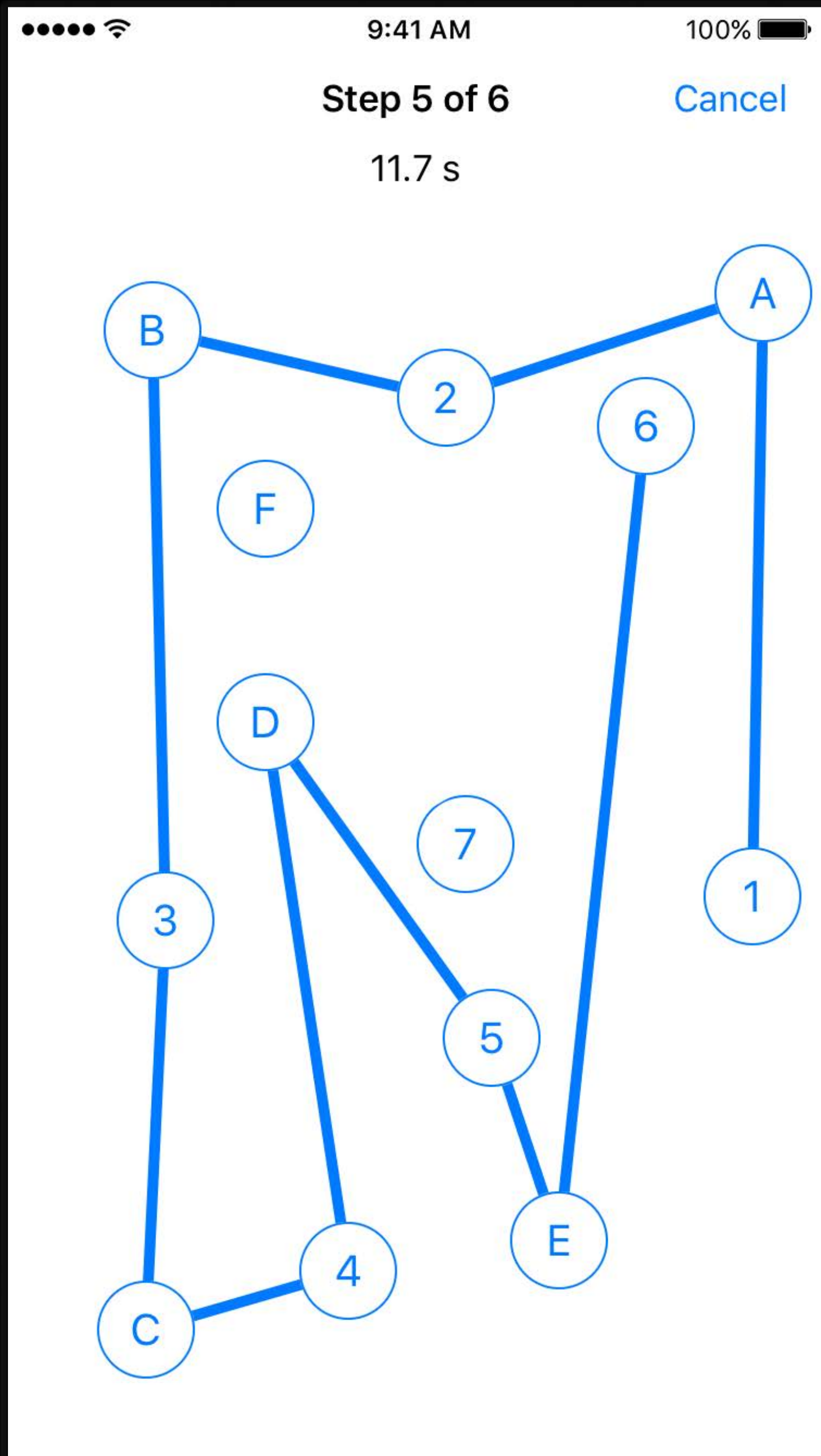


# Trail Making Test



# Trail Making Test

Visual attention

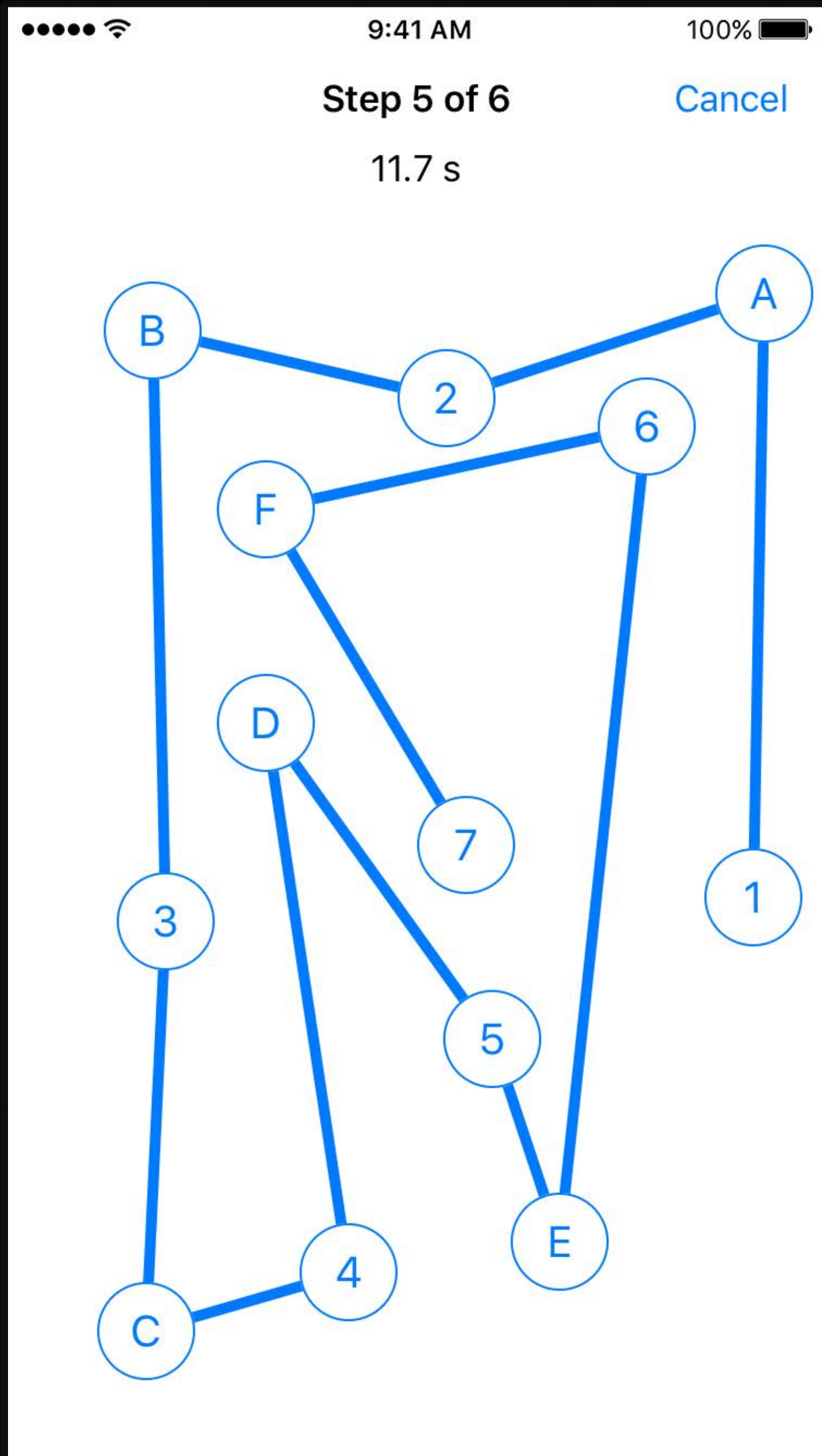


# Trail Making Test

Visual attention

Task switching





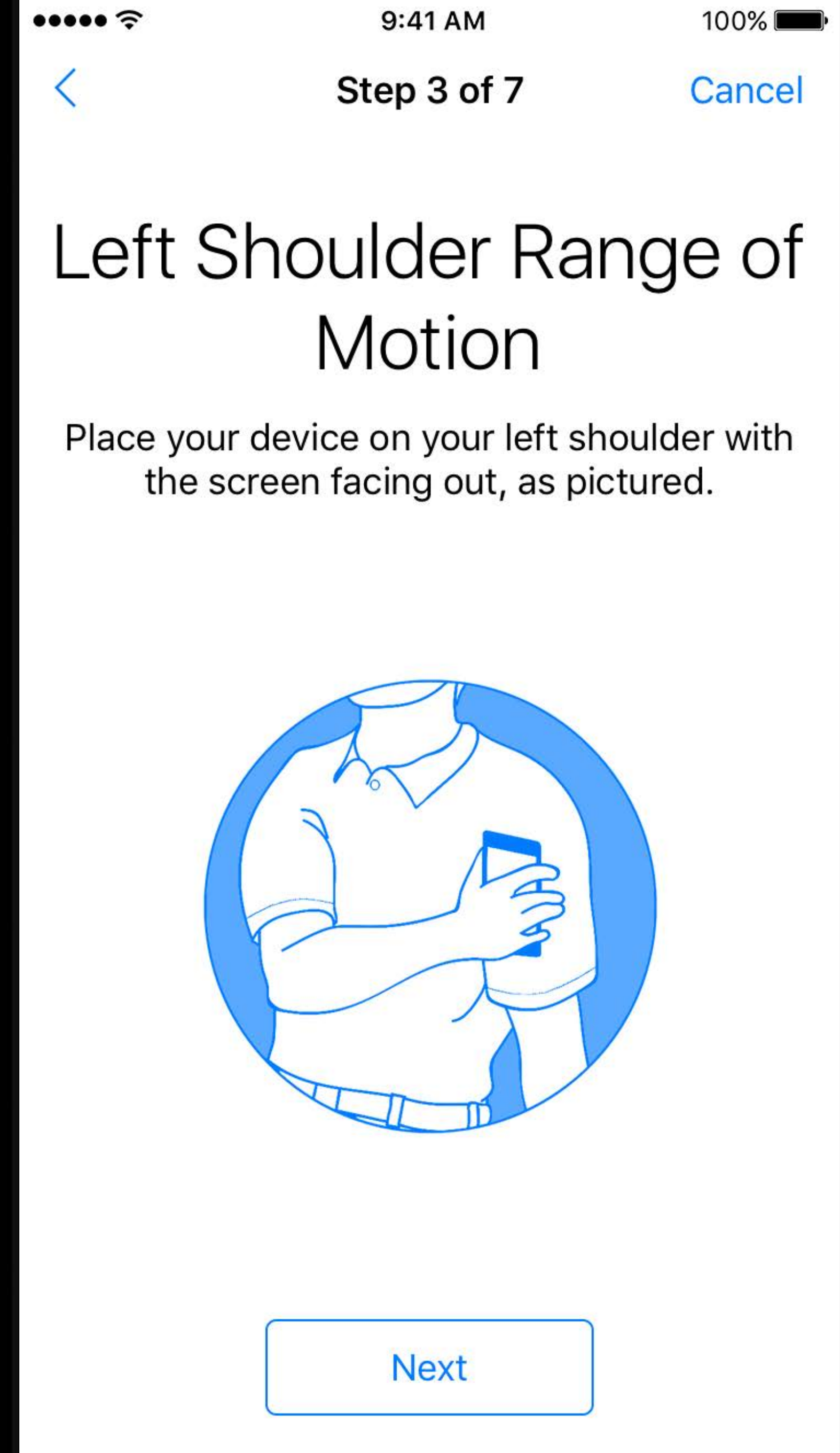
# Trail Making Test

Visual attention

Task switching

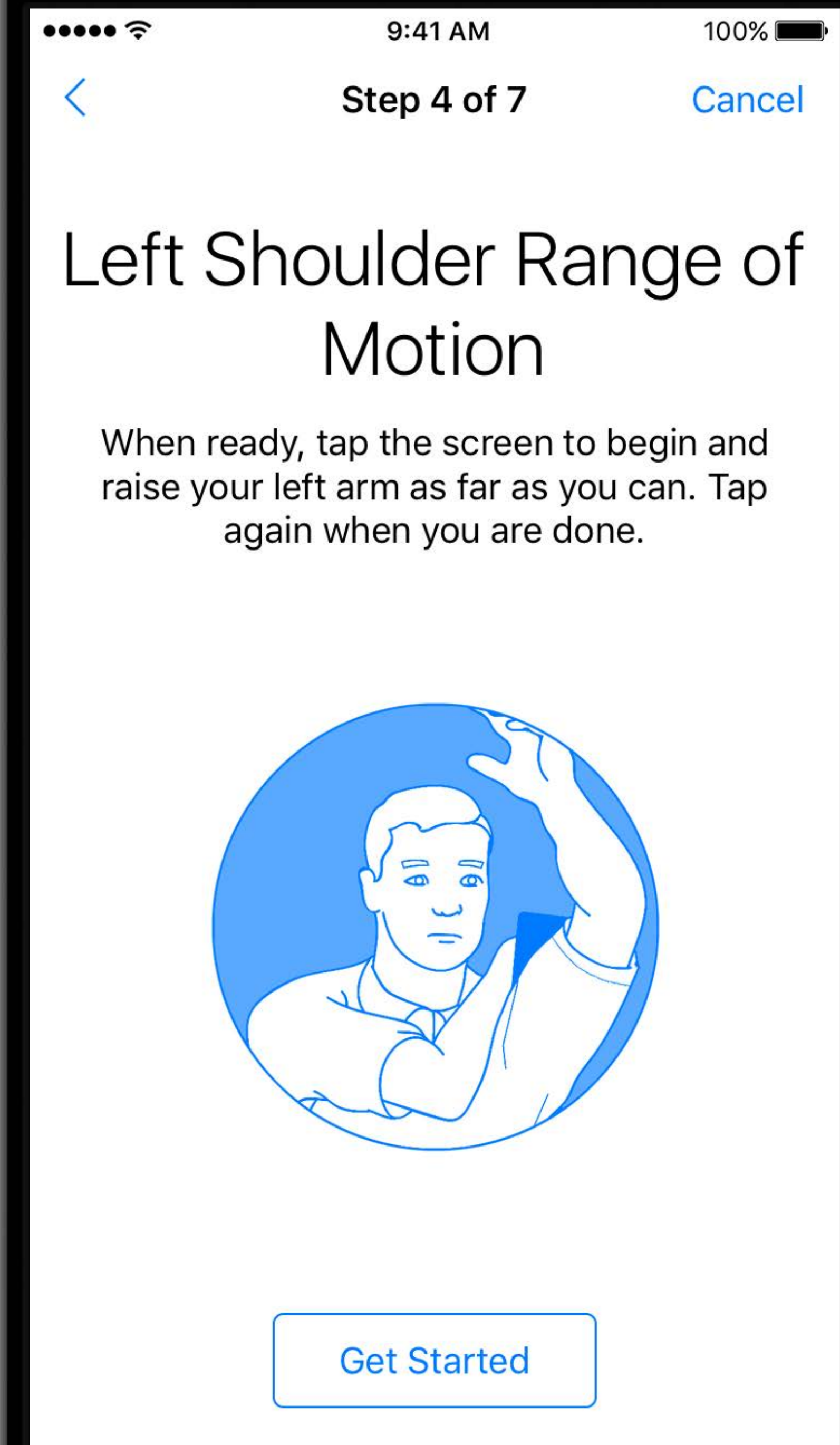
Connect series

# Range of Motion



# Range of Motion

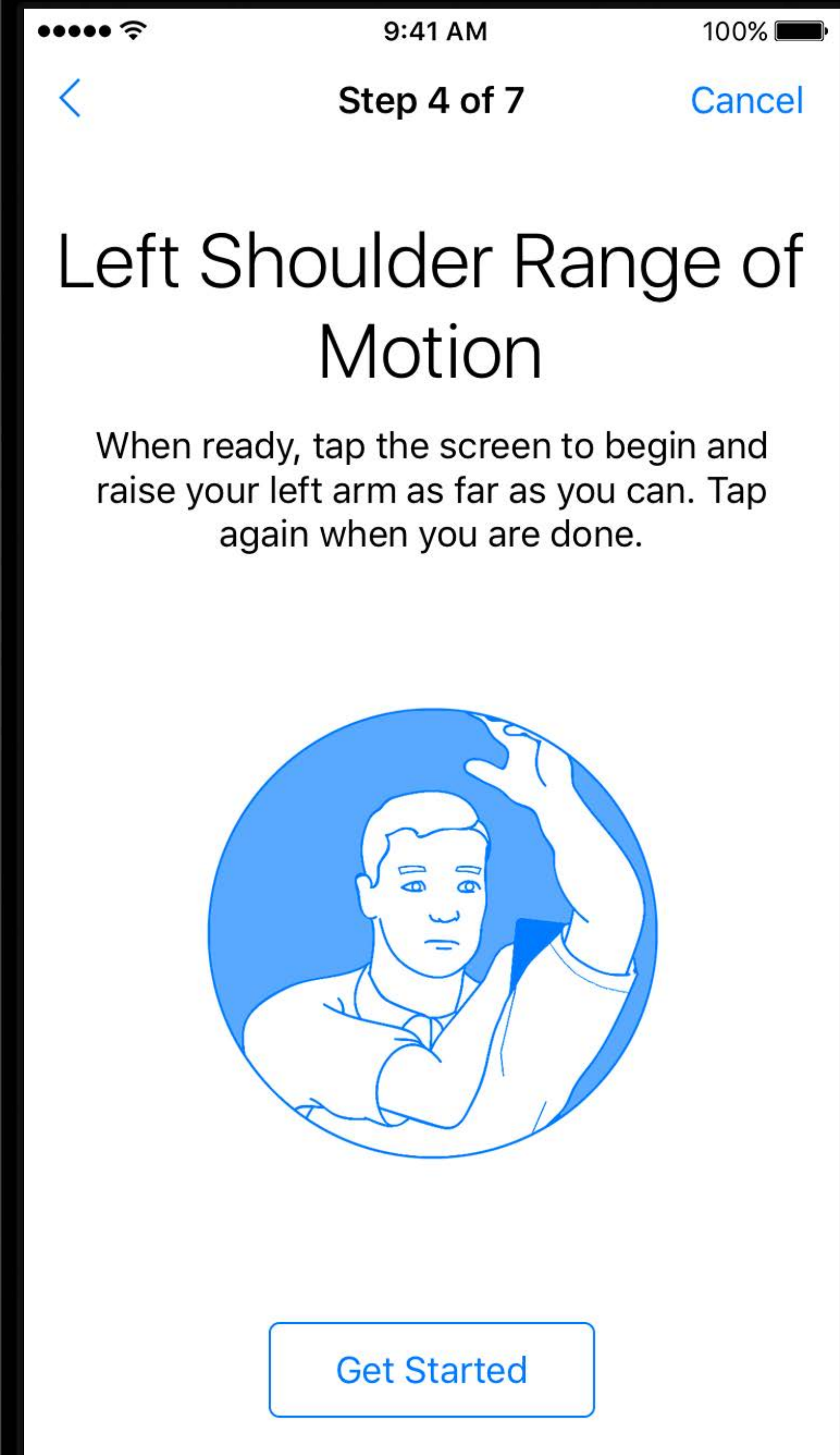
Flexed and extended



# Range of Motion

Flexed and extended

Touch anywhere active task

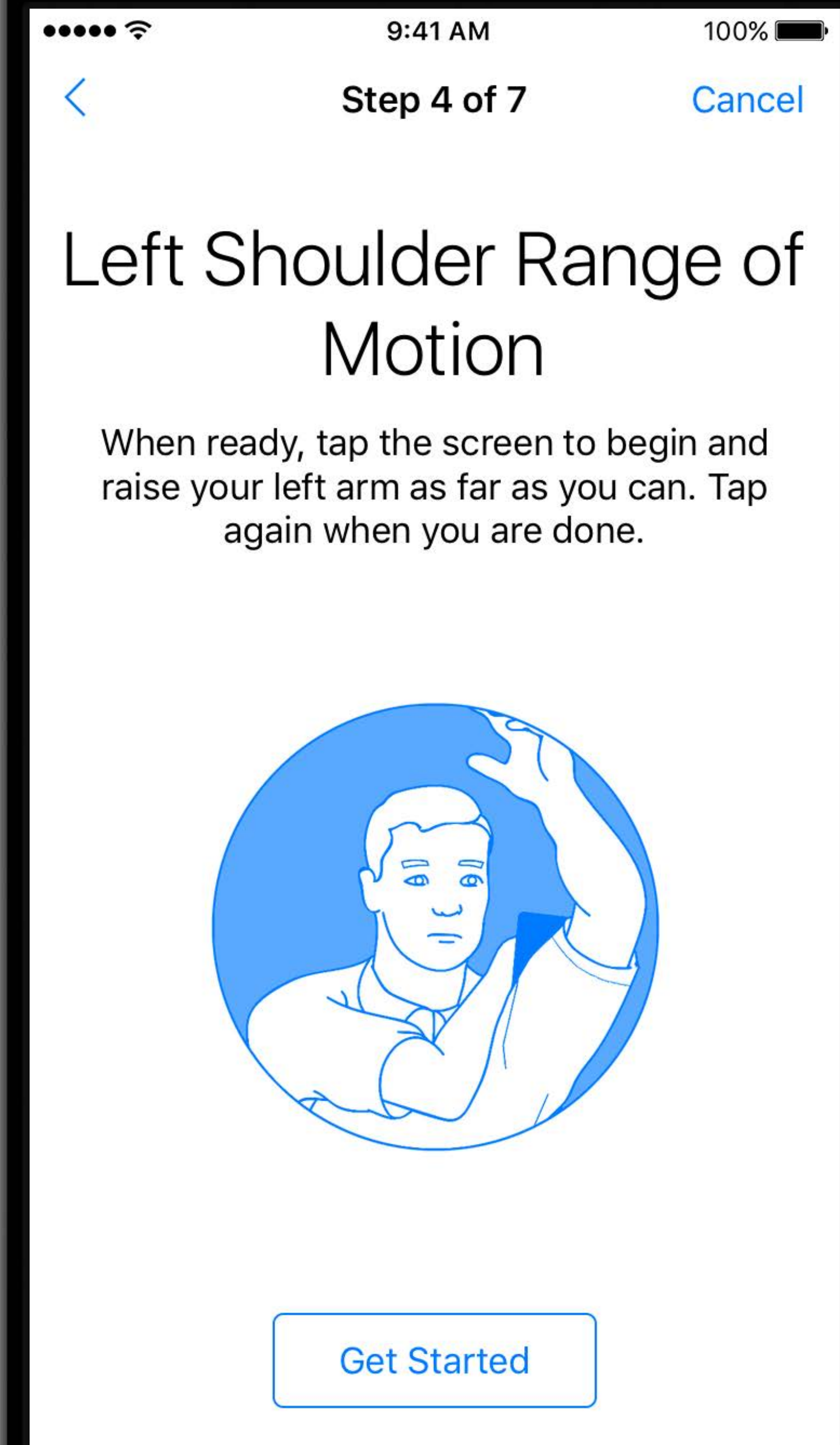


# Range of Motion

Flexed and extended

Touch anywhere active task

Accelerometer and gyroscope



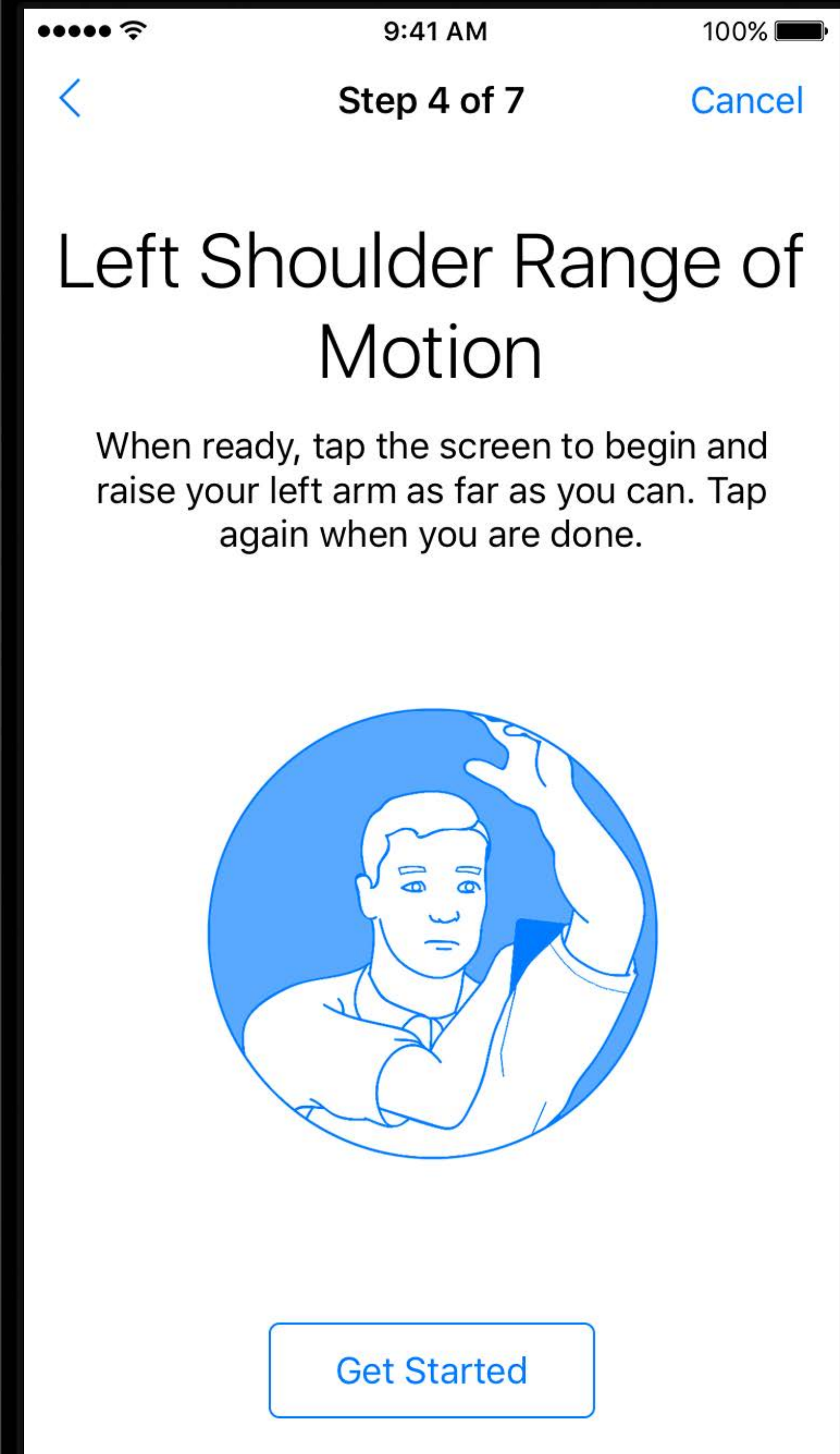
# Range of Motion

Flexed and extended

Touch anywhere active task

Accelerometer and gyroscope

