

# Electronic Check-In Project

An Example of a Quality Improvement Project

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SDSU Research Foundation WIC Program  
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# Roadmap for this presentation

- ▶ Local Agency Background
- ▶ CQI Framework
  - ▶ Quality Improvement (QI) using Action Research
  - ▶ QI as distinct from Quality Assurance (QA)
- ▶ Share example of QI within our Agency
  - ▶ Electronic Check-In Project (E-CIP)
    - ▶ Inception of Project
    - ▶ Objectives of Project
    - ▶ Process & Progress
    - ▶ Lessons Learned
    - ▶ Future Directions
- ▶ How E-CIP exemplifies key characteristics of CQI





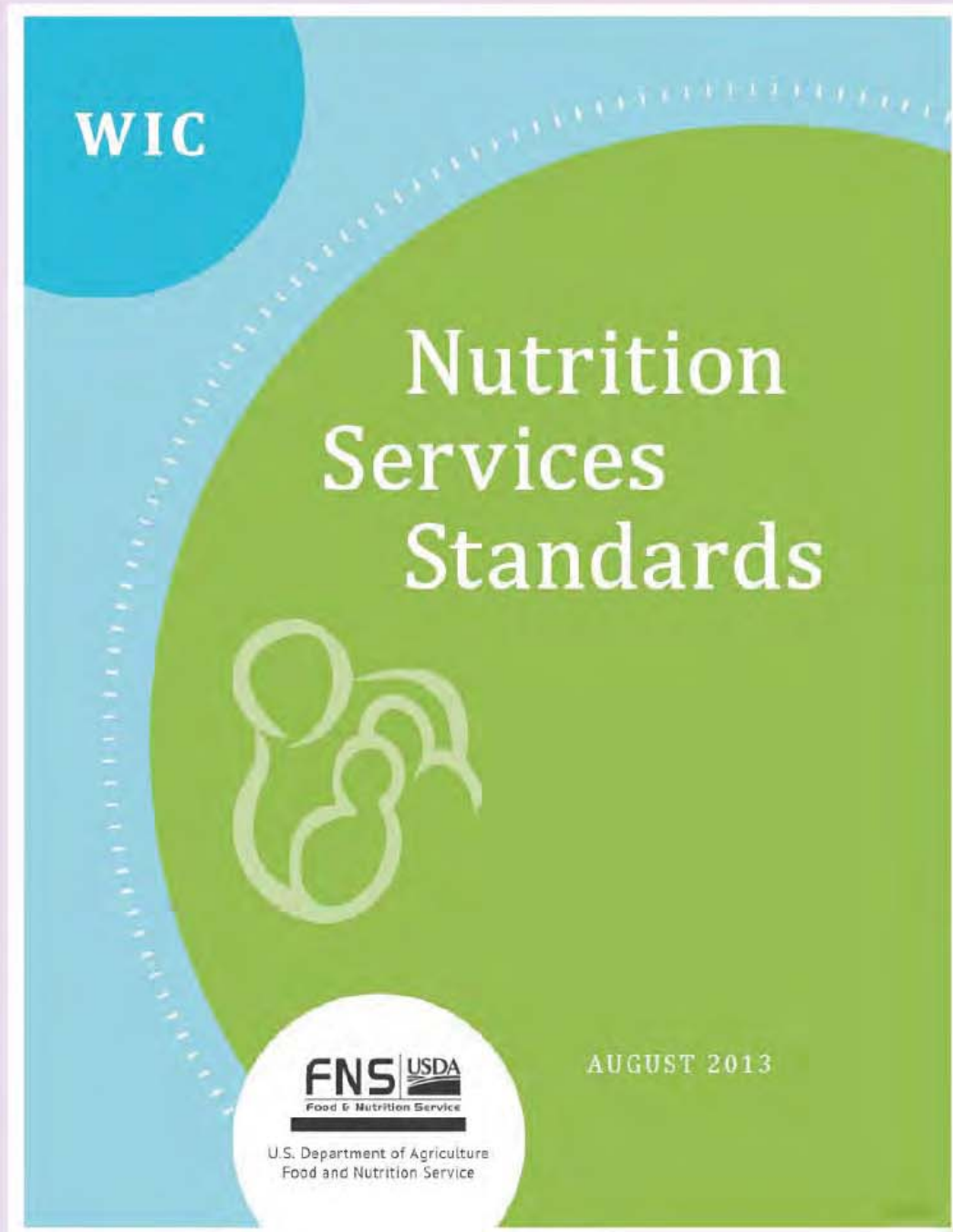
# Continuous Quality Improvement (CQI)

What is it?

How does it fit within WIC?

How does it differ from  
Quality Assurance (QA)?





We have guidelines from FNS/USDA of August 2013 to help with this question

# Continuous Quality Improvement

## “Standard 16 - Quality Improvement

The State and Local Agency engage in ongoing Quality Improvement (QI) to continuously improve staff procedures and the nutrition services participants receive.”

*FNS/USDA Nutrition Service Standards, August 2013*



# Measurement & Monitoring



QA answers a closed-ended question

with one of two options: yes/no; pass/fail; meets expectations/does not meet expectations, etc.

# Improvement



QI answers an open-ended question

such as: “How can we improve our services?” or  
“How can ‘x’ process be more efficient?”

# Quality Improvement (QI)



- ▶ How can we improve what we are doing?

