Instructions for Faculty

Materials for Activity:

- One tennis ball per table or group (6-8 recommended per group)
- One stopwatch per table or group
- Flipchart to record outcomes of each group
- Different colored marker for each team

Follow instructions outlined in the presentation. After each round, ask each team to share their time. Record on the flipchart with the color marker assigned to each group. There should be three rounds recorded on the flipchart. It is helpful to have a second faculty member facilitating and one recording.

Debrief asking the participants to find parallels in the tennis ball activity and creating change in an organization.

Time (seconds)	Round 1	Round 2	Round 3
9			
8			
7			
6			
5			
4			
3			
2			
1			

Let’s Play Ball!

Goals of the Game

- Understand the use of PDSA cycles
- Understand how learnings from PDSA cycles result in measurable improvements over time
- Understand how stealing shamelessly accelerates improvements
- Understand the “magic” of the collaborative methodology

Agosti, IHI (Adapted), 2004

The Baseline: Part 1

- Randomly toss the ball to another person at your table
- Upon catching the ball, that person will toss the ball to another person at the table who has not yet received the ball
- Continue this random tossing until each person has thrown and caught the ball exactly once (ending with the person who threw the ball the first time)

Agosti, IHI (Adapted), 2004

The Baseline: Part 2

- Try repeating the process by tossing the ball in the exact same order as the first time
- Document the order in which you are tossing the ball to ensure that you remember for the next time
- Time how long it takes to go in this order and document it
- Try to go faster without dropping the ball

Agosti, IHI (Adapted), 2004

Thinking It Through: Using PDSAs for Rapid Improvements

<u>What are we trying to accomplish?</u>

- Do not drop the ball in the process

<u>What changes can we make that will result in improvements?</u>

- Look for creative ideas from others at our table
- Share creative, successful ideas ACROSS tables

<u>How will we know that a change is an improvement?</u>

- Measure time and monitor quality (not dropping the ball)

Agosti, IHI (Adapted), 2004

PDSA Cycle 1

- Remove one person from the order you've established to be the data collector (the one who has figured out the stopwatch)
- Maintaining the rest of order, run the process ONE TIME ONLY and measure how long it takes and how many times you drop the ball
- Document your results
- Run the process one time ONLY and quietly await further instructions….

Agosti, IHI (Adapted), 2004

Share Your Baseline

Each team shares their baseline data and it is recorded on the flipchart.

Rules of the Game Based on Evidence-Supported Practice

- Ball must start and end with the same person
- Ball must touch each step (person) in the process
- Specific order of steps (persons) must be maintained
- Time is stopped when first person touches the ball a second time

Agosti, IHI (Adapted), 2004

PDSA Cycle 2: What changes can we make that will lead to improvement?

Within Your Table

Plan: Talk briefly with your table to identify a strategy that might improve the time AND the quality of the process.

Do: Execute the Plan – run this process one time ONLY. Record time and ball drop data.

Quietly await further instructions....

Agosti, IHI (Adapted), 2004

Steal Shamelessly

With the Large Group

Study: Report data time and quality to the large group

Act/Adjust: Ask questions about other teams' experiences and strategies. Begin to think of ideas for your table's next cycle.

Plan: Make a plan to improve on both the quality and time of the process.

Conduct another test and share data.

Agosti, IHI (Adapted), 2004

Model for Improvement

Three Fundamental Questions for Improvement

- What are we trying to accomplish?
- What changes can we make that will result in an improvement?
- How will we know that a change is an improvement?