Shoulder



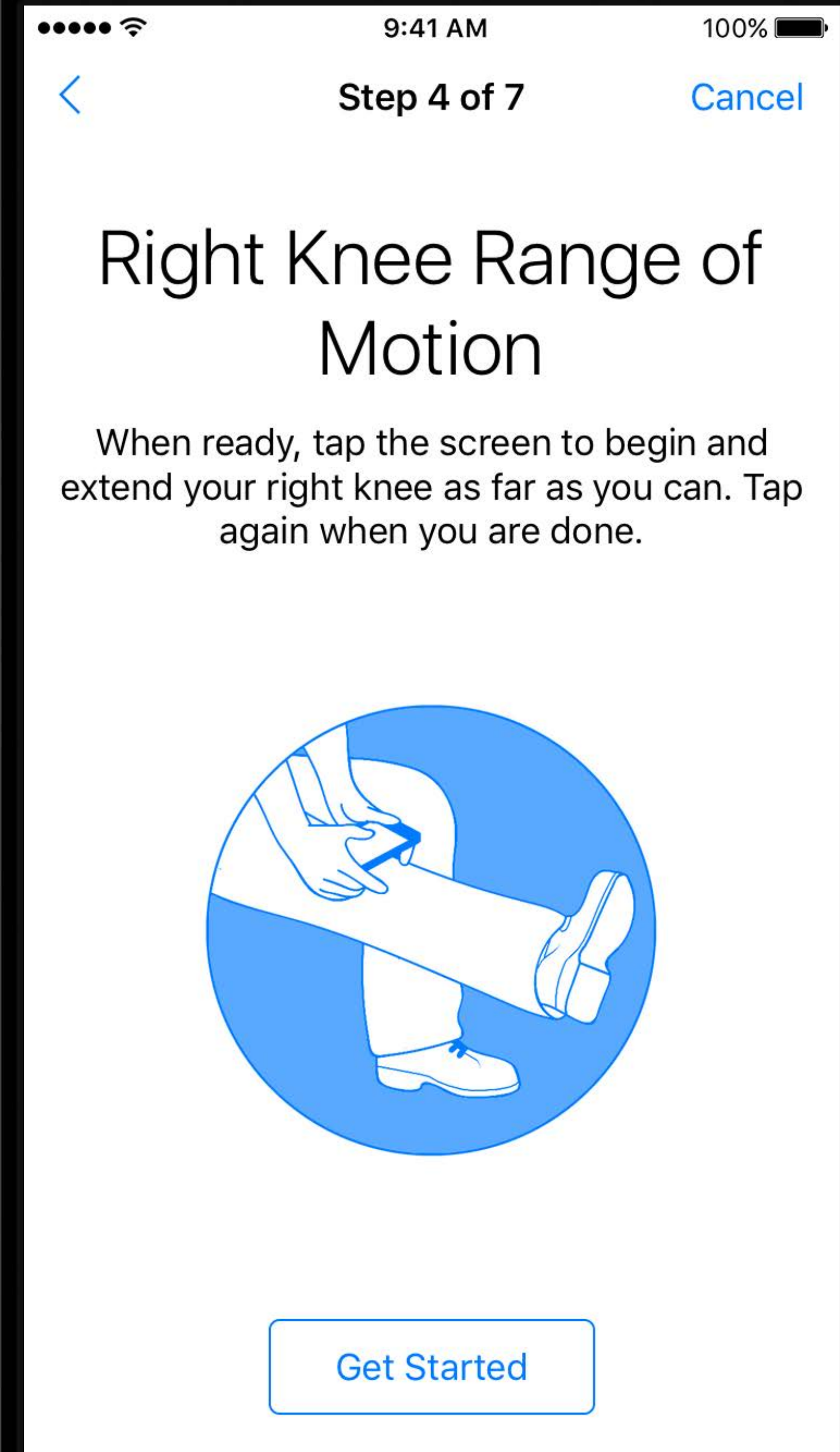
# Range of Motion

Flexed and extended

Touch anywhere active task

Accelerometer and gyroscope

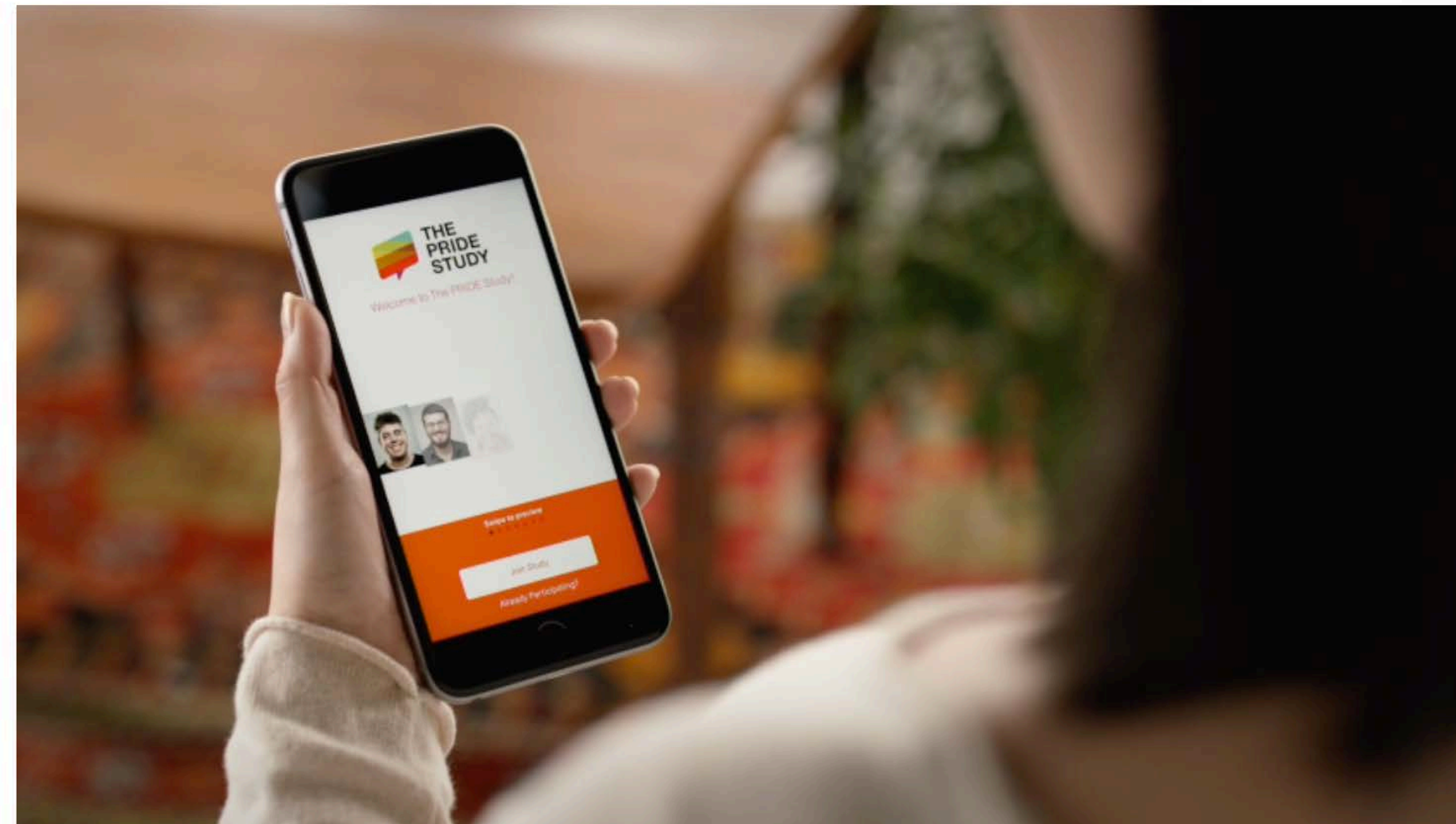
Shoulder and knee



Step 1 of 1

Cancel

## Video Instruction Step



Done





ResearchKit

# ResearchKit

New features

NEW

Tone Audiometry

Stroop

Trail Making

Range of Motion

Video Instruction Step

Digital Object Identifier



# New Features



CareKit



Care Card



Care Card



Symptom Tracker



Care Card



Symptom Tracker



Insights



Care Card



Symptom Tracker



Insights



Connect



Care Card



Symptom Tracker



Insights



Connect





Care Card



Symptom Tracker



Insights



Connect



Care Contents



Insights



Connect



June 8, 2017  
Your care overview  
is 75% complete