**Reflection/Planning**

- ▶ Take Action

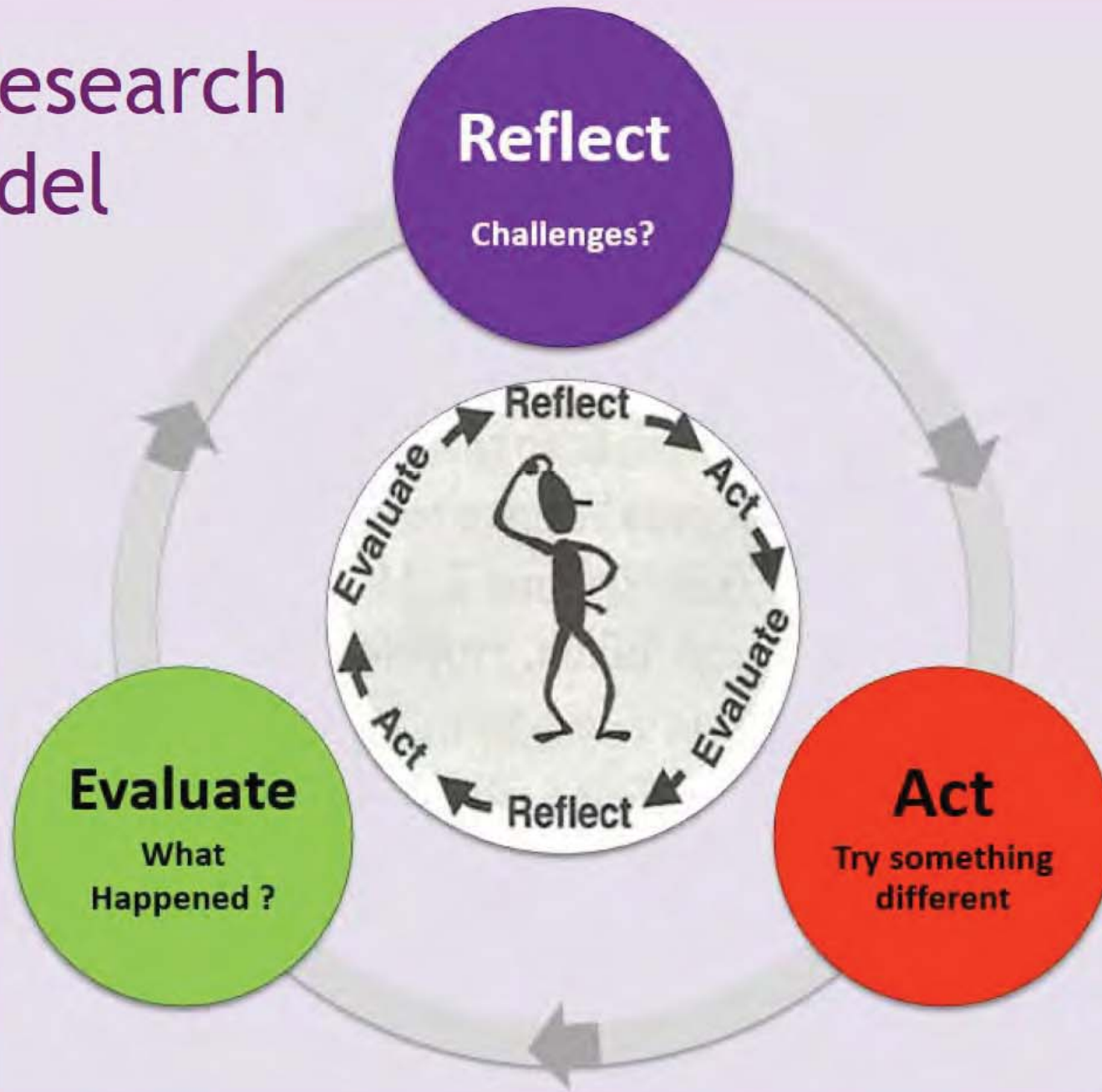
**Observe/Examine**

- ▶ What does it look like after “the improvement”?

**Assessment**



# Action Research Model





**Reflect**

Challenges?



**Evaluate**

What  
Happened ?



**Act**

Try something  
different



Action Research  
Model

+

Quality Improvement  
Project

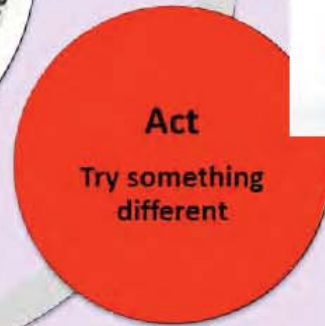
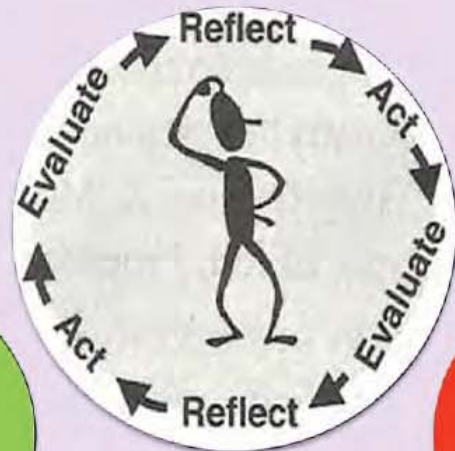
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**E-CIP**

Electronic  
Check-In  
Project



# Inception of E-CIP



**E-CIP**

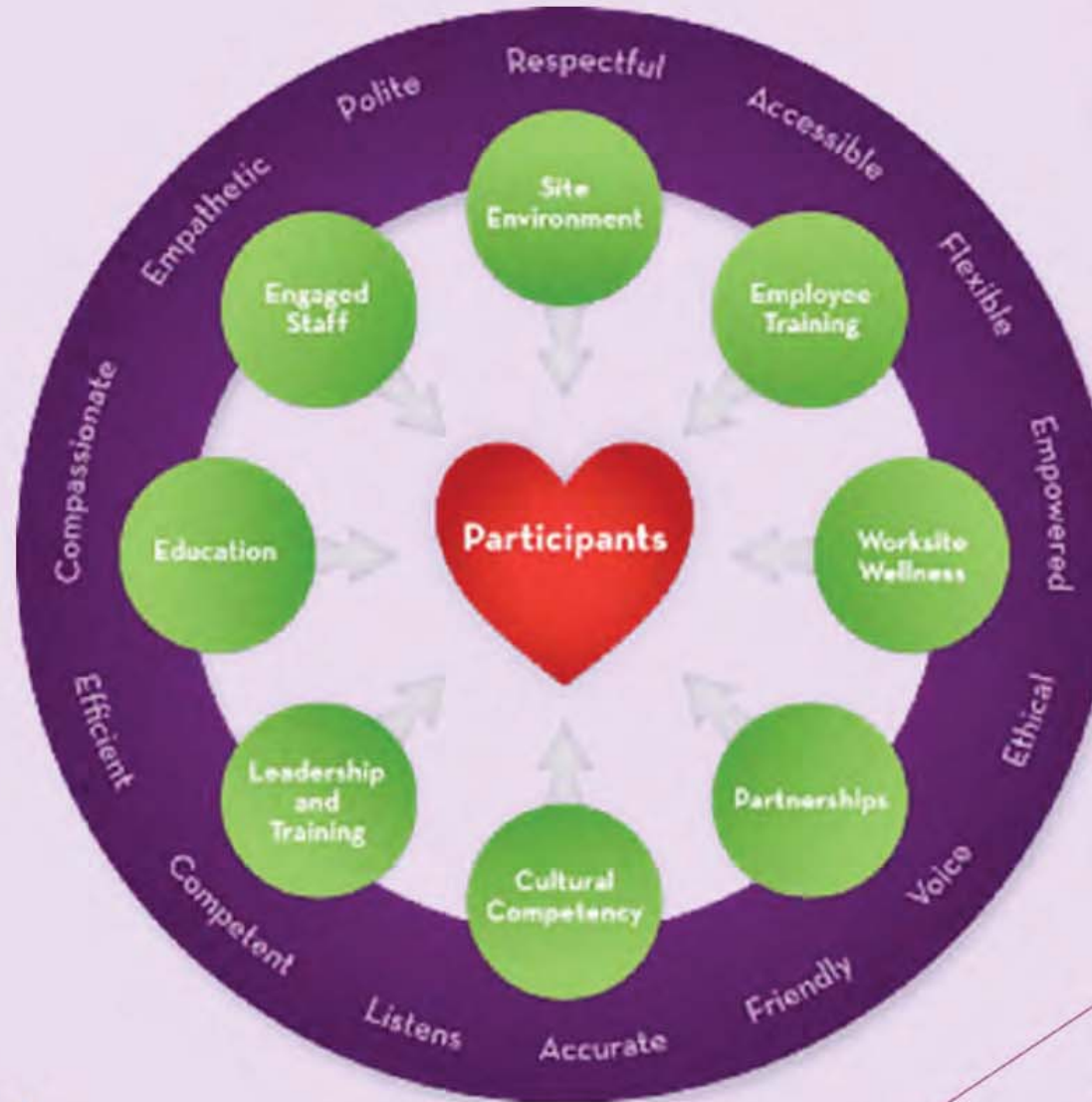
# What is



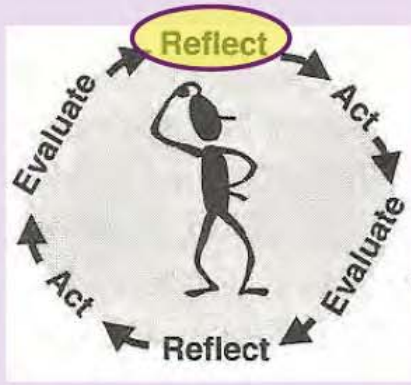
?

## Academy for Participant- Centered Leadership

A California State WIC Program  
5 years, beginning 2010 through 2014







# Reflect

Through APL we were able to reflect on challenges:

- ▶ select an area for a Quality Improvement effort
- ▶ identify specific challenges and objectives



# We went to the Site Staff Teams to listen to their challenges

**First Question** - What would they like to know from the participants?

“Do they know what to do when they first come in?”