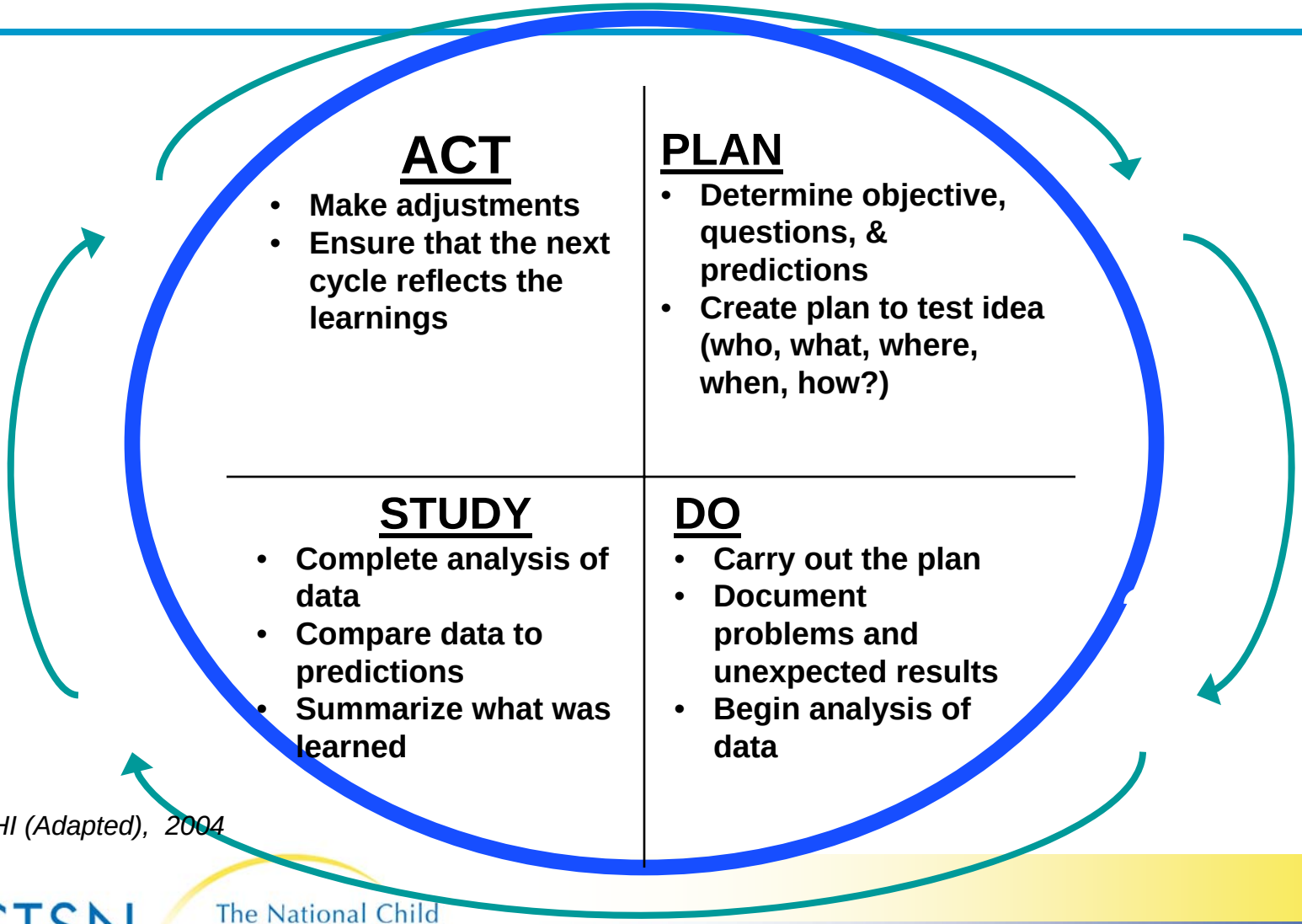
Agosti, IHI (Adapted), 2004

Using the PDSA Cycle

- Helping to Answer the first two questions of the Model for Improvement
- Developing a Change
- Testing a Change
- Implementing a Change