ACTIVITIES

**Breathing Exercise** Breathe App >  
● ● ○

**Heat Therapy** 5 mins >  
●

**Neck Stretches** 3mins >  
● ○

ASSESSMENTS

**Sleep** 3 >  
HealthKit hrs

**Stress** 8 >  
ResearchKit Survey of 10

OPTIONAL

**Ibuprofen** 800 mg >  
● ○ ○

READ ONLY

**Avoid alcohol** >

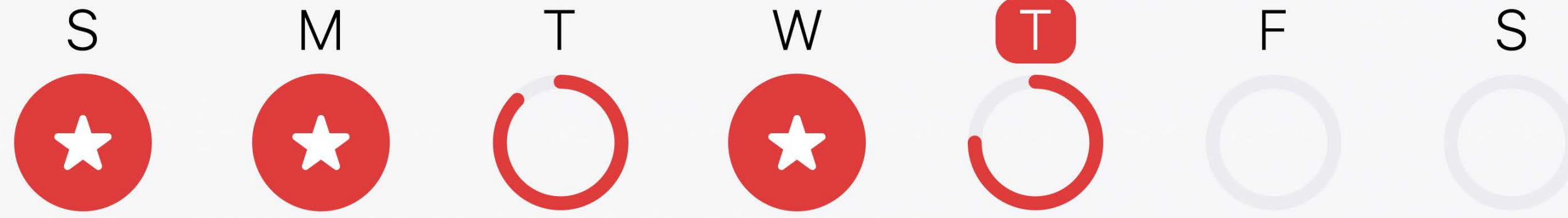


9:41 AM

100%

# Care Contents

Today



June 8, 2017

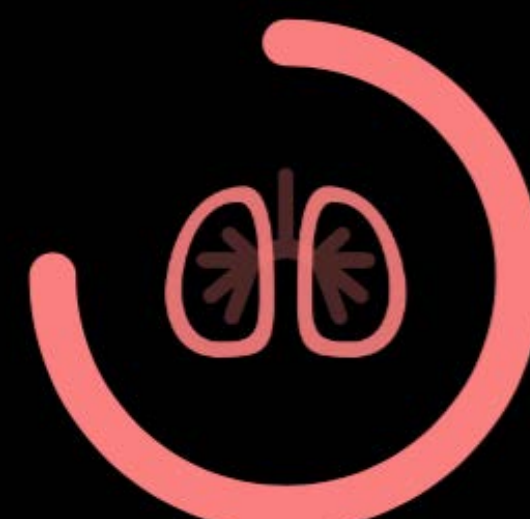
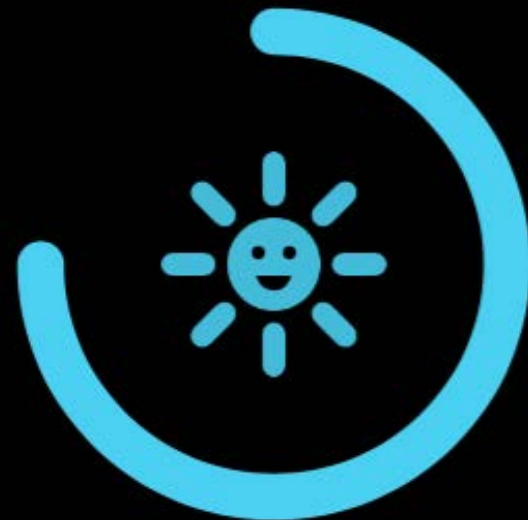
Your care overview  
is 75% complete

## ACTIVITIES

**Breathing Exercise** Breathe App









8:28

9:41

Thursday

Jun 8



72°





```
// Set the view controller glyph type and color
let viewController =
OCKCareContentsViewController(carePlanStore: store)

viewController.glyphType = .heart
viewController.glyphTintColor = .red
```