**Discussion ensued . . .**

Actually, the sense was that they do know what to do, they just don't want to . . .

**For example**, frequently, they will “jump the line” to say, I just have a question . . .



# As we listened, a picture developed

Direct Service Delivery Staff feel pressure  
and at times

Participants express impatience or frustration

Experienced as time crunch for  
both staff and participants

# Progression to Problem-Solving

What about additional signage?

- ▶ Suggesting Courtesy
- ▶ Providing Directions
  
- ▶ No, we have it and when impatience or frustration arise, signs aren't calming

Someone said, "What about Electronic Check-In?"

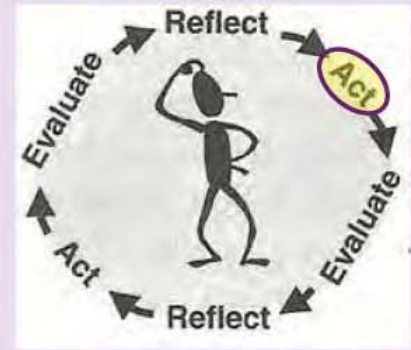


## A Spontaneous Suggestion for Innovation



# Objectives of the Electronic Check-In Project

- a. to improve the quality of support provided to direct service delivery staff
- b. to engage the expertise of direct service delivery staff
- c. to improve participant satisfaction with WIC visit
- d. to improve ability of staff to meet participant needs efficiently
- e. to reduce staff burden and participant frustration and stress of both.

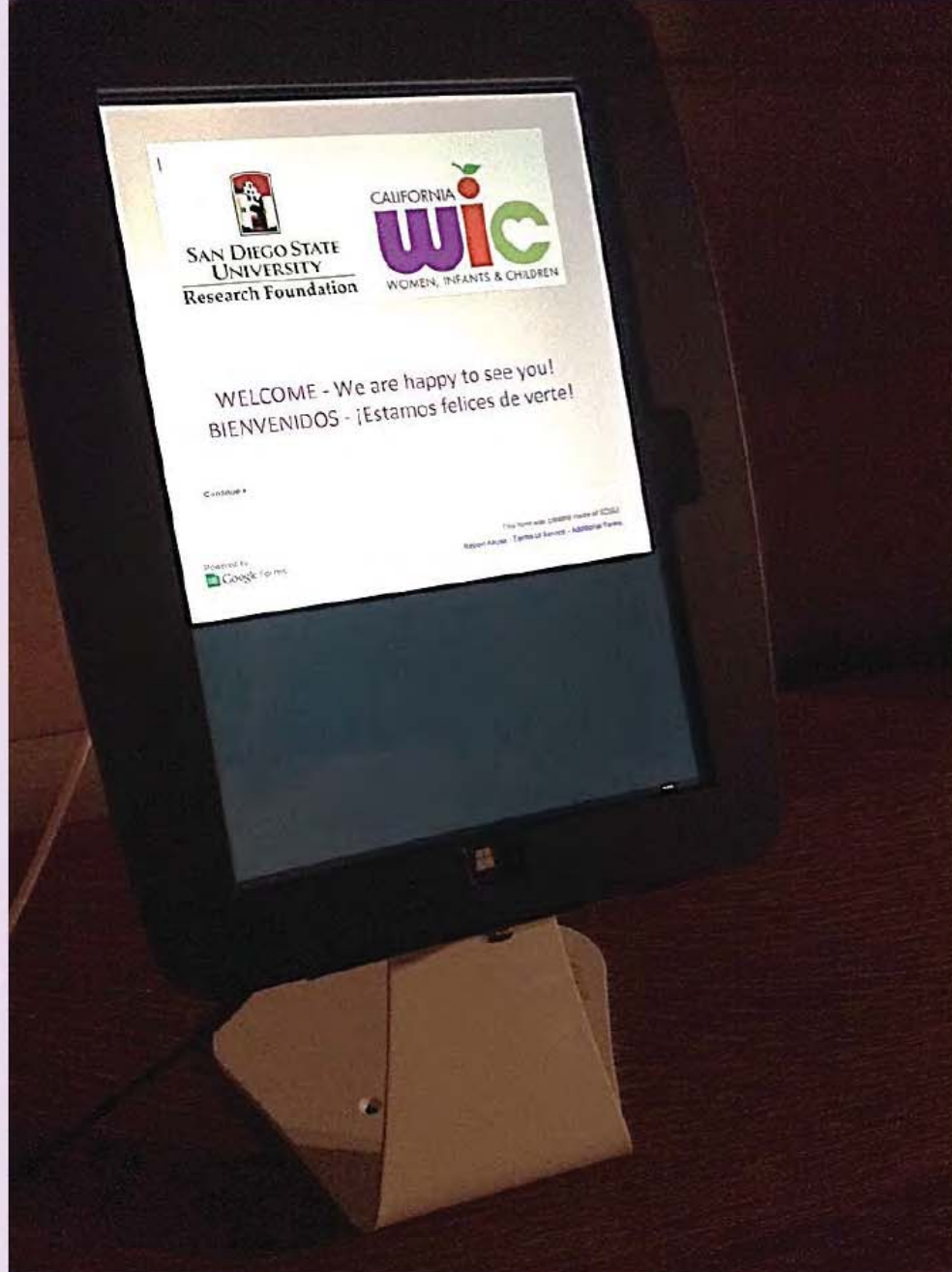


# Moving to Action

- ▶ Secure Funding
  - ▶ APL Project Budget
  - ▶ Equipment \$6,000
  
- ▶ Acquire Equipment
  - ▶ Microsoft Surface 3 Tablet  
\$499.00 + tax (currently)
  - ▶ Security Mounts  
\$129.00 + tax (currently)







# Planning & Process

# Series of Collaborative Work Sessions: Portion of Regularly Schedule Meetings

- ▶ Rich discussion considering wide-range of options for use:
  - ▶ For Walk-Ins
  - ▶ For Bottlenecks
    - ▶ For example: Processing before Class times
  - ▶ For all participants as they arrive at WIC site
- ▶ Considered & Discussed
  - ▶ potential barriers, obstacles
  - ▶ opportunities, benefits to use



# Reflect on discussions

- ▶ Decided to pilot use of the Electronic Check-In for
  - ▶ All participants upon arrival
- ▶ Selected specific objectives for the first pilot
- ▶ Developed trial flow of Check-In Screens/Questions
- ▶ Selected first two WIC sites for pilot testing

# Round I - Electronic Check-In Pilot

Will be testing two aspects:

- ▶ A “virtual queue” for all Participants arriving at WIC site
- ▶ A “strategy tool” for all Site Staff - get an overview of who is waiting for what reason



# Intentions

- ▶ A “virtual queue” for all Participants arriving at WIC site

queue up - form a queue, form a line, stand in line;