Agosti, IHI (Adapted), 2004

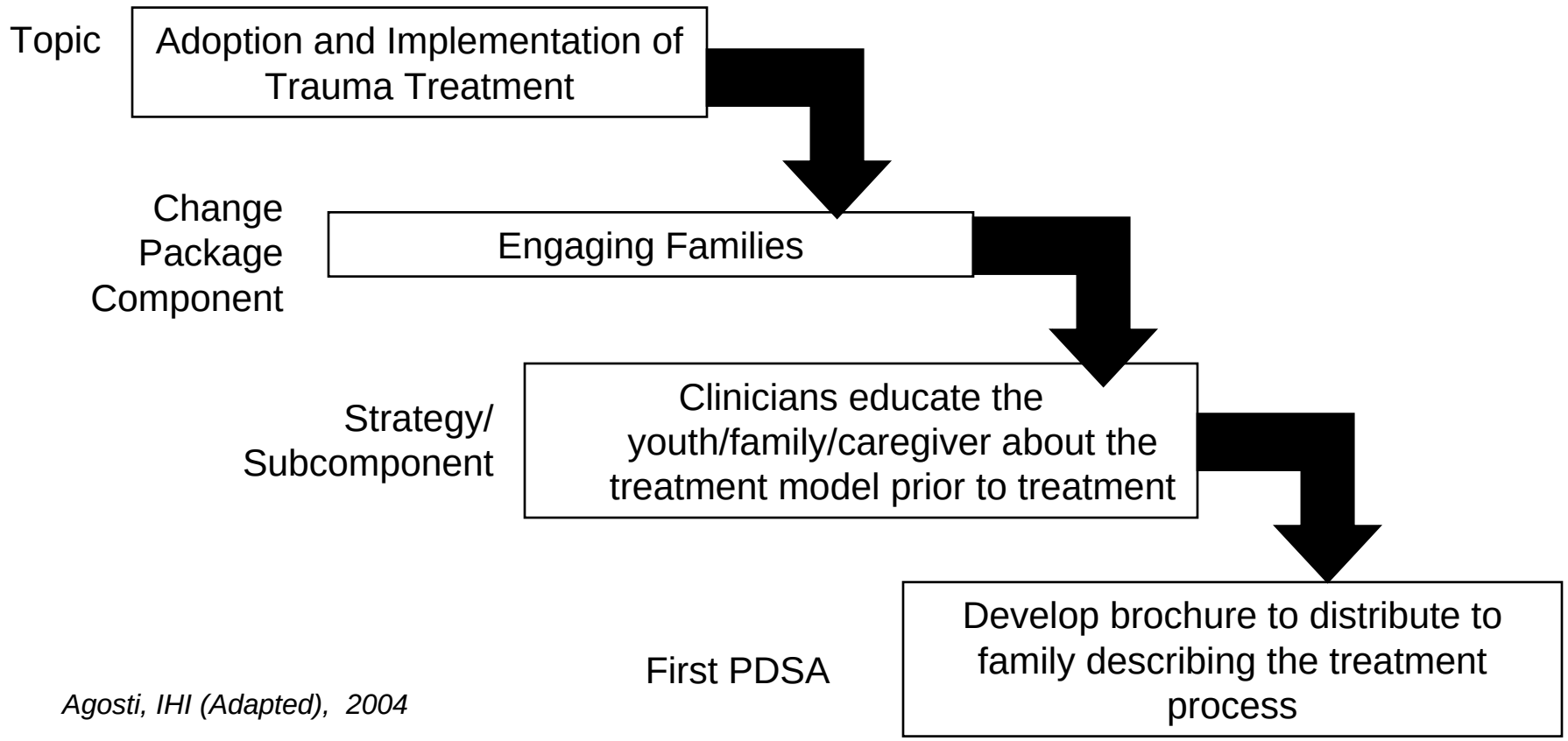
Testing Changes: What Is a PDSA?



Agosti, IHI (Adapted), 2004

Adapted from © 2001 Institute for Healthcare Improvement

Designing a PDSA



Agosti, IHI (Adapted), 2004

PDSA Sets:
A Single PDSA to System-wide Change

ENGAGING FAMILIES BY INFORMING AND EDUCATING ABOUT TREATMENT PROCESS

First PDSA

The Test: One clinician asked one family member whether the brochure was helpful in explaining the treatment process

Lessons: Clinician received feedback that the brochure was too wordy and dense. The benefits of the treatment needed to be clearer and more easily accessible to the family member reading the brochure.

Second PDSA

The Test: Same clinician made revisions to the brochure and asked three different family members for feedback regarding the brochure.

Lessons: The revisions worked for the most part. One family member asked for the document in Spanish for her husband so a translation was developed for future use.

Third PDSA

The Test: Three clinicians used the brochure as part of their first session and surveyed them regarding the materials.

Lessons: Clinicians received a mostly positive response from the family members, particularly when they reviewed the brochure with them and then gave it to them to take with them.