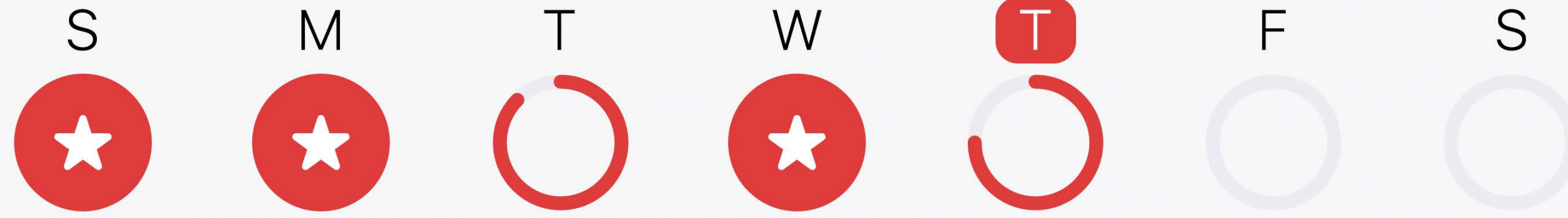


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview  
is 75% complete

## ACTIVITIES

**Breathing Exercise** Breathe App



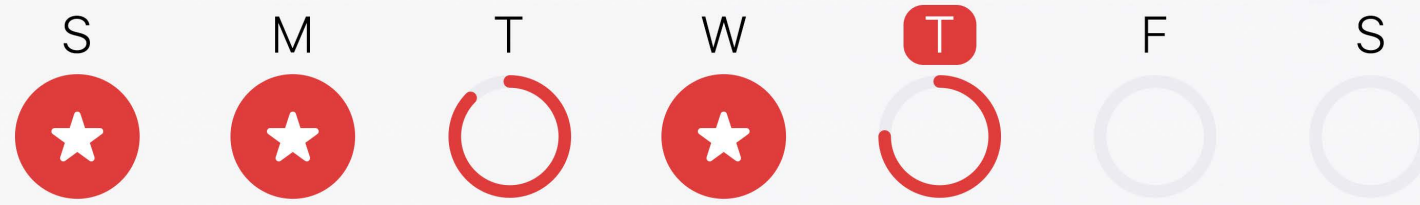


9:41 AM

100%

# Care Contents

Today

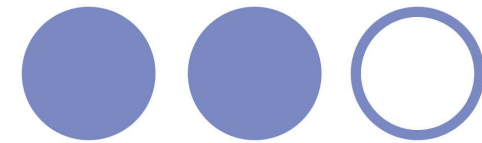


June 8, 2017

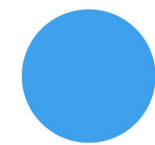
Your care overview is 75% complete

## ACTIVITIES

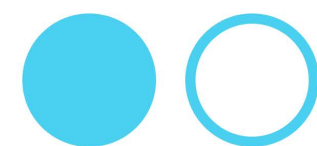
**Breathing Exercise** Breathe App



**Heat Therapy** 5 mins



**Neck Stretches** 3mins



Care Contents



Insights



Connect

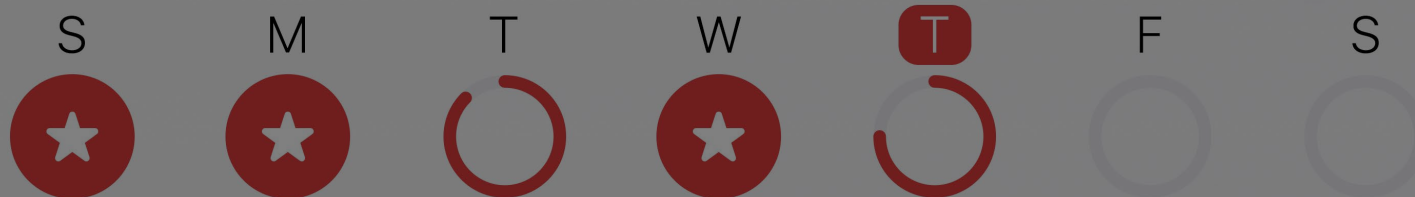


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## ACTIVITIES

**Breathing Exercise** Breathe App



**Heat Therapy** 5 mins



**Neck Stretches** 3 mins



Care Contents



Insights



Connect

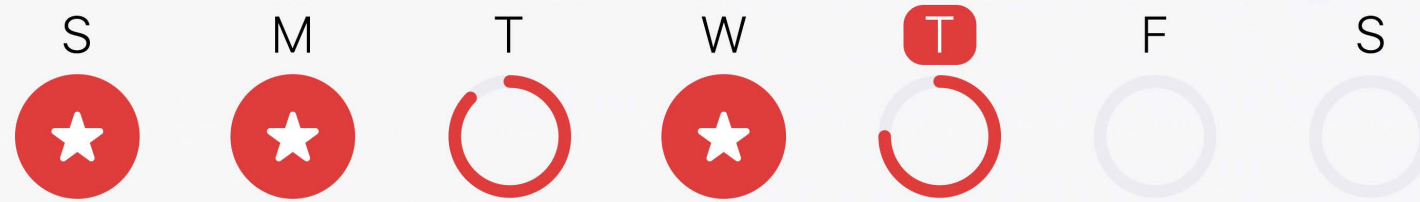


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## ACTIVITIES

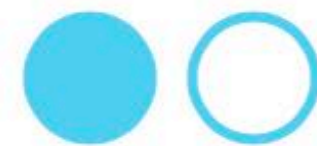
**Breathing Exercise** Breathe App



**Heat Therapy** 5 mins



**Neck Stretches** 3 mins



Care Contents



Insights



Connect

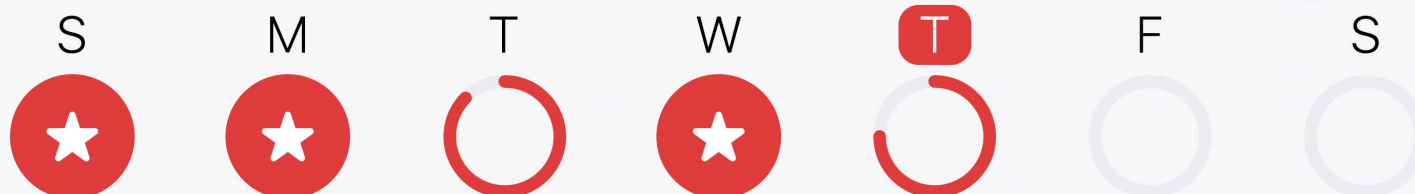


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete



## ASSESSMENTS

**Sleep**  
HealthKit

3 >  
hrs

**Stress**  
ResearchKit Survey

8 >  
of 10

## OPTIONAL



Care Contents



Insights



Connect

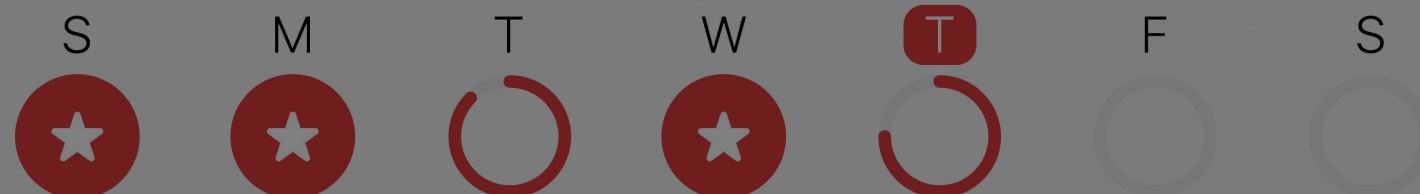


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete



## ASSESSMENTS

**Sleep**  
HealthKit

3 >  
hrs

**Stress**  
ResearchKit Survey

8 >  
of 10

## OPTIONAL



Care Contents



Insights



Connect

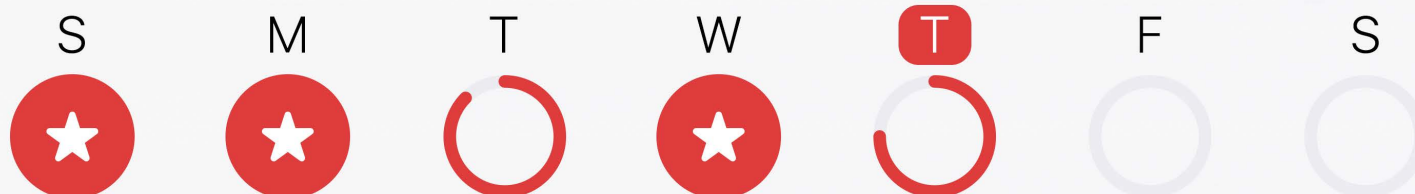


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## ASSESSMENTS

**Sleep**  
HealthKit

3 >  
hrs

**Stress**  
ResearchKit Survey

8 >  
of 10

## OPTIONAL



Care Contents



Insights



Connect



9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## Stress

ResearchKit Survey

8 of 10 >

### OPTIONAL

Ibuprofen 800 mg



### READ ONLY

Avoid alcohol



Care Contents



Insights



Connect



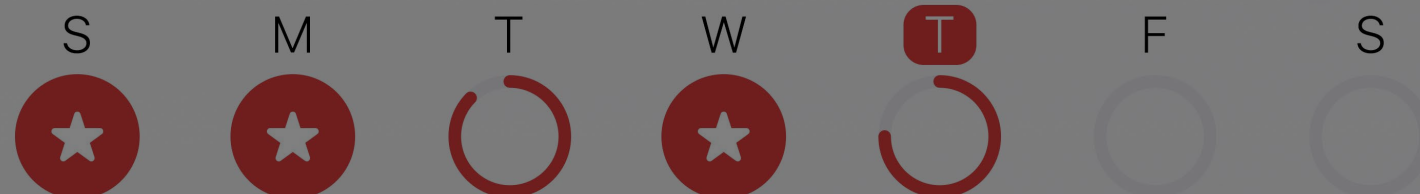


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## Stress

ResearchKit Survey

8 of 10 >

### OPTIONAL

Ibuprofen 800 mg >



### READ ONLY

Avoid alcohol >



Care Contents



Insights



Connect

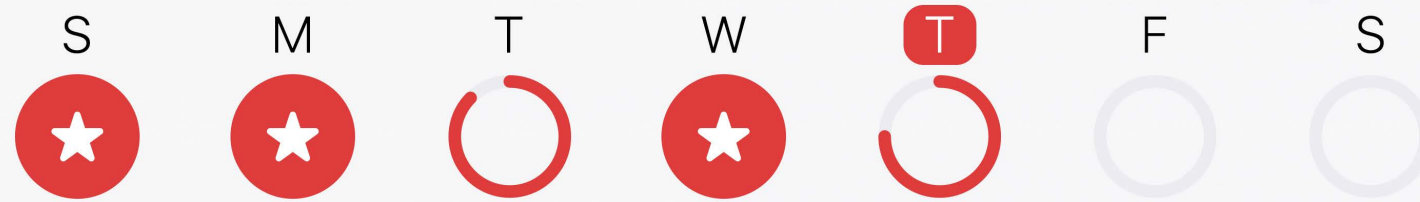


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## Stress

ResearchKit Survey

8 of 10 >

### OPTIONAL

## Ibuprofen 800 mg



### READ ONLY

## Avoid alcohol



Care Contents



Insights



Connect

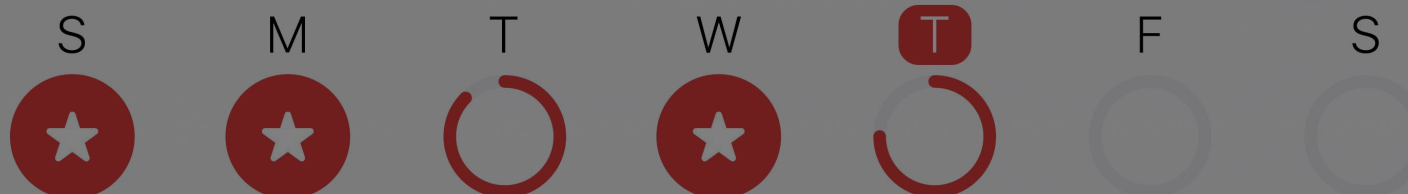


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## Stress

ResearchKit Survey

8 of 10 >

### OPTIONAL

Ibuprofen 800 mg



READ ONLY

Avoid alcohol >



Care Contents



Insights



Connect

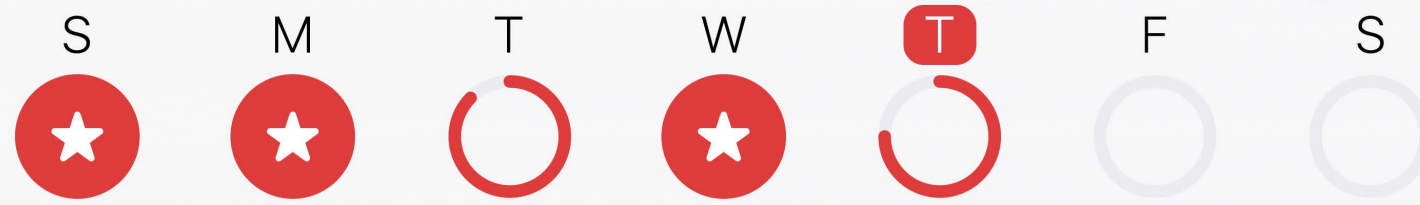


9:41 AM

100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## Stress

ResearchKit Survey

8 of 10 >

### OPTIONAL

Ibuprofen 800 mg



### READ ONLY

Avoid alcohol



Care Contents



Insights



Connect

```
// Setting Activity as Optional
let ibuprofenIntervention =
OCCarePlanActivity.intervention(withIdentifier: "ibuprofen",
                                groupIdIdentifier: "Pain Medication",
                                title: "Ibuprofen",
                                text: "800 mg",
                                tint: .green,
                                instructions: "Take ibuprofen as needed for pain",
                                imageUrl: nil,
                                schedule: schedule,
                                userInfo: nil,
                                optional: true)
```

```
// Setting Activity as Optional
let ibuprofenIntervention =
OckCarePlanActivity.intervention(withIdentifier: "ibuprofen",
    groupIdentifier: "Pain Medication",
    title: "Ibuprofen",
    text: "800 mg",
    tintcolor: .green,
    instructions: "Take ibuprofen as needed for pain",
    imageURL: nil,
    schedule: schedule,
    userInfo: nil,
    optional: true)
```

```
// Initializing a read only activity
let recommendations =
OckCarePlanActivity.readOnly(withIdentifier: "readOnlyActivity",
                              groupIdentifier: "Recommendations",
                              title: "Avoid Alcohol",
                              text: "Until next appointment",
                              instructions: "Alcohol may increase chance of migraine",
                              imageURL: nil,
                              schedule: schedule,
                              userInfo: nil)
```

```
// Initializing a read only activity
let recommendations =
OCKCarePlanActivity.readOnly(withIdentifier: "readOnlyActivity",
                              groupIdentifier: "Recommendations",
                              title: "Avoid Alcohol",
                              text: "Until next appointment",
                              instructions: "Alcohol may increase chance of migraine",
                              imageURL: nil,
                              schedule: schedule,
                              userInfo: nil)
```



# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## Stress

ResearchKit Survey

8 of 10 >

### OPTIONAL

Ibuprofen 800 mg >



### READ ONLY

Avoid alcohol >



Care Contents



Insights



Connect



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100%

# Care Contents

Today



June 8, 2017

Your care overview is 75% complete

## ACTIVITIES

Breathing Exercise Breathe App



Heat Therapy 5 mins



Neck Stretches 3 mins



Care Contents



Insights



Connect

NEW

# Thresholds



Adherence



Numeric













# Insights

Stress  
**8 of 10**

Neck Stretches  
**67%**

Sleep  
**3 hrs**

## THRESHOLD ALERTS

### Stress

High stress level. Try to do some relaxation exercises to reduce stress.

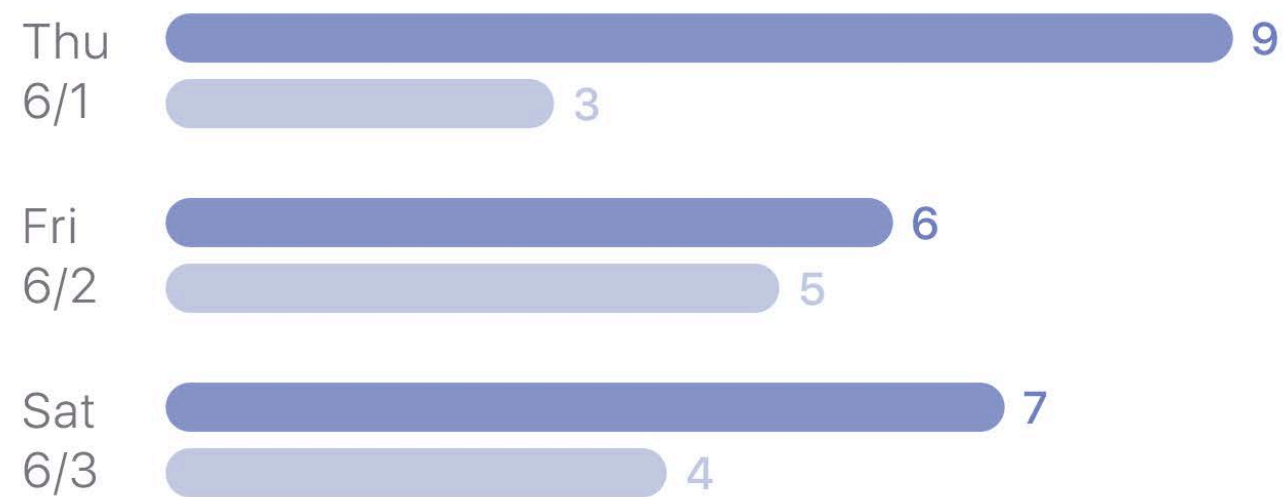
## INSIGHTS

### Care Plan Update

Your care plan adherence was 83% last week.

### Stress Levels

vs Sleep



Care Contents



Insights



Connect



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100%

## Insights

Stress  
**8 of 10**

Neck Stretches  
**67%**

Sleep  
**3 hrs**

### THRESHOLD ALERTS


#### **Stress**

High stress level. Try to do some relaxation exercises to reduce stress.

### INSIGHTS



9:41 AM

100% 

## Insights

Stress  
**8 of 10**

Neck Stretches  
**67%**

Sleep  
**3 hrs**

### THRESHOLD ALERTS

#### Stress

High stress level. Try to do some relaxation exercises to reduce stress.

### INSIGHTS

```
// Initializing Stress Assessment
let stressAssessment =
OCKCarePlanActivity.assessment(withIdentifier: "stress",
                                groupIdentifier: "Assessments",
                                title: "Stress",
                                text: "ResearchKit Survey",
                                tintcolor: .purple,
                                resultResetable: false,
                                schedule: schedule,
                                userInfo: nil,
                                optional: false)
```



















9:41 AM

100%

## Insights

Stress  
**8 of 10**

Neck Stretches  
**67%**

Sleep  
**3 hrs**

### THRESHOLD ALERTS


#### **Stress**

High stress level. Try to do some relaxation exercises to reduce stress.

### INSIGHTS



9:41 AM

100% 

## Insights

Stress  
**8 of 10**

Neck Stretches  
**67%**

Sleep  
**3 hrs**

### THRESHOLD ALERTS

#### **Stress**

High stress level. Try to do some relaxation exercises to reduce stress.

### INSIGHTS

# Insights

Stress  
**8 of 10**

Neck Stretches  
**67%**

Sleep  
**3 hrs**

## THRESHOLD ALERTS

### Stress

High stress level. Try to do some relaxation exercises to reduce stress.

## INSIGHTS

### Care Plan Update

Your care plan adherence was 83% last week.

### Stress Levels

vs Sleep



Care Contents



Insights



Connect



9:41 AM

100%

## Connect



Sam Mravca

### INBOX



Bill James, RN



### CARE TEAM



**Dr. Maria Ruiz**

Physician



**Bill James, RN**

Nurse



**Lisa Fin, RN**

Nurse



### FRIENDS & FAMILY



Care Contents



Insights



Connect





9:41 AM

100%

## Connect



Sam Mravca

### INBOX



Bill James, RN



### CARE TEAM



**Dr. Maria Ruiz**  
Physician



**Bill James, RN**  
Nurse



**Lisa Fin, RN**  
Nurse



### FRIENDS & FAMILY



Care Contents



Insights



Connect



9:41 AM

100%

**Connect**

**Bill James, RN**

Bill James 6/8/2017, 3:02 PM

Hi Sam, how have you been responding to your care plan?

Sam Mravca 6/8/2017, 3:36 PM

I'm doing well, trying to reduce how much ibuprofen I take. The breathing exercises have been really helpful!

Bill James 6/8/2017, 5:07 PM

Sounds like great progress. Looking forward to our next follow up. Please reach out if you have any questions.

Thanks! :)

Send



Care Contents



Insights



Connect

# Connect



**Sam Mravca**

## INBOX



**Bill James, RN**



## CARE TEAM



**Dr. Maria Ruiz**

Physician



**Bill James, RN**

Nurse



**Lisa Fin, RN**

Nurse



## FRIENDS & FAMILY



Care Contents



Insights



Connect



CareKit

# CareKit

New features

NEW

Care Contents

Thresholds

Glyph Assets

Widgets

Optionality

Inbox

Read-Only



# CareKit

New features

NEW

Care Contents

Thresholds

Glyph Assets

Widgets

Optionality

Inbox

Read-Only

Bridge API











# CareKit Prototyping Tool

Srinath Tupil Muralidharan, Software Engineer







Exploration



Exploration



Wireframes





Exploration



Wireframes



Proposition



Exploration



Wireframes



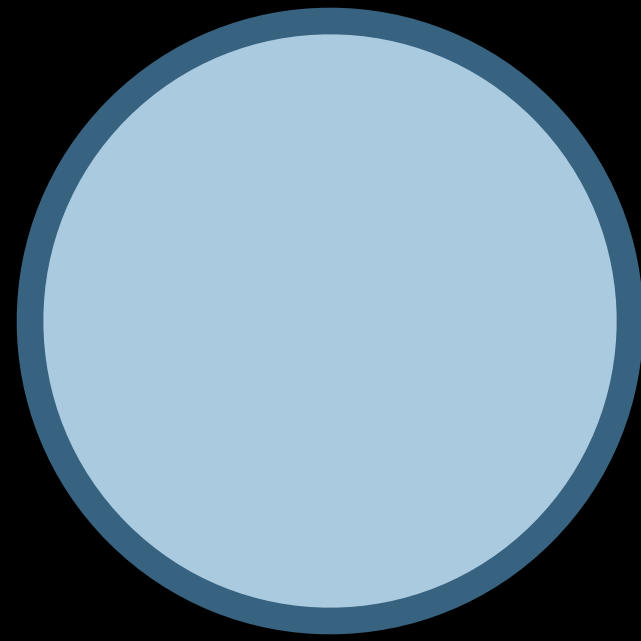
Proposition



Development







Development



Prototype

Development

## Penick Medical Center General Surgery Post-Operative Discharge Instructions

### MEDICATIONS:

You have been prescribed pain medication. Directly after discharge be sure to take:

- hydrocodone 5mg/acetaminophen 300mg tablet - take 1-2 tablets every 4-6 hours as needed (not to exceed 8 tablets daily).