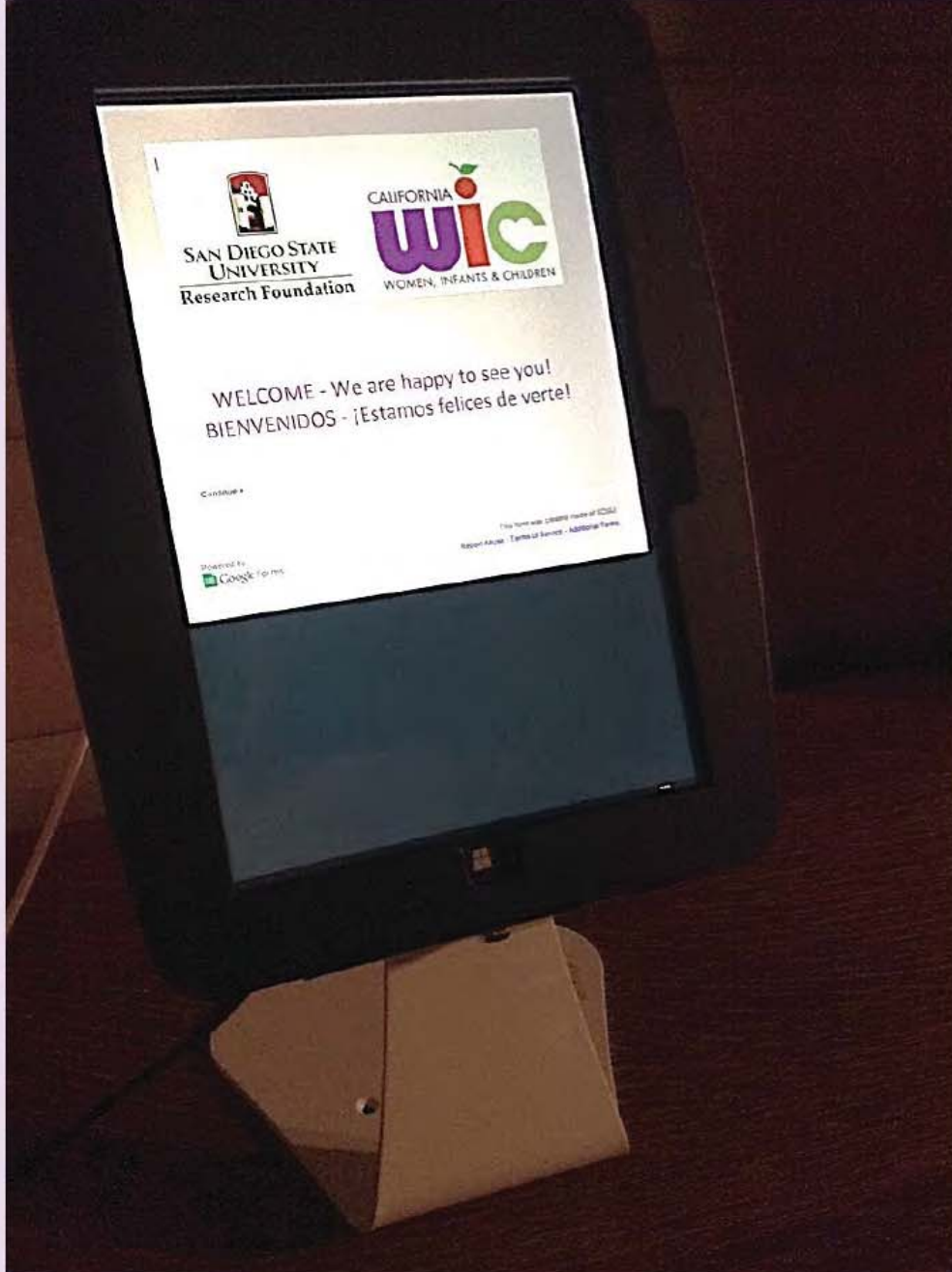
- ▶ A “strategy tool” for all Site Staff - get an overview of who is waiting for what reason

Manage the queue with greater efficiency and effectiveness while improving the customer experience.

# Possible Advantages

- ▶ Improve Fairness ~ Virtual Queue
- ▶ Improve Efficiency ~ Strategy Tool
  
- ▶ Reduce Wait Time
- ▶ Reduce Staff Stress
- ▶ Improve Participant Satisfaction
- ▶ Improve Participant Perception of Fairness
- ▶ Reduce Participant Stress





# Piloting & Progress

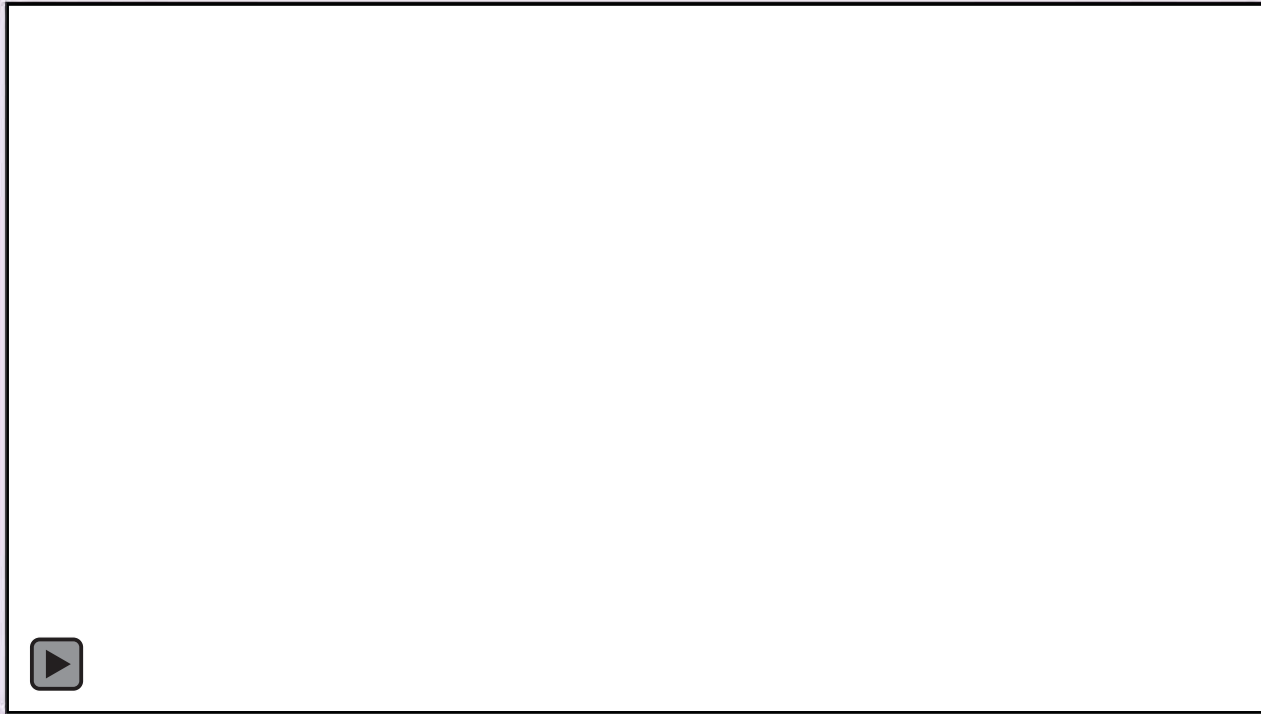
# Early Piloting Steps: preparing for actual use with participants

Worked with a wide-range of WIC staff to:

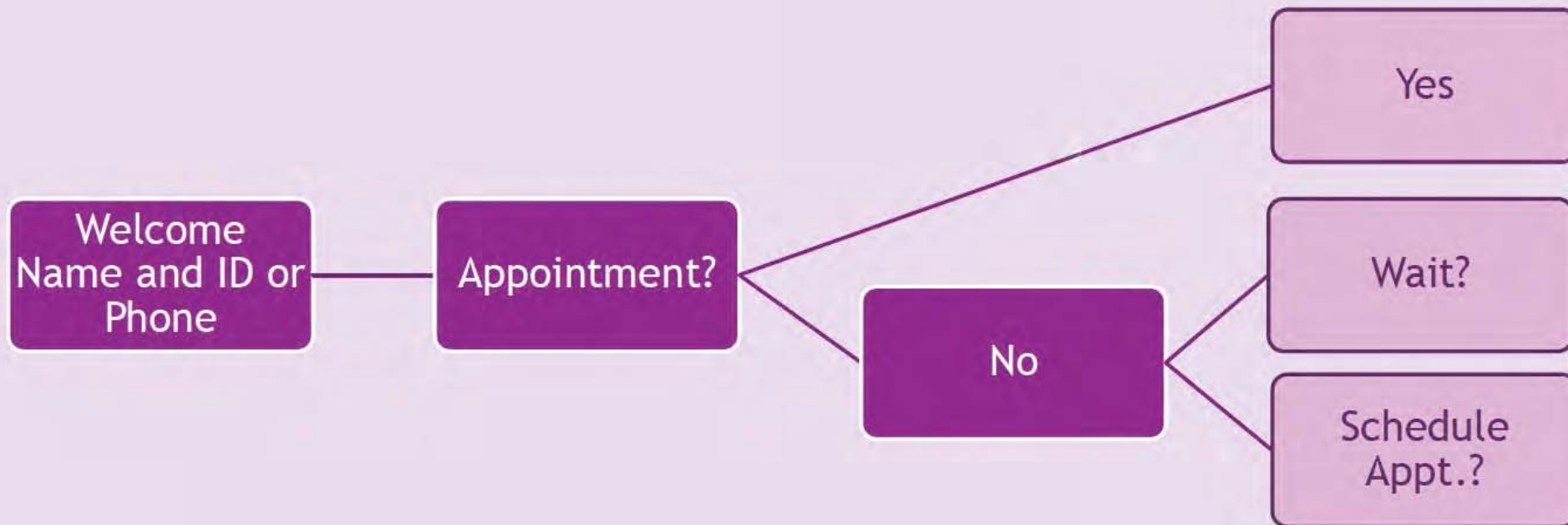
- ▶ Figure out set-up -physical and electronic arrangement of equipment
- ▶ Design flow of Check-In Screens/Questions developed for initial pilot
- ▶ Give staff opportunity to try it out and give input on all aspects
- ▶ Consider ideas for using information resulting from Check-In Screens
- ▶ Consider schedule and location for initial pilot testing with actual participants at the sites



# Use of Electronic Check-In at the Site



# Overview of Basic Flow of Questions on Check-In Screen







WELCOME - We are happy to see you!  
BIENVENIDOS - ¡Estamos felices de verte!

Name / Nombre

Please enter your WIC Family ID / ¿Cual es tu número de identificación familiar de WIC?

Or phone number with area code / ó número de teléfono con código de área?

Continue >



Do you have an appointment today? / ¿Tiene una cita hoy?

- Yes / Sí
- No / No

< Back

Continue >



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**Do you have an appointment today? / ¿Tiene una cita hoy?**

Yes / Sí

No / No

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**What do you prefer? / ¿Cuál es su preferencia?**

Wait until a WIC Counselor is available to meet with you? / Esperar hasta que un Consejera de WIC esté disponible?

Schedule an appointment. / Programar una cita.

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San Diego State University Research Foundation logo and California WIC logo (Women, Infants & Children).

Please press "submit" and be seated. / Por favor presione el boton "submit" y toma asiento.

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Never submit passwords through Google Forms.



San Diego State University Research Foundation logo and California WIC logo (Women, Infants & Children).

**Welcome to WIC! / ¡Bienvenidos a WIC!**

Thank you for checking in! We will assist you as soon as possible.

Gracias! Estaremos encantados de ayudarle tan pronto como sea posible.

[Submit another response](#)

# Set up Check-In Screens using Google Forms

Form Settings

- Require SDSU login to view this form
- Automatically collect respondent's SDSU username
- Show progress bar at the bottom of form pages
- Only allow one response per person (requires login) ?
- Shuffle question order ?

Page 1 of 5

**Welcome to WIC! / ¡Bienvenidos a WIC!**

WELCOME - We are happy to see you! BIENVENIDOS - ¡Estamos felices de verte!

Name / Nombre

Please enter your WIC Family ID / ¿Cual es tu número de identificación familiar de WIC?

Or phone number with area code / ó número de teléfono con código de área?

Add item -

After page 1 Continue to next page ↻

Page 2 of 5

Do you have an appointment today? / ¿Tiene una cita hoy?