PDSA Sets:
A Single PDSA to System-wide Change

Implementation

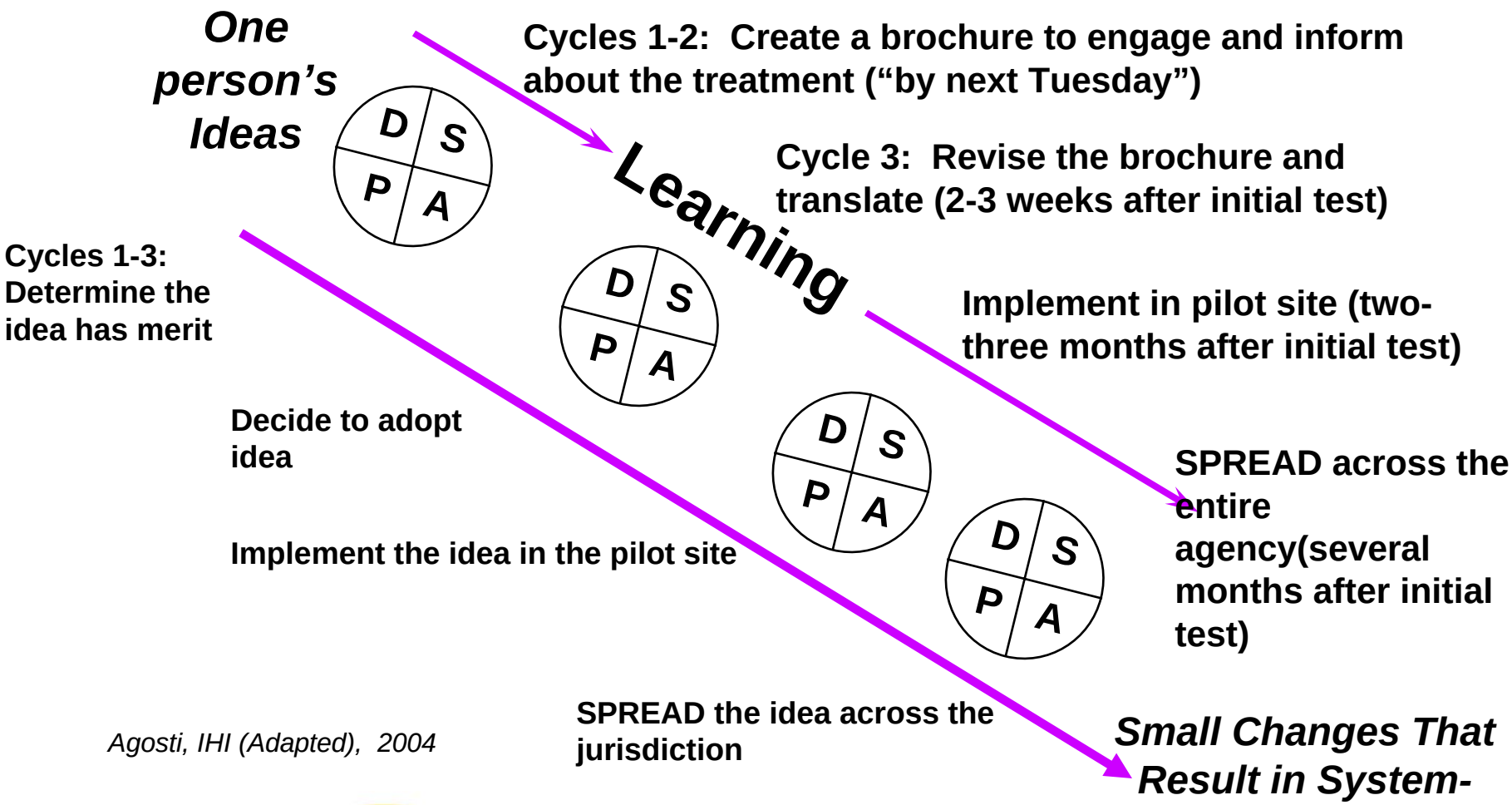
The Test: The brochures were printed in both English and Spanish and made available to all clinicians on the unit for distribution during an initial session.

Lesson: Clinicians found the process useful on multiple levels- engaging, educating and providing information to be shared with other family members.

SPREAD

Senior Leader makes the decision to spread this practice across entire county agency and incorporate into policy for all clinicians providing this treatment. Provides a demonstration to all clinicians in orientation on how to use materials effectively. Training content developed by the clinicians who tested the materials.

Repeated Use of the PDSA Cycle



Agosti, IHI (Adapted), 2004

Key Benefits of PDSAs

- Test ideas quickly
- Obtain results on ideas quickly
- Multiple ideas can be tested simultaneously
- Identify problems while they have minimal impact
- Failure is allowed
- Get buy-in as you go based on proof of success
- Small changes may have large impacts

Agosti, IHI (Adapted), 2004

Small Test of Change

CHECKLIST

- Can be accomplished quickly
- No over-planning (Plan only as much as can Do)
- Consensus not required
- Adapt known results and tools
- Base on learning from prior cycle