After 4 days of this pain medication, start decreasing the frequency of hydrocodone (e.g twice a day).

If you have breakthrough pain, try adding ibuprofen in between your hydrocodone doses.

- hydrocodone 5mg/acetaminophen 300mg and ibuprofen 400mg. By the second week post discharge, shift completely to ibuprofen 400mg every 6-8 hours as needed.

It is important to your recovery that you do not wait until your pain becomes severe before taking this medication. It may not work as well if you wait too long to take it between doses.

You may be prescribed antibiotics to help treat or prevent infection. If you need to be given antibiotics, be sure to complete the full course of antibiotics along with your prescribed pain medication. Antibiotics may be prescribed to you a few days into your recovery if risk of infection becomes clear.

### ACTIVITY:

Although it might be painful, movement is a key part of your recovery starting from day 1. However, too strenuous of an activity can be detrimental to your recovery.

- For the first two days after surgery, be sure to stand up and move around for at least 2 minutes twice a day. *light*
- After day 2, be sure to increase your activity level. At a minimum walk around for 5-10 minutes 3x per day. Activity is okay based on your comfort level, but avoid overly strenuous activity such as lifting heavy objects.

*until ok'd by dr.*

### DIET:

You will need to start your recovery process on a liquid diet and then slowly add solid foods back into your diet. Depending on how your recovery is going, you may need to add more fiber to your diet, but be sure to not add too much fiber too early. You may also be told to use a laxative or stool softener, these can often be bought over the counter.

- Consume at least 4 fluid meals during your first 3 days of recovery. This can include soups, juices and shakes.

### WOUND CARE:

A soft bandage has been placed over your incision. Keep your incision *Friday* clean and dry.

- Don't touch the bandage for the first 2 days. On day 3, start changing the bandage daily to a new, dry sterile gauze. Don't get the bandages wet for the first 2 days!
- You may shower 3 days after your operation. If you notice any discoloration of the wound area, call your doctor immediately.
- If steri-strips were applied to the incision, do not remove, let them fall off on their own.

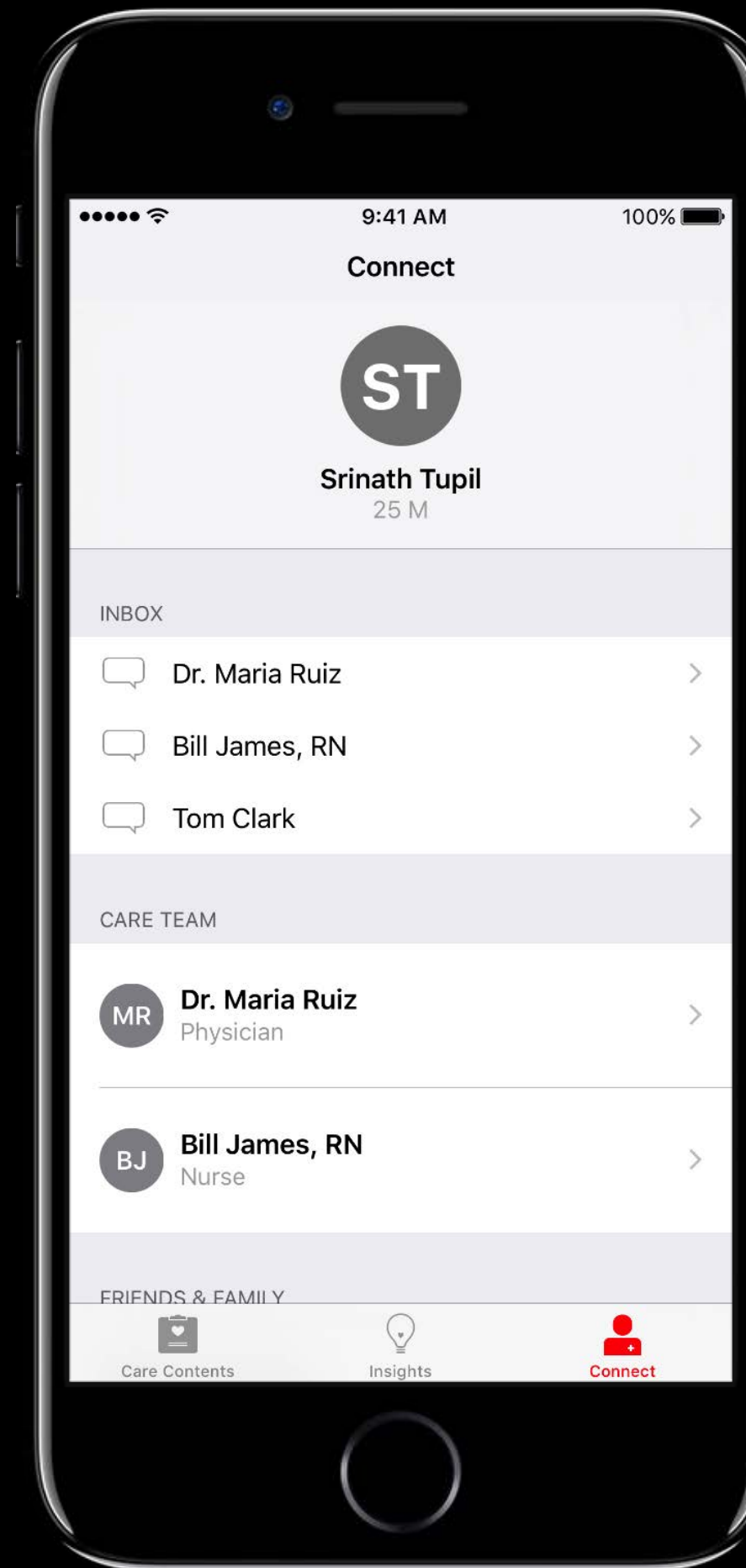
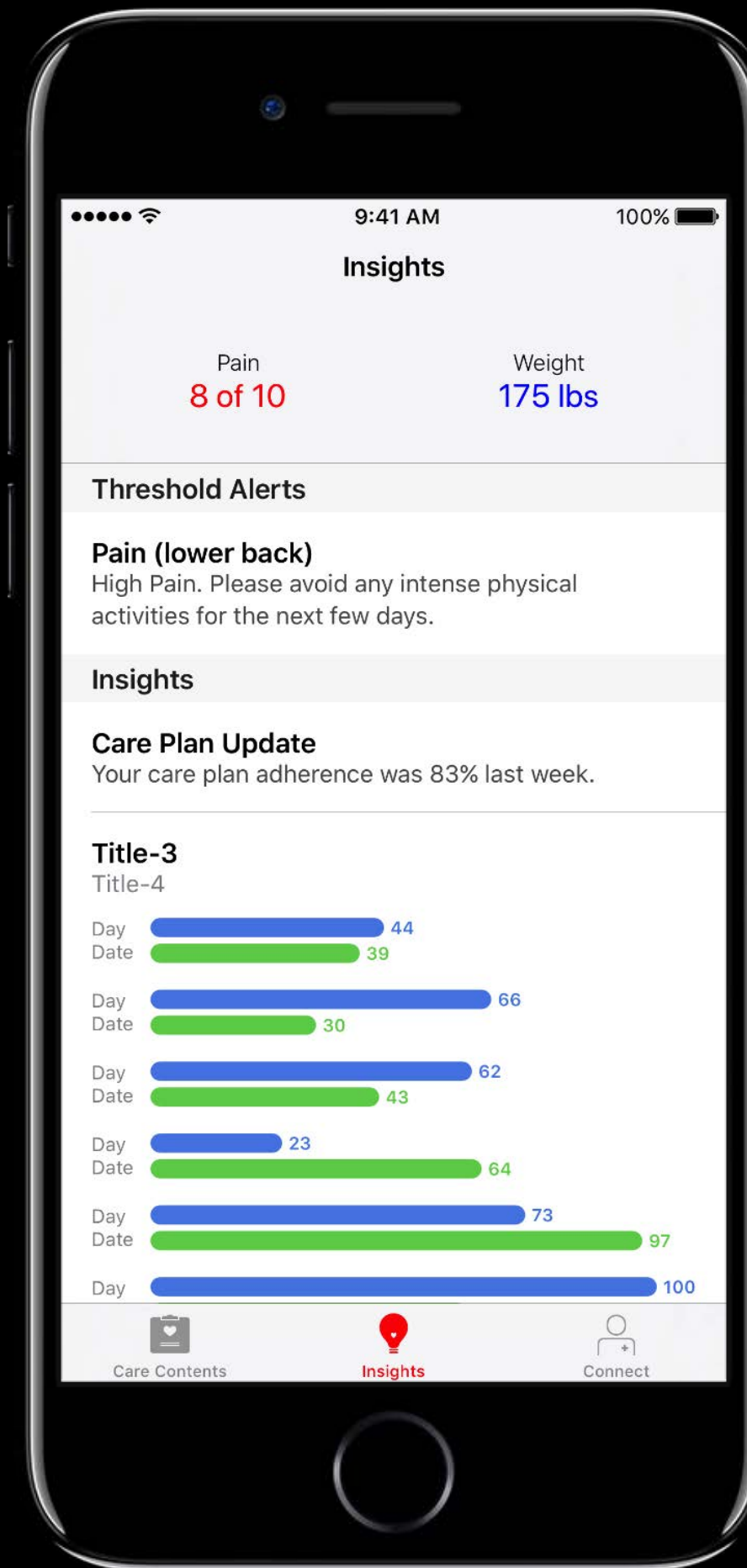
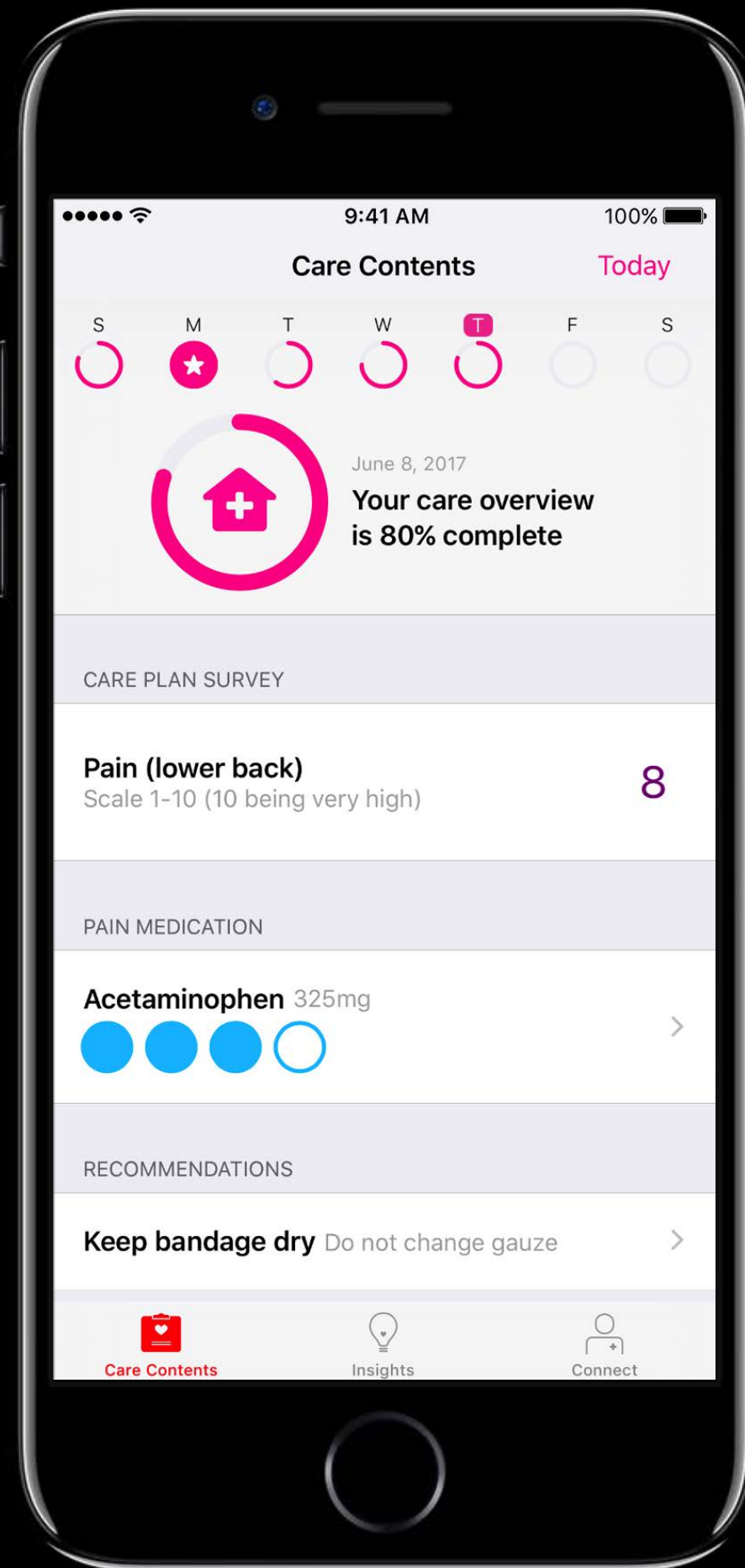
Call your doctor right away if you have any of the following:

- Fever of 100.4 degrees F or higher
- Pain or tenderness near your incision area
- Increased redness, swelling or bleeding at the incision site
- Nausea or persistent pain that isn't relieved by pain medication
- Your range of motion isn't improving after 7 days

*408-555-0010*

Penick Medical Center

Clinic Hours: Mon/Wed/Fri 7:30-5:30, Tue/Thurs 7:30-7:30, Sat 9-12, Closed Sundays & Holidays