Yes / Sí

No / No

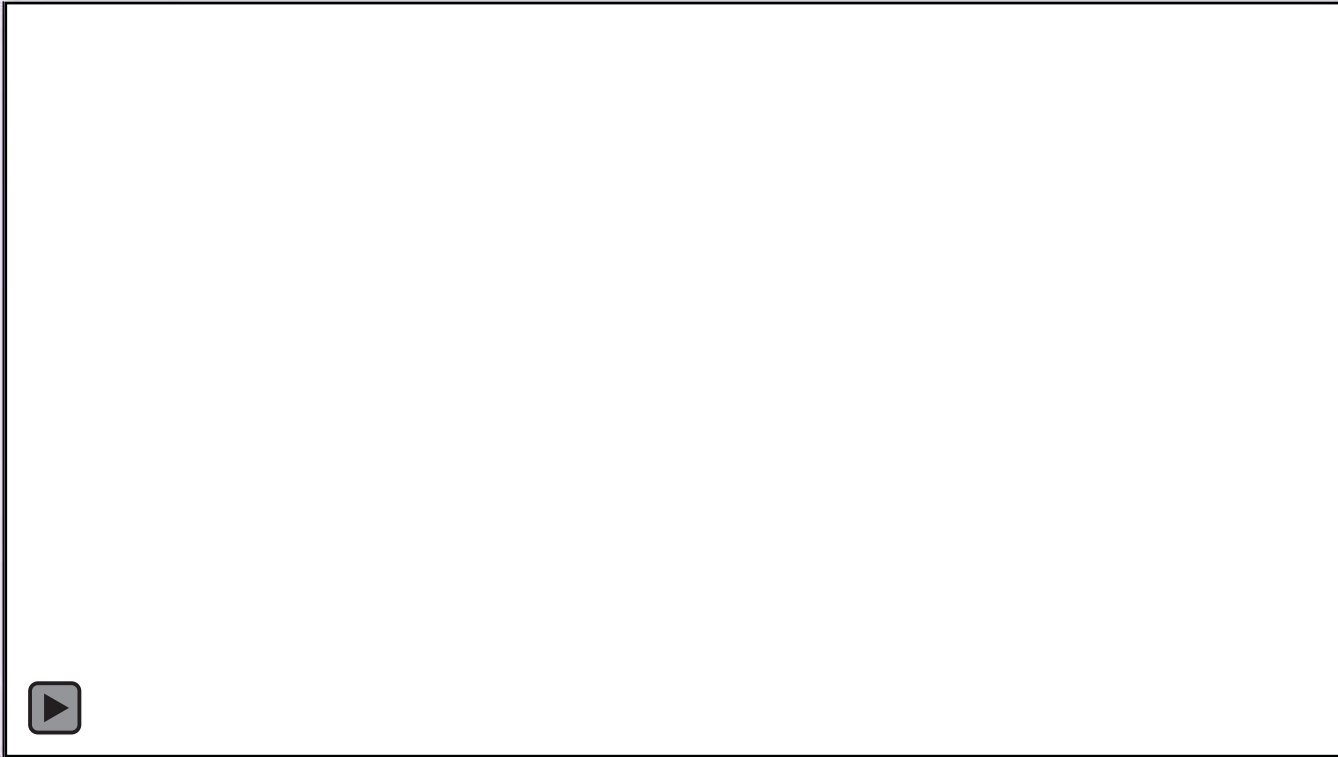
Add item -

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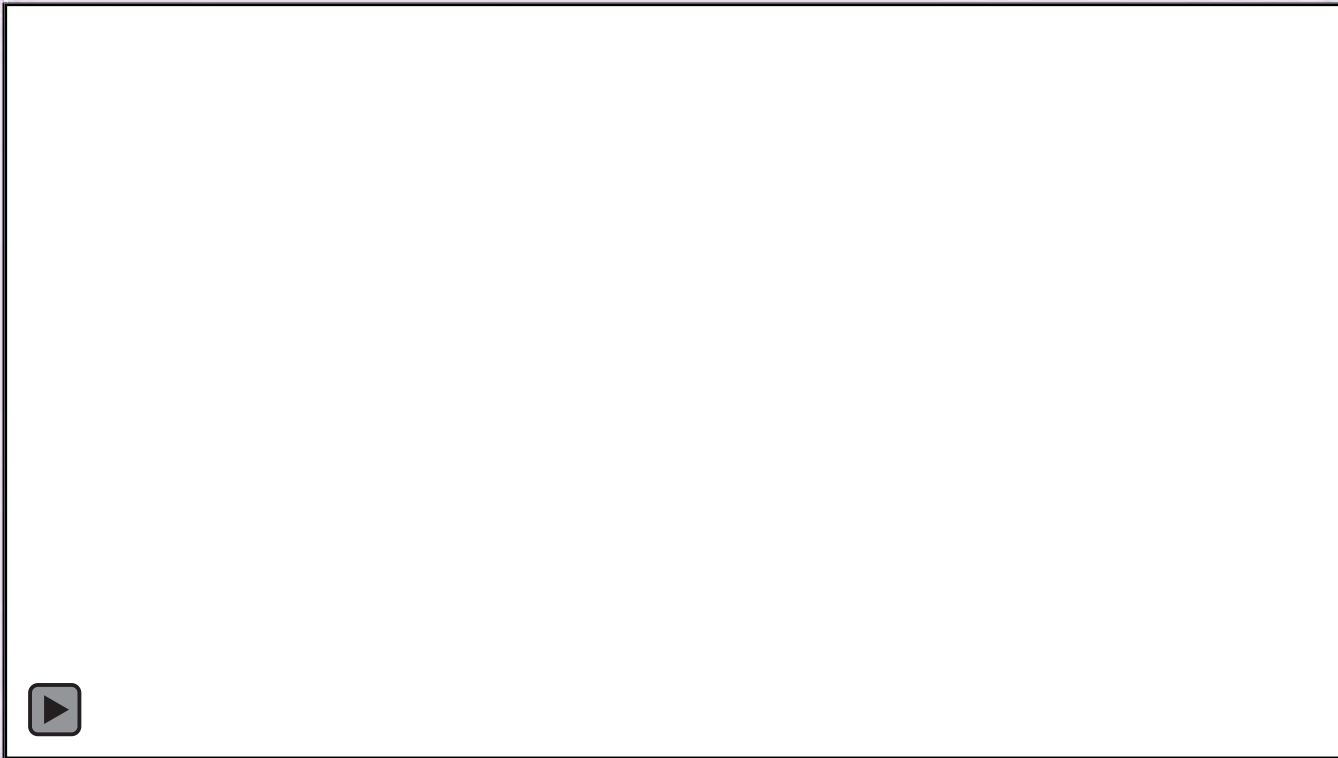




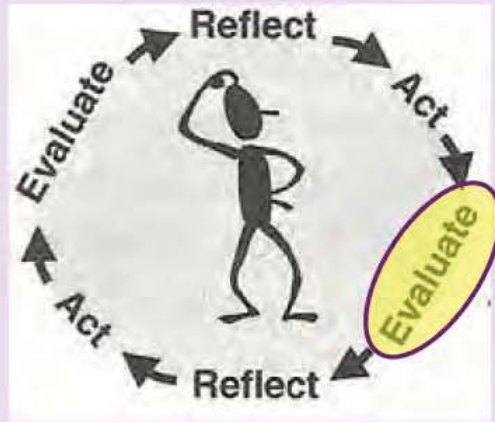
# Use of Electronic Check-In at the Site



How do the Staff access and use the information entered by the Participant?





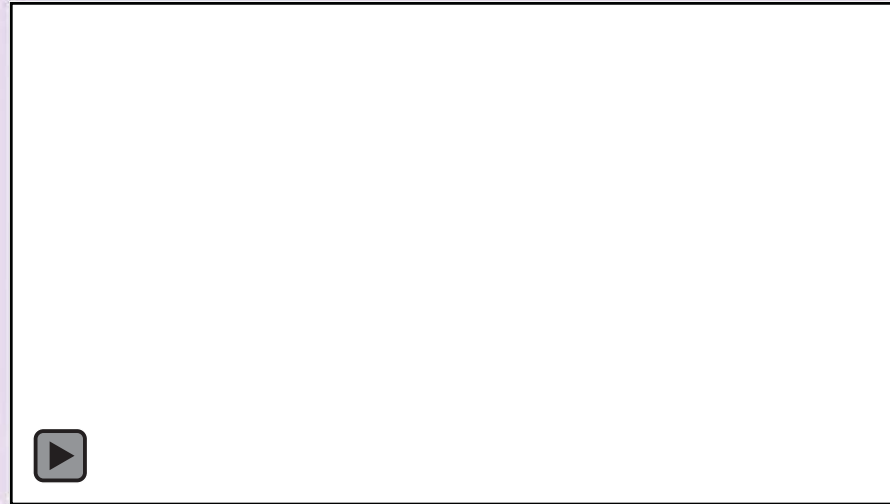
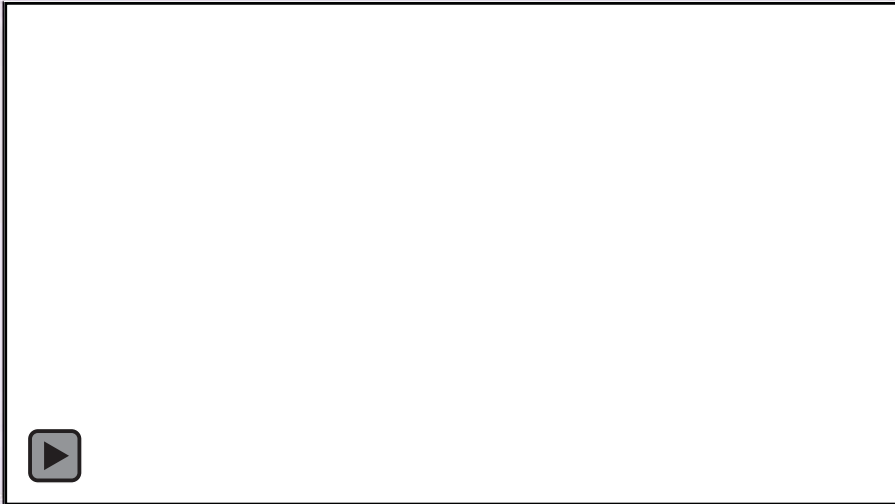