Agosti, IHI (Adapted), 2004

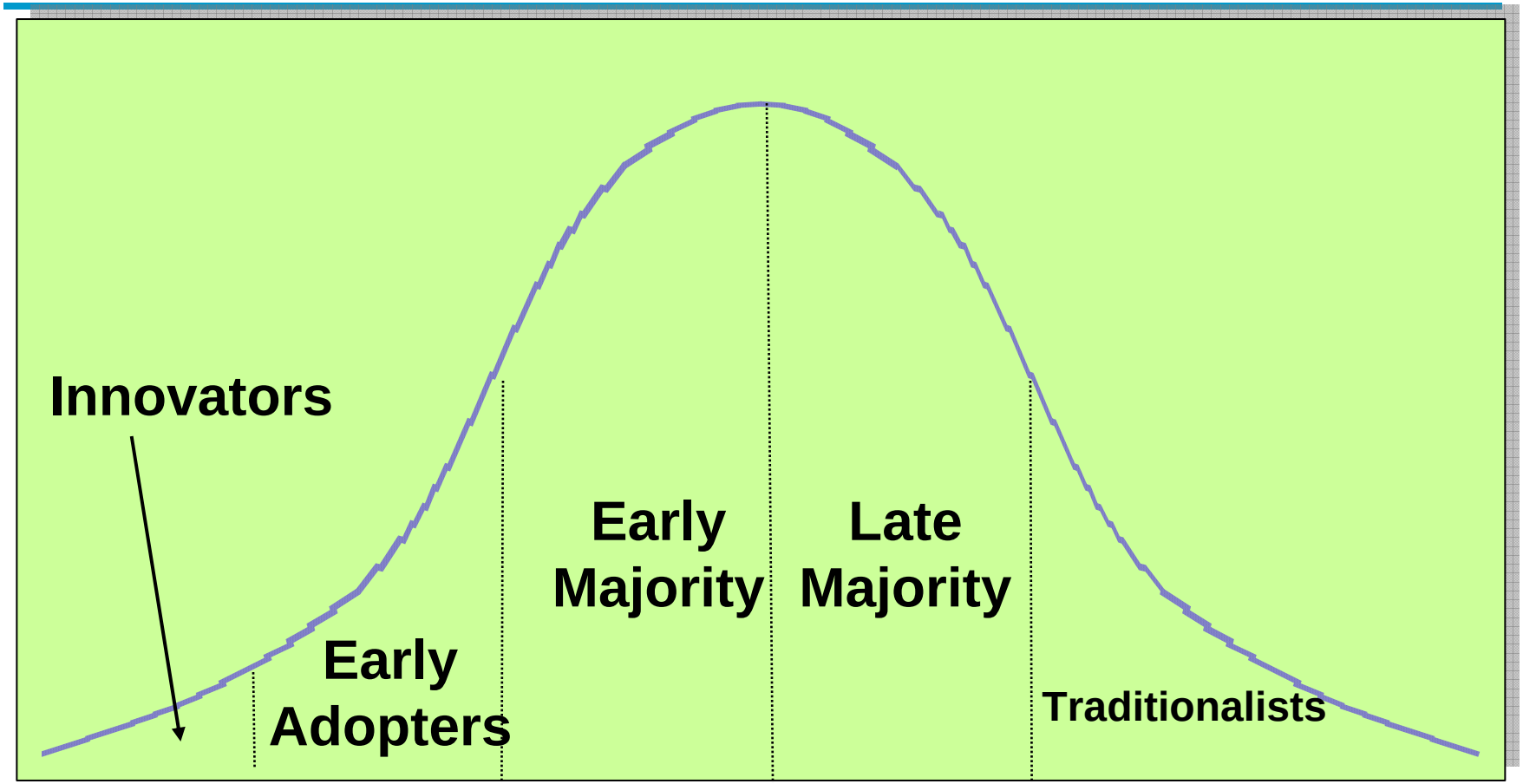
Spreading and Institutionalizing Changes

Four Key Stages

- Making the case for change
- Packaging and communicating the message
- Cultivating champions of and messengers for change
- Institutionalizing the change

Agosti, IHI (Adapted), 2004

Adoption of Change



2.5% ***13.5%*** ***34%*** ***34%*** ***16%***

from E. Rogers, 1995

Institutionalizing Change

- Ensure alignment with strategic plans and direction of the agency
- Make the “new way” of practice easier and more desirable than the “old way” – connect to rewards, acknowledgements, and performance evaluations
- Establish and document practices and processes
- Assess and meet ongoing needs for training and professional development

Agosti, IHI (Adapted), 2004

Keys to the Collaborative Methodology

- Keep tests small
- Keep tests rapid
- Keep your mind open and your ideas flowing
- Gather data for learning, not research
- Share with other colleagues and learn (and steal shamelessly!) from other teams

Agosti, IHI (Adapted), 2004

References

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