Care Contents Today



June 8, 2017  
Your care overview is 80% complete

CARE PLAN SURVEY

**Pain (lower back)** 8  
Scale 1-10 (10 being very high)

PAIN MEDICATION

**Acetaminophen 325mg**  
●●●○ >

RECOMMENDATIONS

**Keep bandage dry** Do not change gauze >

# Care Contents Today




June 8, 2017  
**Your care overview  
 is 80% complete**

## CARE PLAN SURVEY

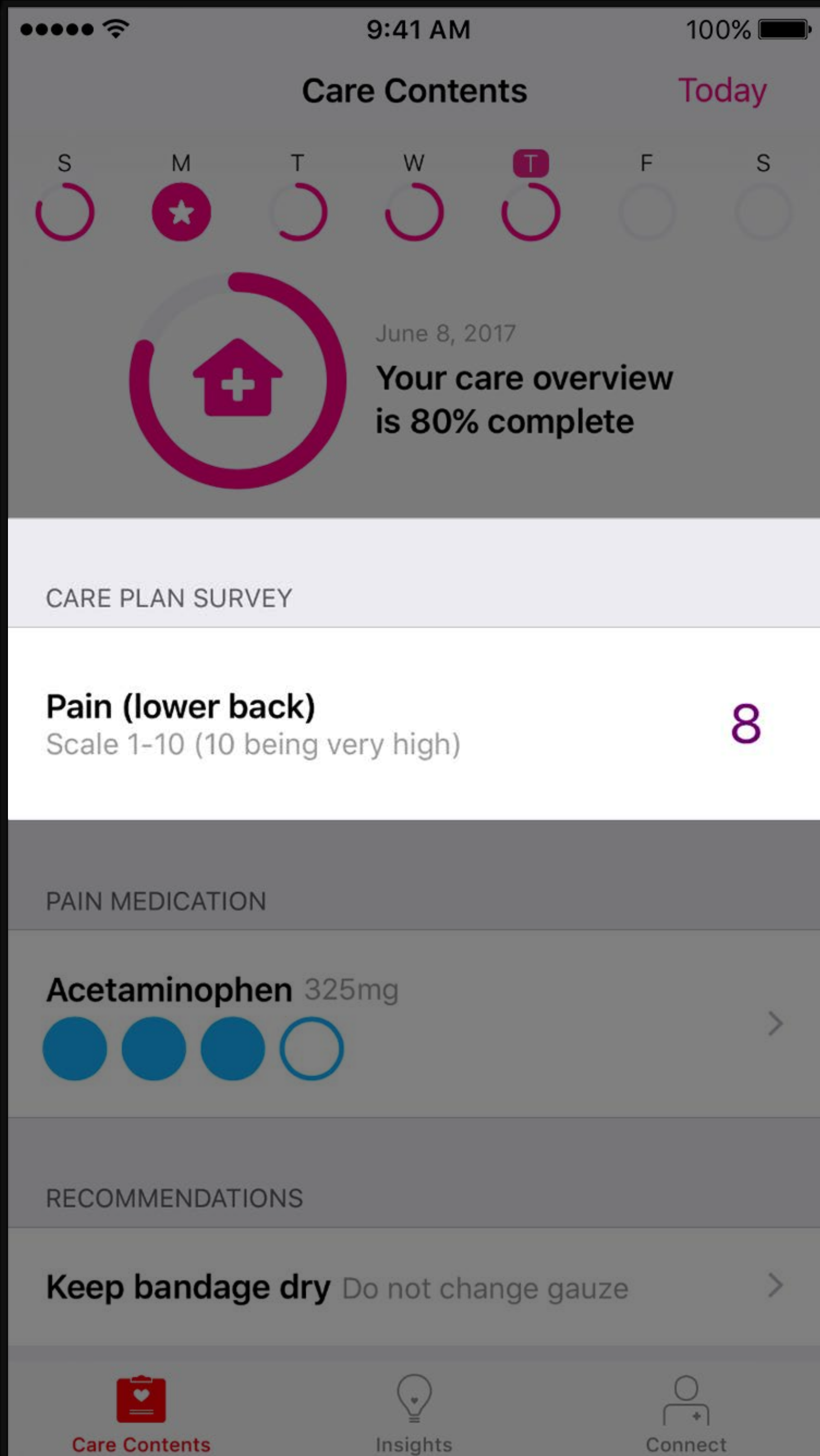
**Pain (lower back)** 8  
 Scale 1-10 (10 being very high)

## PAIN MEDICATION

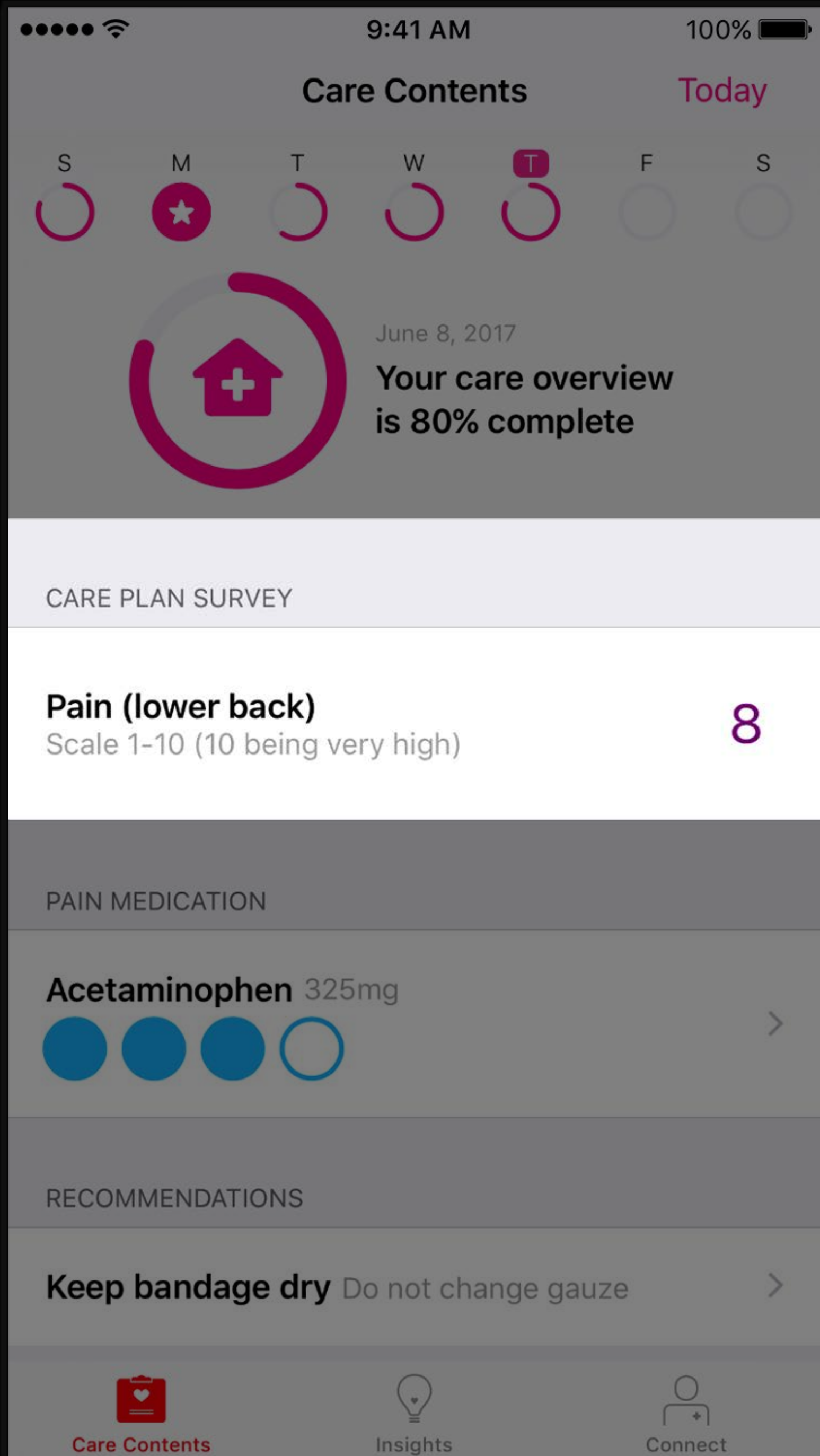
**Acetaminophen 325mg** >  


## RECOMMENDATIONS

**Keep bandage dry** Do not change gauze >

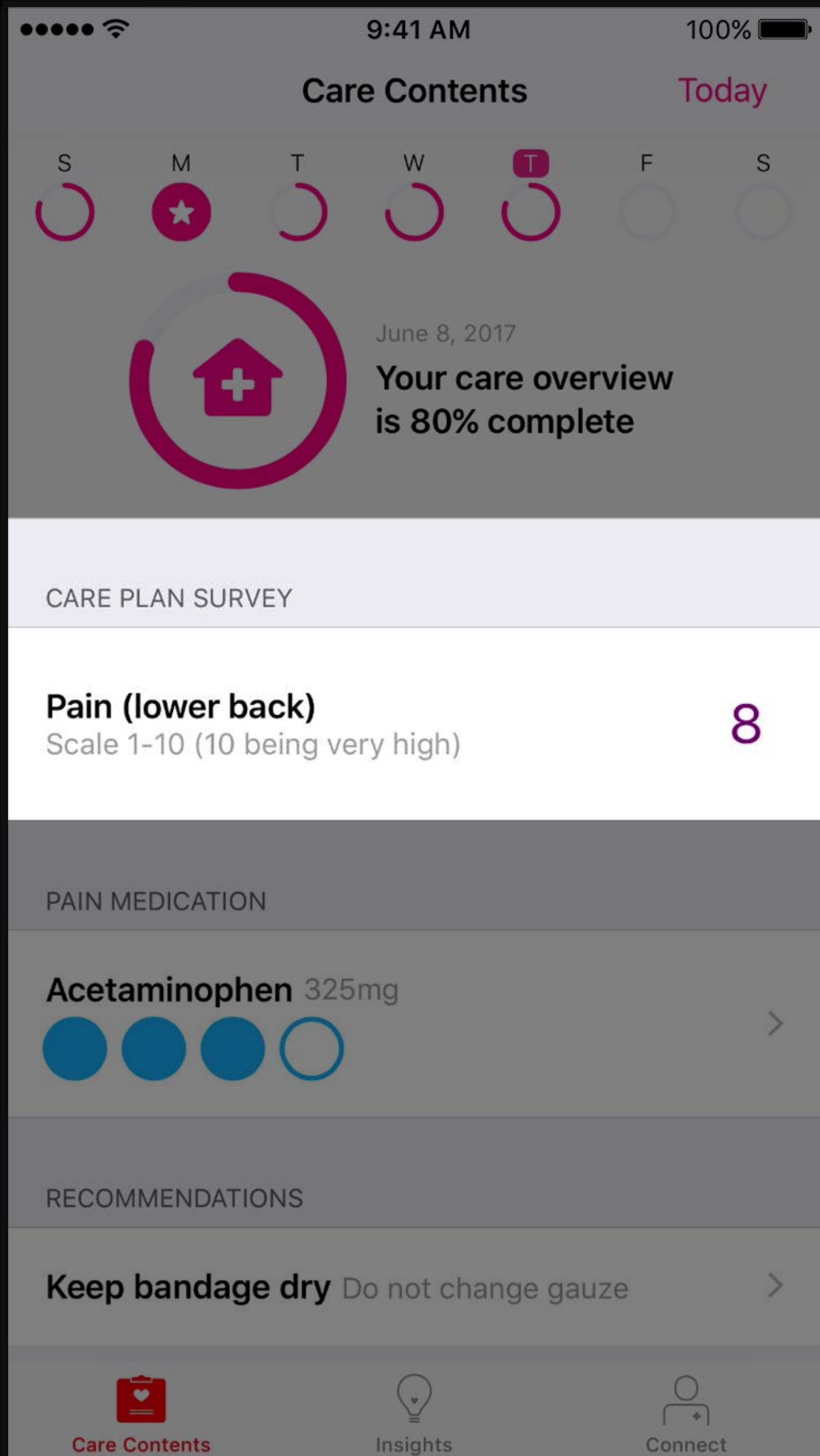


type	Assessment
identifier	Pain
groupId	
title	
text	
activityStartDate	06/04/2017
activityEndDate	06/12/2019
occurrences	[ 1,0,1,0,1,0,1 ]
optional	NO

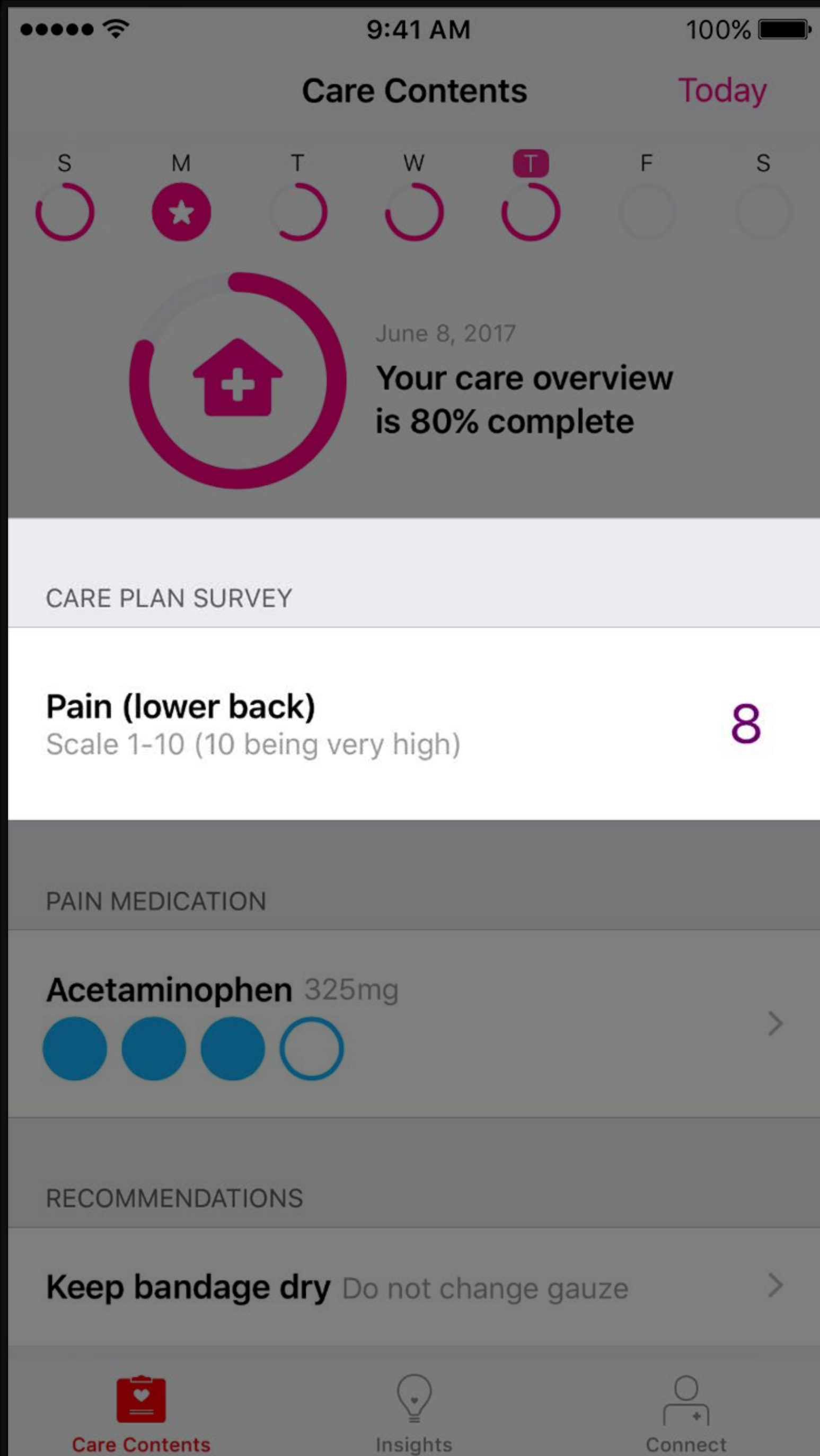


type	Assessment
identifier	Pain
groupIdentifier	Care Plan Survey
title	Pain (lower back)
text	Scale 1-10
activityStartDate	06/04/2017
activityEndDate	06/12/2019
occurrences	[ 1,0,1,0,1,0,1 ]
optional	NO