Evaluate →

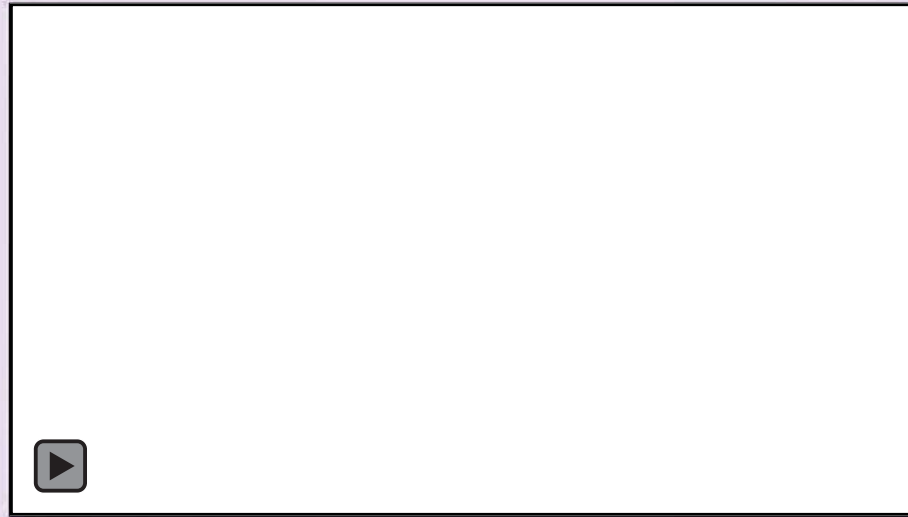
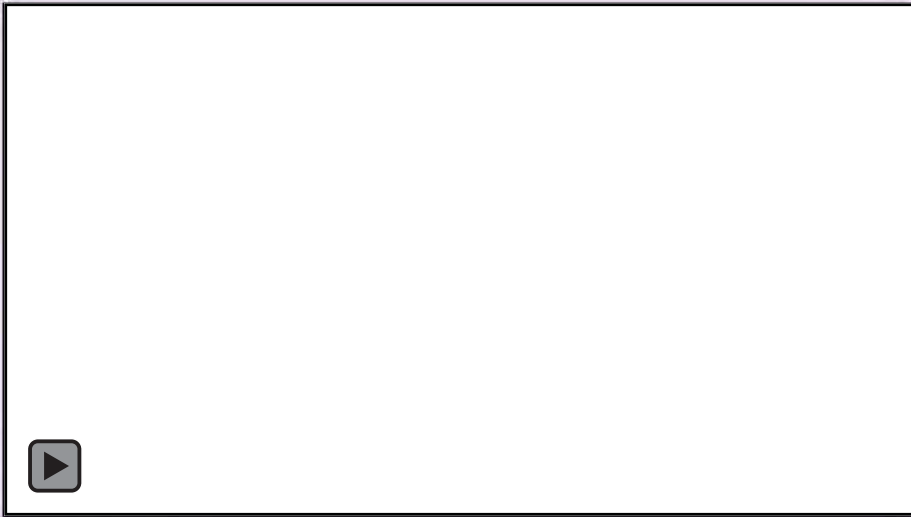
Improve Office Flow  
Reduce Pressure  
Staff  
Participants

- ▶ Improve Fairness ~ Virtual Queue
- ▶ Improve Efficiency ~ Strategy Tool
  - ▶ Reduce Wait Time
  - ▶ Reduce Staff Stress
  - ▶ Improve Participant Satisfaction
  - ▶ Improve Participant Perception of Fairness
  - ▶ Reduce Participant Stress

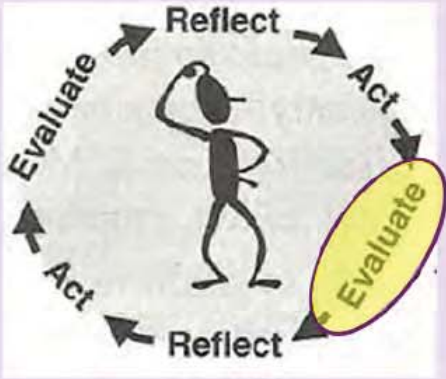
# What Participants have to say about the Electronic Check-In System



# What WIC Staff have to say about the Electronic Check-In System







## Evaluate: Taking a Closer Look at Assessment and Evaluation during the Pilot Phase

Requires careful balance between:

Planning

Flexibility



Allows use of On-Site Expertise

- ▶ Some adjustments are rapid
  - ▶ Examples
    - ▶ Specific Text and Flow of Screens
    - ▶ Location & Securing Equipment
- ▶ Some require greater consideration
- ▶ Some require measurement
  - ▶ Ex- Office flow
  - ▶ Participant perception
  - ▶ Staff perception



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**Please enter your WIC Family ID number? / ¿Cual es su número de Identificación Familiar?**

**OR Name and phone number with area code / ¿O Nombre y número de teléfono con código de área?**

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Do you have an appointment today? / ¿Tiene una cita hoy?

- Yes / Sí
- No / No
- I have an appointment. / Tengo una cita.
- I am here for a different reason. / Estoy aquí por una razón diferente.

[Back](#) [Continue](#)



If you want to, share your question or the reason you came in. Si desea, puede compartir su pregunta o la razón por su visita.

[Back](#) [Continue](#)



Do you have your WIC Folder with you? / ¿Tiene su Solpe de Identificación con usted?

- Yes / Sí
- No / No

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Do you have an appointment today? / ¿Tiene una cita hoy?

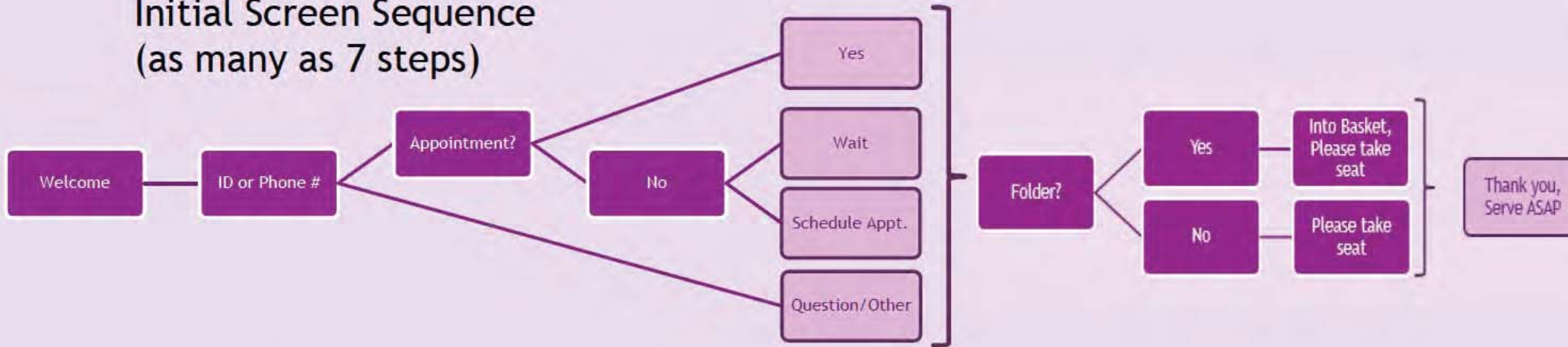
- Yes / Sí
- No / No

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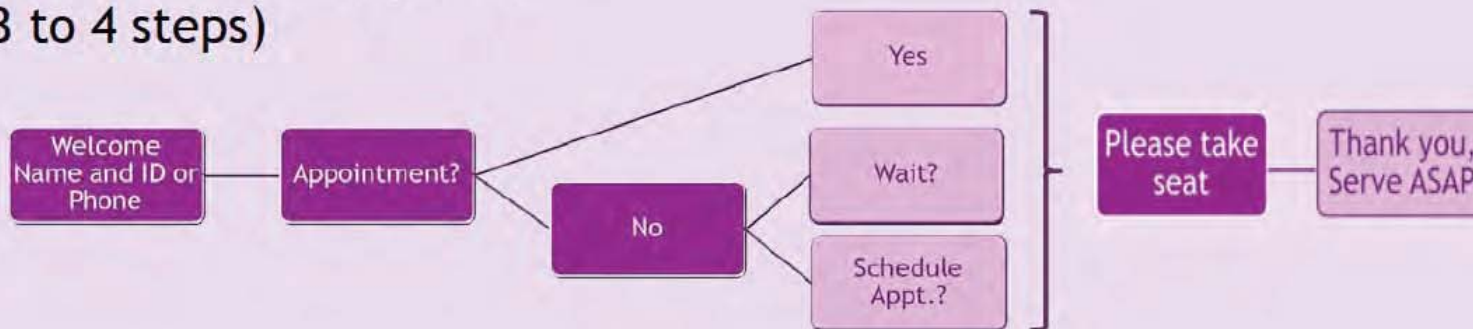