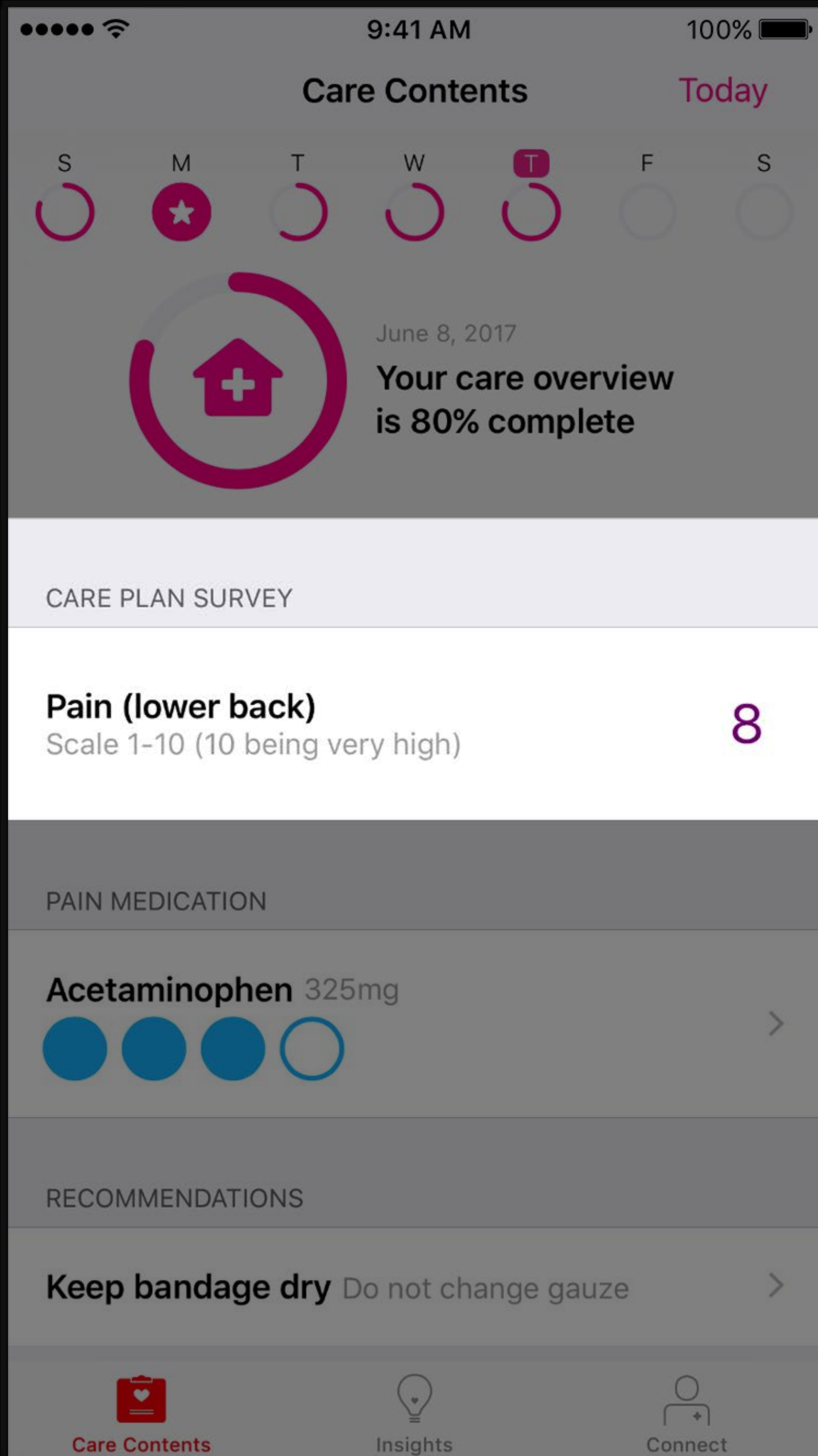




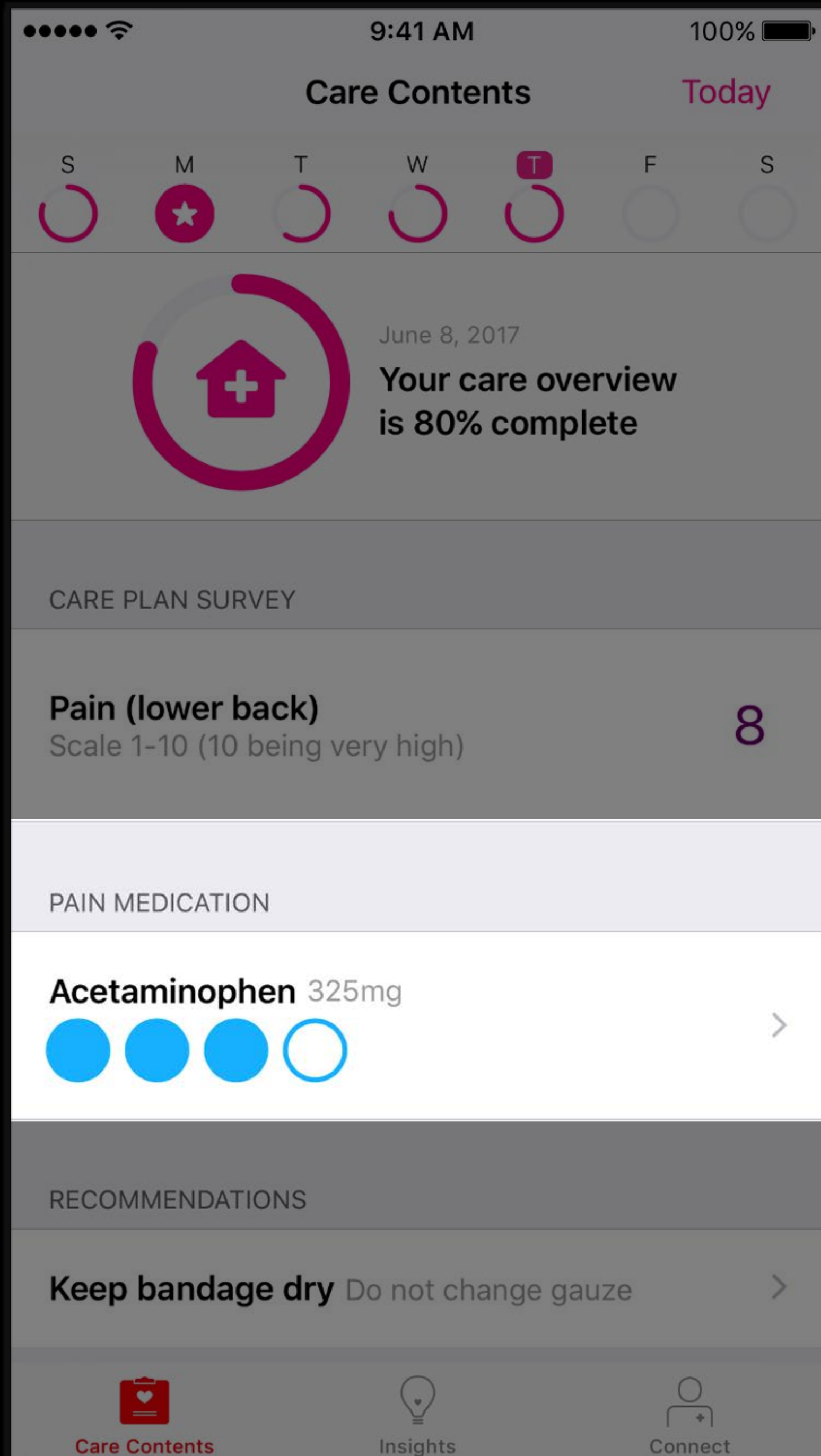
type	
identifier	
groupIdentifier	
title	
text	
activityStartDate	06/04/2017
activityEndDate	06/12/2019
occurrences	
optional	NO



type	Intervention
identifier	Acetaminophen
groupIdentifier	
title	
text	
activityStartDate	06/04/2017
activityEndDate	06/12/2019
occurrences	[ 3,3,3,3,3,3,3 ]
optional	NO



type	Intervention
identifier	Acetaminophen
groupIdentifier	Pain Medication
title	Acetaminophen
text	325mg
activityStartDate	06/04/2017
activityEndDate	06/12/2019
occurrences	[ 3,3,3,3,3,3,3 ]
optional	NO



type	Intervention
identifier	Acetaminophen
groupIdentifier	Pain Medication
title	Acetaminophen
text	325mg
activityStartDate	06/04/2017
activityEndDate	06/12/2019
occurrences	[ 3,3,3,3,3,3,3 ]
optional	NO

Plist File

# Insights

Pain  
**8 of 10**

Weight  
**175 lbs**

## Threshold Alerts

### Pain (lower back)

High Pain. Please avoid any intense physical activities for the next few days.

## Insights

### Care Plan Update

Your care plan adherence was 83% last week.

### Title-3

Title-4



Care Contents



Insights



Connect

# Insights

Pain  
**8 of 10**

Weight  
**175 lbs**

## Threshold Alerts

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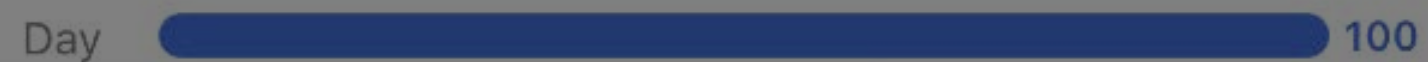
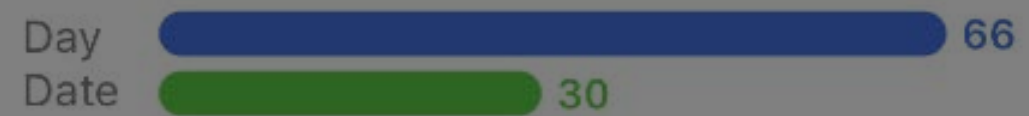
## Insights

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### Title-3

Title-4



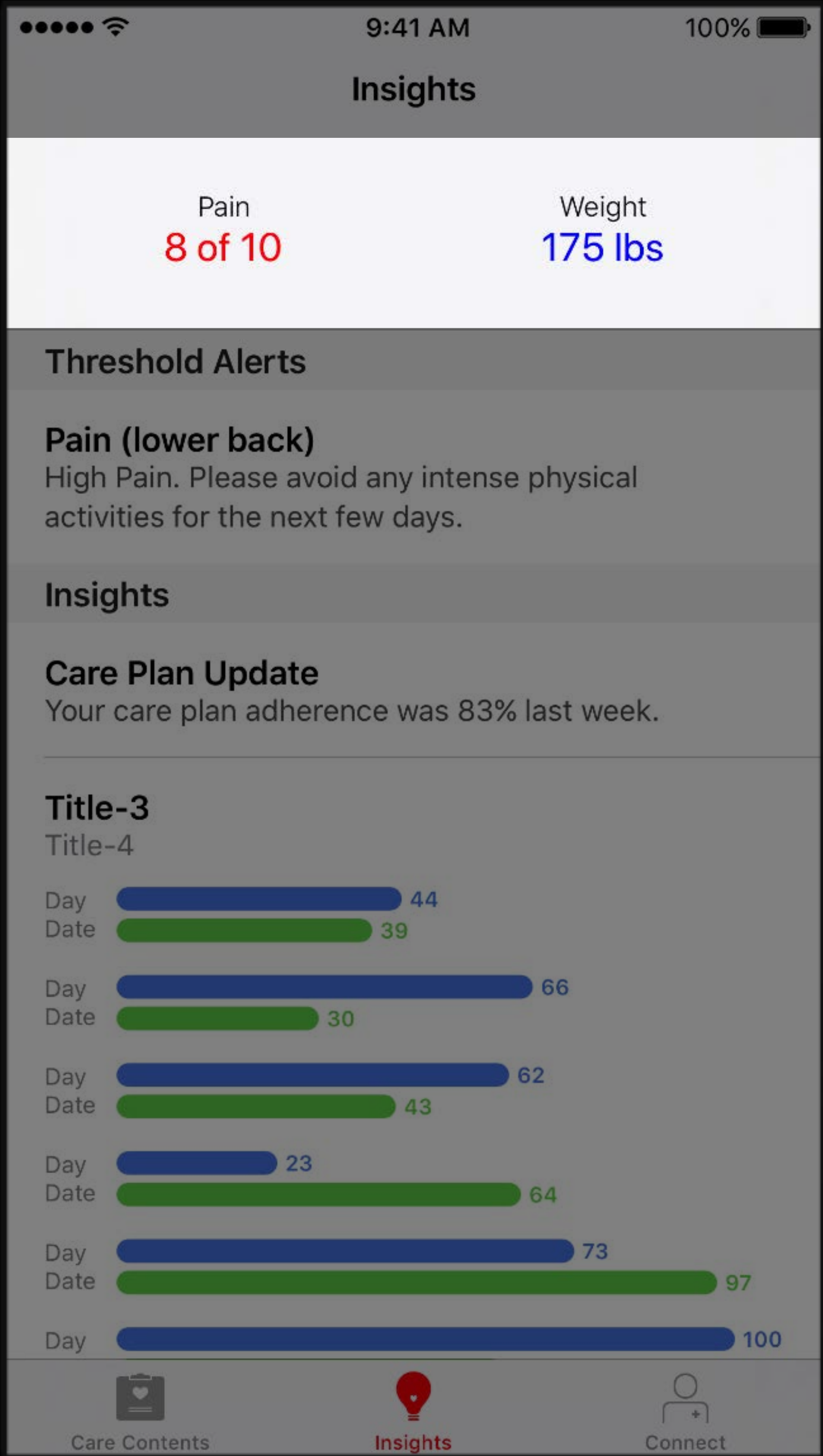
Care Contents



Insights



Connect



```
title Pain
text 8 of 10
tintColor 0xff0000

title Weight
text 175 lbs
tintColor 0x0000ff
```

Plist File




## Connect





**Srinath Tupil**

25 M

### INBOX

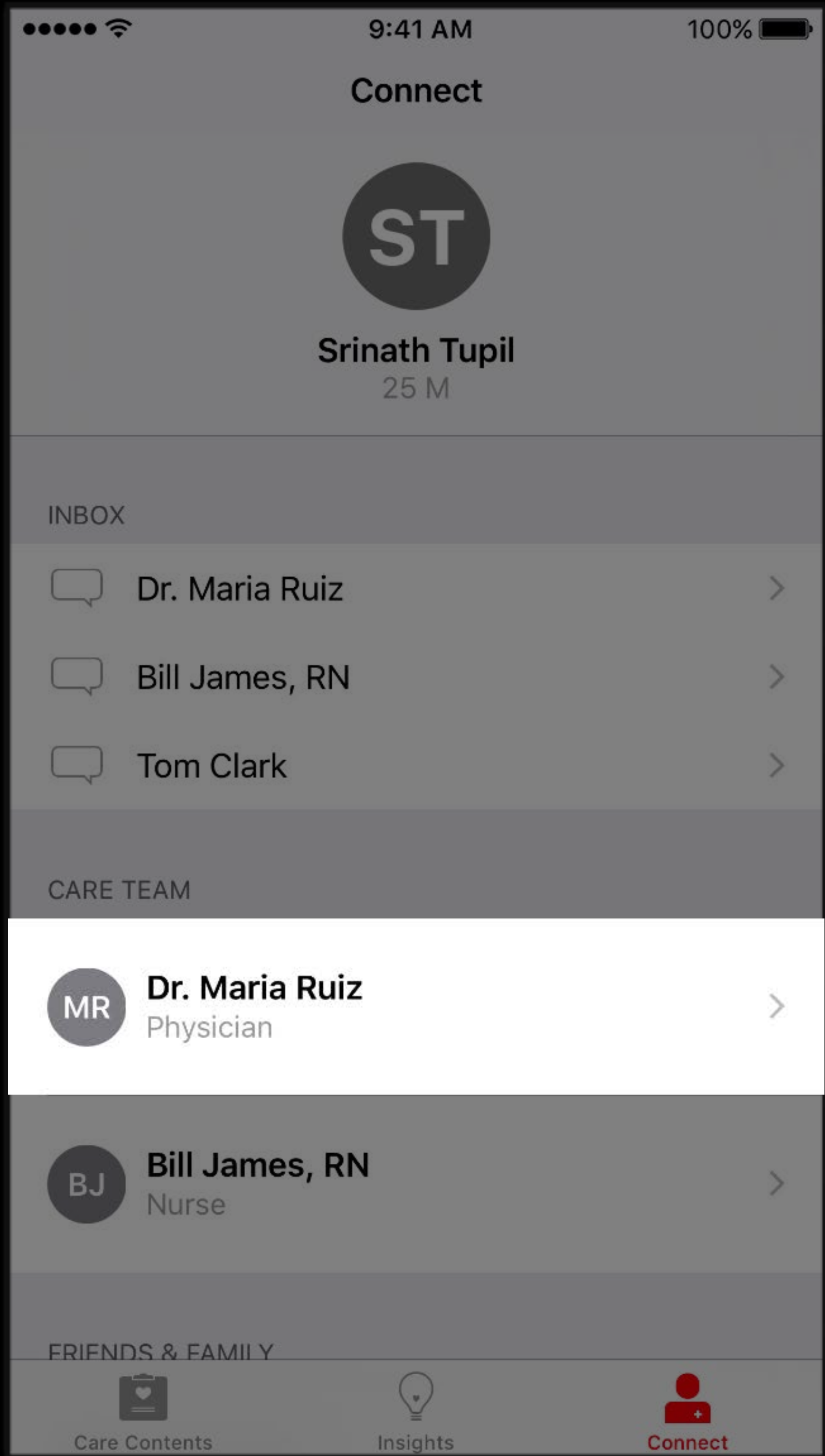
-  Dr. Maria Ruiz >
-  Bill James, RN >
-  Tom Clark >

### CARE TEAM

-  **Dr. Maria Ruiz**  
Physician >
-  **Bill James, RN**  
Nurse >

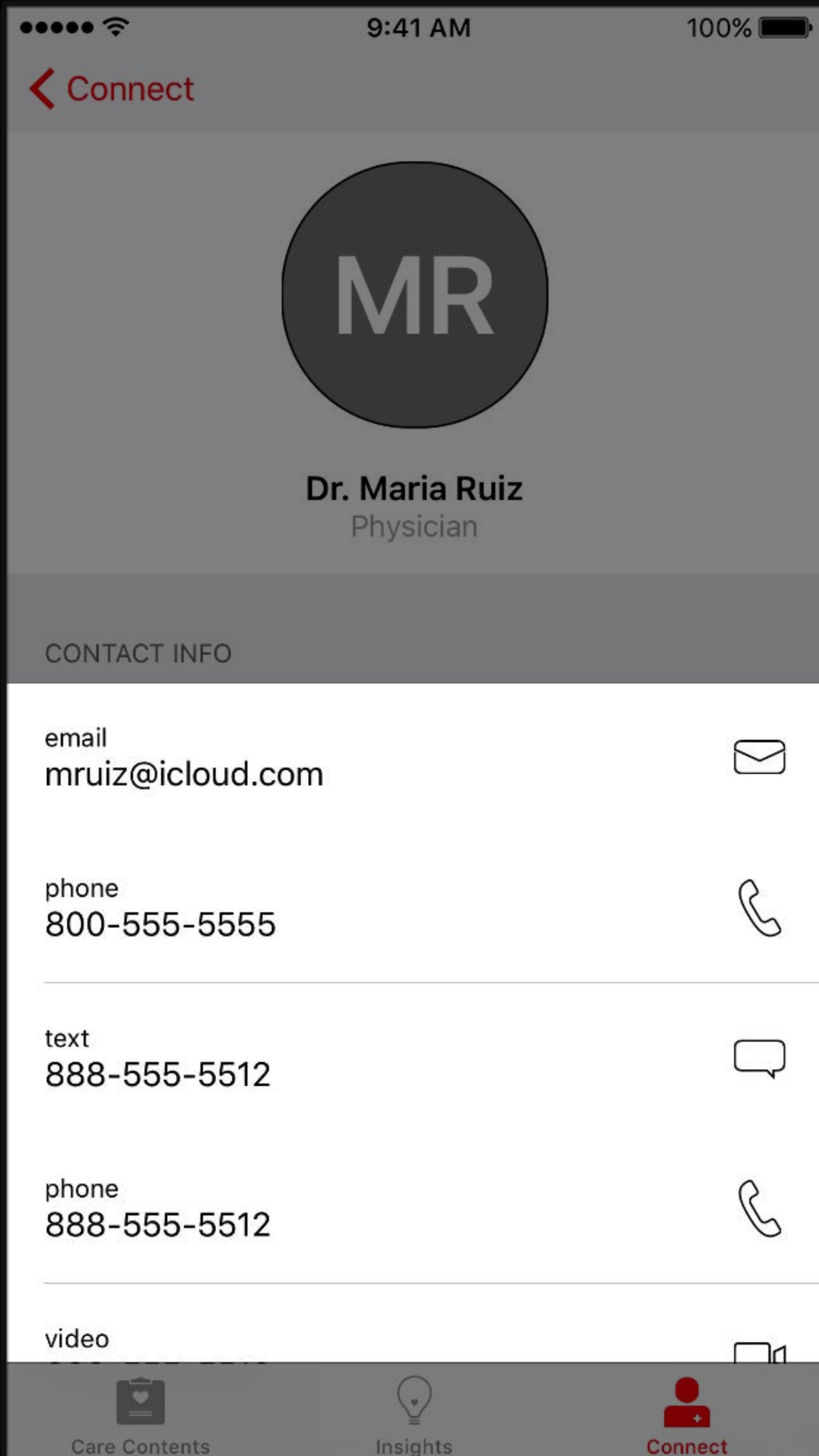
### FRIENDS & FAMILY





type	careTeam
name	Dr. Maria Ruiz
relation	Physician
monogram	MR
phone	800-555-5555
sms	888-555-5512
email	mruiz@icloud.com
facetimeVideo	888-555-5512
facetimeAudio	888-555-5512

Plist File



type	careTeam
name	Dr. Maria Ruiz
relation	Physician
monogram	MR
phone	800-555-5555
sms	888-555-5512
email	mruiz@icloud.com
facetimeVideo	888-555-5512
facetimeAudio	888-555-5512

Plist File



Xcode



CareKit Repository



Xcode



CareKit Repository



# Xcode

Create great apps for Mac, iPhone, and iPad.



**Install** ▾

Xcode 4+  
Essentials

Xcode includes everything developers need to create great applications for Mac, iPhone, iPad, Apple TV, and Apple Watch. Xcode provides developers a unified workflow for user interface design, coding, testing, and debugging. The Xcode IDE combined with the Swift programming language make developing apps easier and more fun than ever before.

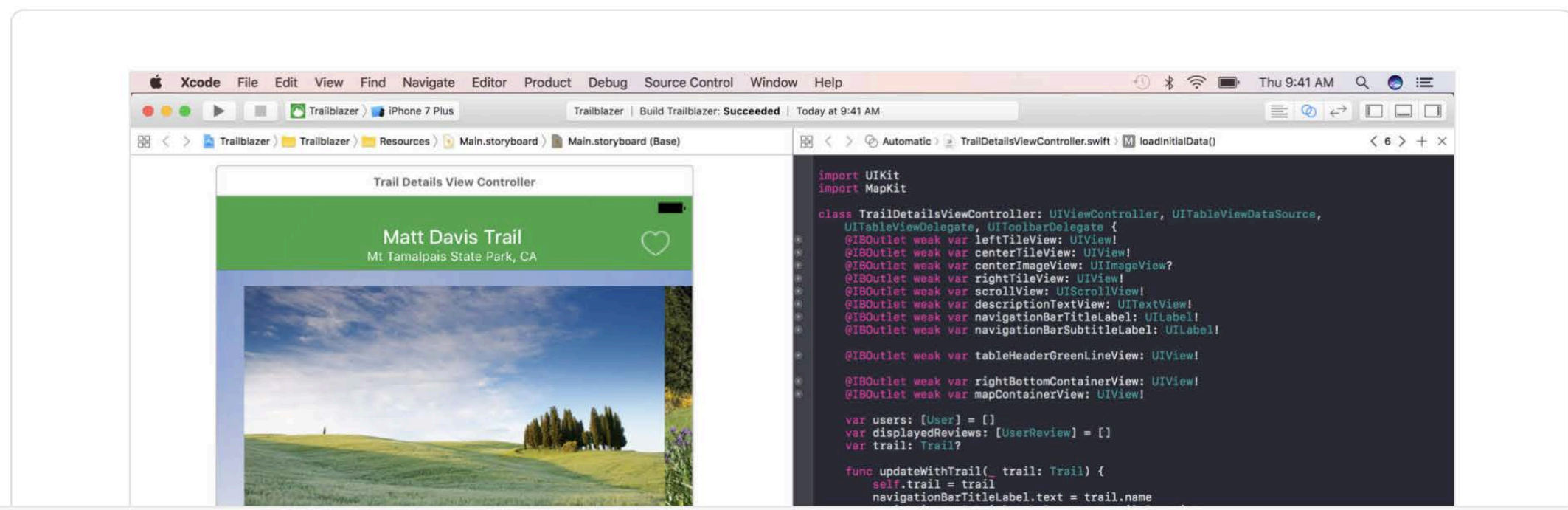
### What's New in Version 8.3.2

Xcode 8.3.2 includes Swift 3.1 and SDKs for iOS 10.3, watchOS 3.2, tvOS 10.2, and macOS Sierra 10.12

- [Apple Web Site](#) >
- [Xcode Support](#) >
- [App License Agreement](#) >
- [Privacy Policy](#) >

...More

...More



### Information

Category: Developer Tools  
 Updated: Apr 18, 2017  
 Version: 8.3.2  
 Price: Free  
 Size: 4.51 GB  
 Family Sharing: Yes  
 Language: English  
 Seller: Apple Inc.  
 © 1999–2017 Apple Inc.

Rated 4+  
 Compatibility:  
 macOS 10.12 or later

### More by Apple





Xcode



CareKit Repository




Xcode



CareKit Repository

carekit.org

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# CareKit

[Overview](#) [Blog](#)

---

## Introducing CareKit

Care doesn't only happen at the doctor's office. That's why Apple created CareKit. An open source framework, CareKit allows developers to build beautiful apps that leverage a variety of customizable modules. CareKit apps will let users regularly track care plans, monitor their progress, and share their insights with care teams. Since CareKit is open source, developers can build upon existing modules and contribute new code to help users world wide create a bigger—and better—picture of their health.



upon existing modules and contribute new code to help users world wide create a bigger—and better—picture of their health.

## Framework

The CareKit framework offers core modules that includes a Care Card for displaying care plans, a Symptom and Measurement Tracker for monitoring symptoms and tracking objective measurements, Insights for surfacing health tips and visualizing trends, and Connect to engage care teams and family members as partners in your health journey.

The framework comes with a sample app, API documentation, and a programming guide to help you build an incredible care app. CareKit is localized to many languages for use world wide.

## Links

[Get it on GitHub](#)

[Documentation](#)

[API Reference](#)

[Sample App](#)

[Watch the Video](#)

## Best Practices

The CareKit framework has a local data store, but does

## Using CareKit

CareKit is easy to use. It has six modules; you can use as many as you'd like in your app.

These four modules provide the user interface:

- Care Card, manages tasks that a user needs to perform as part of a treatment. For example, taking a medication, changing a wound dressing, or meditating.
- Symptom and Measurement Tracker, manages tasks that evaluate the effectiveness of a treatment plan. These include subjective assessment of symptoms (such as pain scales) and objective measurements (such as blood pressure).
- Insights, displays charts that are intended to provide insight to a user by showing the relationship between treatment and progress. An insight can also be a text that provides a tip or alert to help someone stay on track with their health goals.
- Connect, helps a user communicate their health status and Insights data with care teams and friends/family members.

These two modules manage data:

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carekit-apple / CareKit

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Code Issues 31 Pull requests 6 Projects 0 Wiki Pulse Graphs

CareKit is an open source software framework for creating apps that help people better understand and manage their health.

207 commits 2 branches 7 releases 28 contributors BSD-3-Clause

Branch: master New pull request Create new file Upload files Find file Clone or download

umerkhan-apple committed on GitHub Merge pull request #153 from moppymopperson/remove-radar-bug Latest commit 50c4874 on Mar 30

CKWorkspace.xcworkspace	Initial commit	a year ago
CareKit.xcodeproj	Merge pull request #130 from moppymopperson/publicAccessTableView	3 months ago
CareKit	Add OCK prefix to CareCardAccessibilityElement	2 months ago
CareKitTests	convergence	8 months ago
Sample	Merge pull request #153 from moppymopperson/remove-radar-bug	2 months ago
dependency @ c1493b9	Update dependency	7 months ago
docs	convergence	8 months ago
scripts	Added updated find_headers.rb from ResearchKit git	11 months ago
testing/OCKTest	Fix missing Mercury symbol on mmHg unit	3 months ago
.gitignore	Initial commit	a year ago
.gitmodules	convergence	8 months ago

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testing/OCKTest	Fix missing Mercury symbol on mmHg unit	3 months ago
.gitignore	Initial commit	a year ago
.gitmodules	convergence	8 months ago

MacBook Pro

***Demo***

Building a custom prototype app

# CareKit Prototyping Tool

# CareKit Prototyping Tool

Limitations

# CareKit Prototyping Tool

## Limitations

- Prototyping only



# CareKit Prototyping Tool

## Limitations

- Prototyping only
- No support for custom views

# CareKit Prototyping Tool

## Limitations

- Prototyping only
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- Prototyping only
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## Features

- No coding required

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## Limitations

- Prototyping only
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## Features

- No coding required
- Rapid prototyping

# CareKit Prototyping Tool

## Limitations

- Prototyping only
- No support for custom views
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## Features

- No coding required
- Rapid prototyping
- Highly customizable

# CareKit Prototyping Tool

## Limitations

- Prototyping only
- No support for custom views
- Cannot integrate with ResearchKit or HealthKit

## Features

- No coding required
- Rapid prototyping
- Highly customizable
- Can be leveraged by developers and designers





Open Source.  
It's what WE make of it.

# Collaboration

Ideas...

# Collaboration

Ideas...

Population views

- Researchers
- Care teams

# Collaboration

Ideas...

Population views

- Researchers
- Care teams

EMR Hooks

# Collaboration

Ideas...

Population views

- Researchers
- Care teams

EMR Hooks

Modules

- Education
- Social network
- Rewards

# Collaboration

Our role

# Collaboration

Our role

Accessibility

# Collaboration

Our role

Accessibility

Localization



# Collaboration

Our role

Accessibility

Localization

QA testing

# Collaboration

Our role

Accessibility

Localization

QA testing

Merge into framework

Contribute



ResearchKit



CareKit

# More Information

<https://developer.apple.com/wwdc17/232>

# Related Sessions

---

Connecting CareKit to the Cloud

Grand Ballroom A

Friday 10:00AM

---

What's New in Health

WWDC 2017

---

# Labs

---

ResearchKit and CareKit Lab

Technology Lab H

Fri 11:00AM–1:00PM

---