# Example of Flexibility and Simplification

Initial Screen Sequence  
(as many as 7 steps)



Revised Screen Sequence  
(3 to 4 steps)



# A few lessons learned so far . . .

- ▶ Site physical set up comes with unique issues
- ▶ Different Sites have differing:
  - ▶ Ideas
  - ▶ Opinions
  - ▶ Preferences
  - ▶ Team approaches to communication
  - ▶ “time needed to consider”
- ▶ Need to encourage “problem identification”
- ▶ Onsite Adjustments help with “engagement as experts”
- ▶ There is excitement with this type of innovation



# Salmon Slip Baseline Measurement

Measure “Office Flow”

Reduce Wait Time  
Improve Efficiency

## WIC Participant Visit

Date: \_\_\_\_\_ Arrival Time: \_\_\_\_\_

Reason for Visit: \_\_\_\_\_

- Appointment Time \_\_\_\_\_
- Walk-in Scheduled
- Walk-in without Arrangement

WIC Family ID: \_\_\_\_\_

Please enter begin and end times &  
check off items that happen during ppt's visit

	begin time	end time	staff initial
Initial WIF Processing:			
<input type="checkbox"/> Ht & Wt <input type="checkbox"/> Pronto <input type="checkbox"/> NQ (pre-filled by ppt.) <input type="checkbox"/> NQ (waiting room by ppt.)			
Nutrition Ed.			
<input type="checkbox"/> Class (onsite) <input type="checkbox"/> Online (onsite) <input type="checkbox"/> Online (before WIC visit)			
Counseling:	begin	end	initial
<input type="checkbox"/> Ht & Wt <input type="checkbox"/> Pronto <input type="checkbox"/> Class (at desk)			
Finishes WIC Visit:	exit time	initial	
<input type="checkbox"/> Receives Vouchers			



# Baseline Measurement

## WIC Participant Visit

Date: \_\_\_\_\_ Arrival Time: \_\_\_\_\_

Reason for Visit: \_\_\_\_\_

Appointment Time \_\_\_\_\_

Walk-in Scheduled

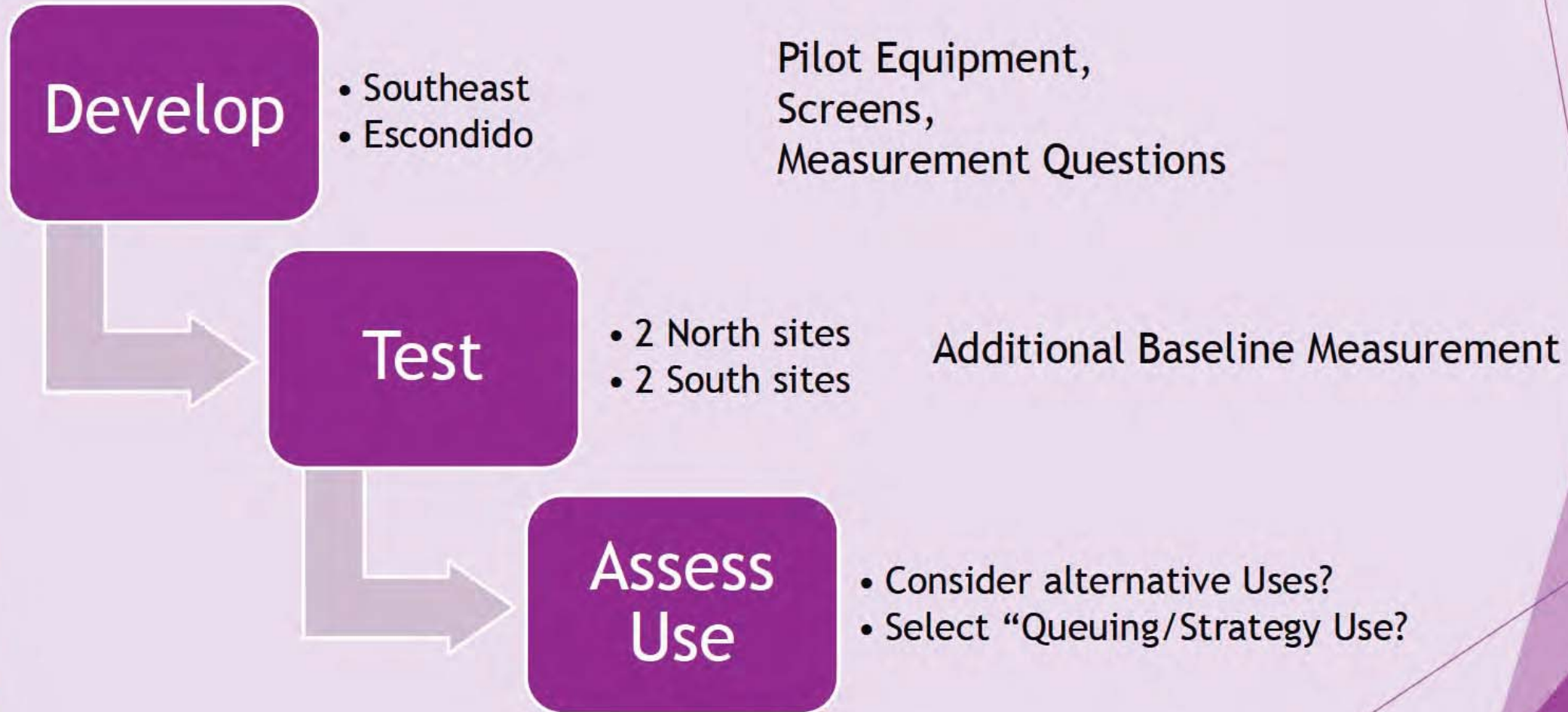
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Finishes WIC Visit:		exit time	initial
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# Now and going forward in Pilot Phase





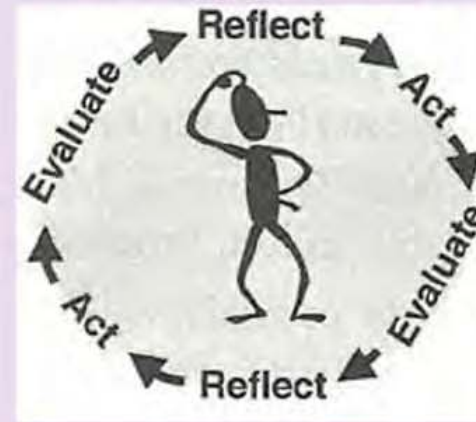
Progress . . .

## through an Action Research Process

**Assess**  
**Problems** → **Ideas**

**Reflect**

- APL Assessment
- Listening Session



**Reflect**  
**Ideas** → **Potential Actions**

**Act**

- Secure Funding
- Acquire Equipment

**Act**  
**Potential Actions** → **Pilot**

**Evaluate**

- Pilot with Staff
- Pilot at Site & Revise



# Key Characteristics

## Successful CQI Process

- ▶ Collaborate
- ▶ Investigate
- ▶ Innovate
- ▶ Consider Evidence
- ▶ Persevere



# Key Characteristics exemplified in E-CIP Successful CQI Process

## Collaborate

Site Staff are Experts

## Investigate

Admin facilitates

## Innovate

Focus, Reflect, &  
Follow Through

## Consider Evidence

Measure & Examine

## Persevere

Problem-Solve







# Electronic Check-In Project

An Example of a Quality Improvement Project

As they say at NWA . . . It takes a Village . . . Here is our Village!

