UK Kidney Association

Kidney Quality Improvement Partnership

Plan-Do-Study-Act Cycles to test change and Action Planning

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10 steps in QI

KQIP Methodology

1. Agree an area for improvement using data
2. Prepare to lead a QI team
3. Understand your system and problem
4. Define project aim and scope
5. Identify and engage stakeholders
6. Define drivers and develop change ideas
7. Agree measures including baseline data
8. **Test change ideas using PDSA cycles**
9. Display data over time to understand impact
10. Sustain and share improvements

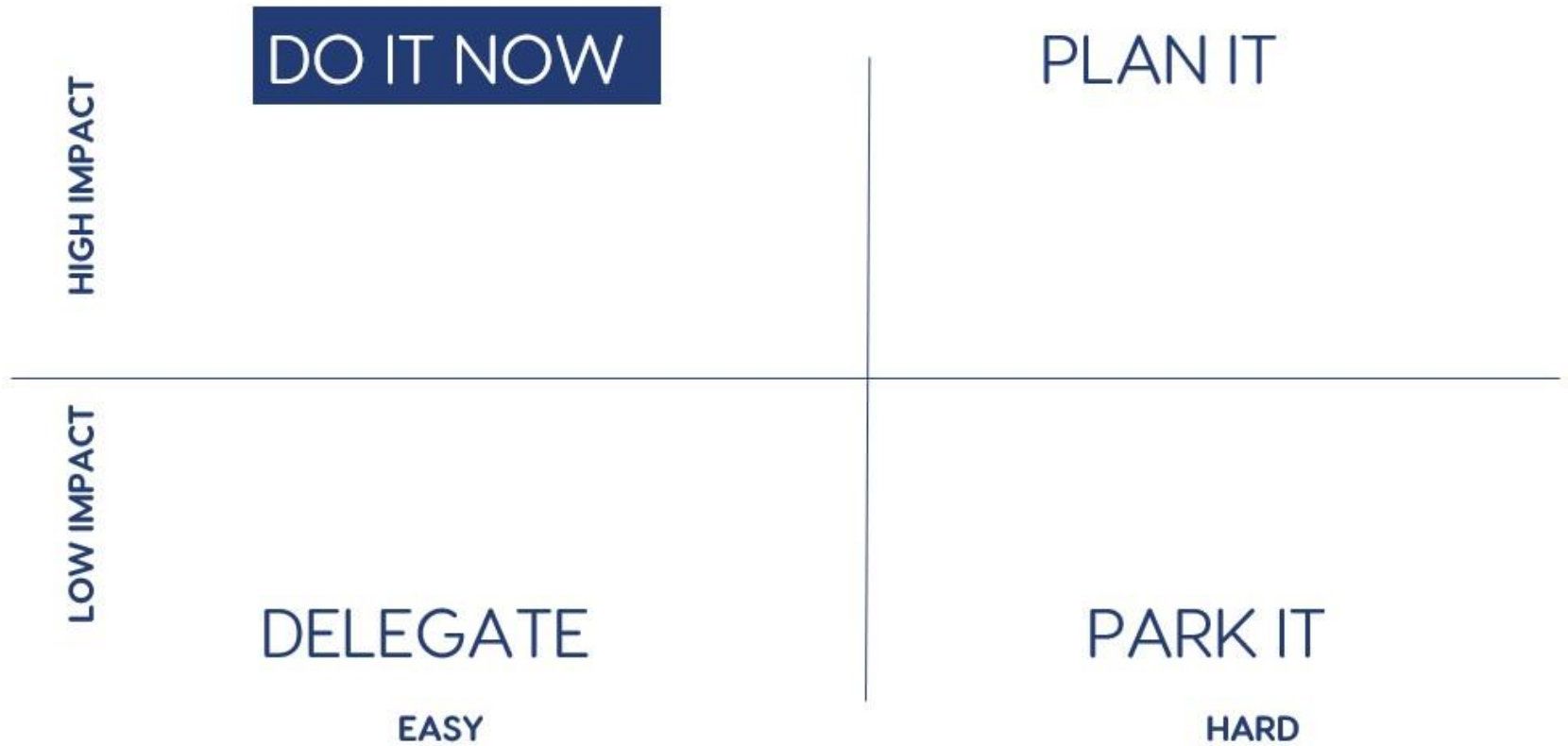


IHI Model for Improvement

Kidney Quality Improvement Partnership

Established in 2016 | Hosted by the UK Kidney Association

Prioritising change ideas



Testing change ideas

Plan – Do – Study – Act

A **structured, iterative method** for testing and implementing change:

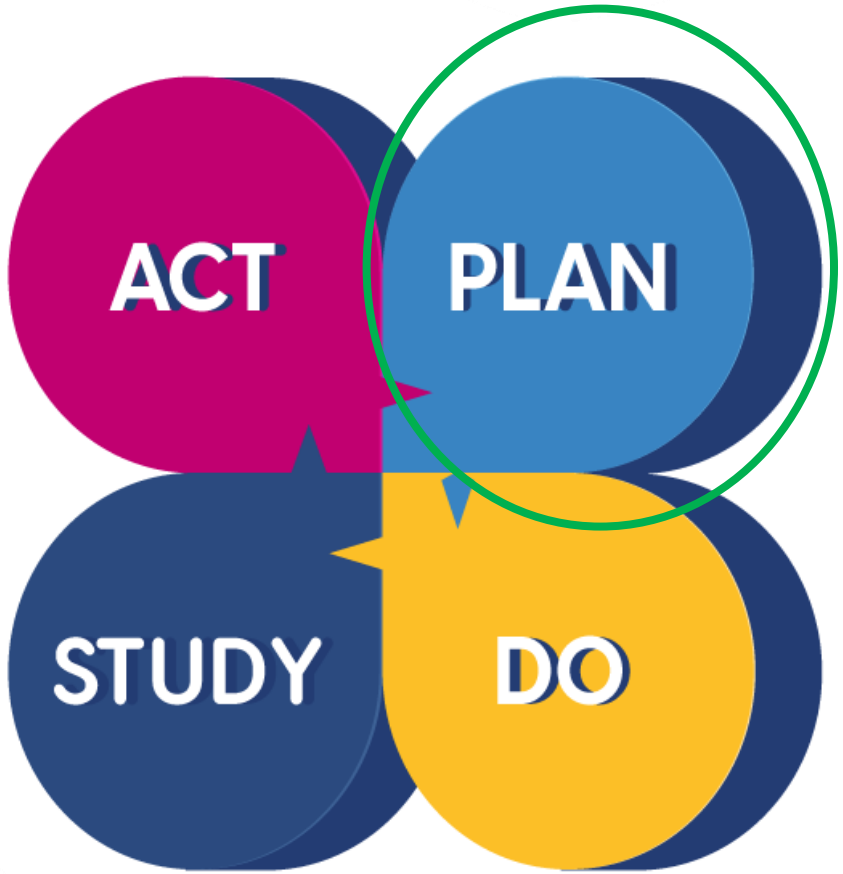
- Small-scale testing
- Continuous learning
- Data-driven improvement



PLAN

- A **problem** (e.g., high PD peritonitis rates)
- A **goal** (e.g., reduce infections)
- A **change idea** (e.g., improved training checklist)
- **Measures** to track success

👉 Key question: *What are we trying to improve, and how will we measure it?*



PREDICT

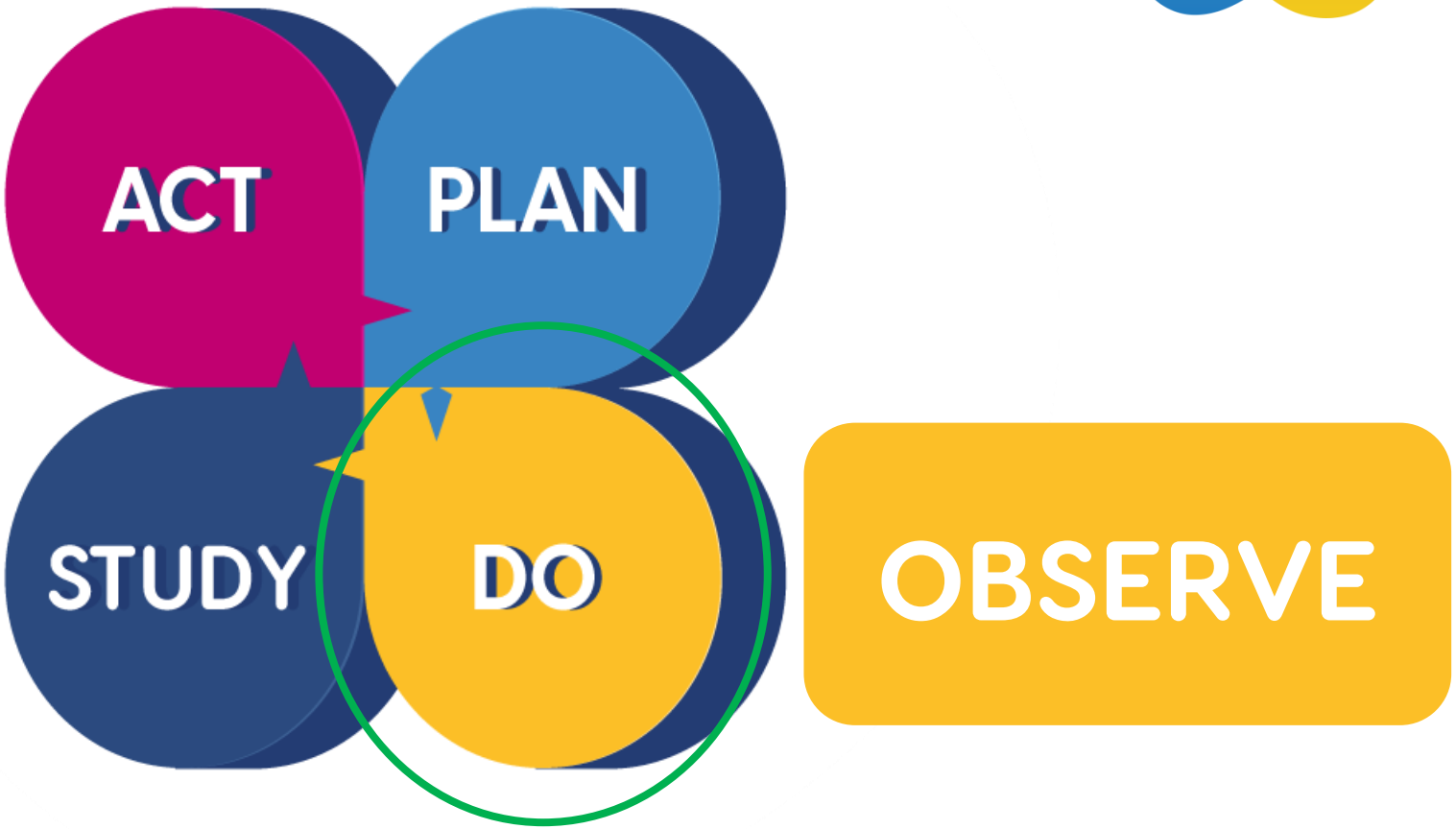
Do

Test the change on a **small group** (e.g., 2–3 PD patients)

Document:

- What happened
- Any unexpected issues

👉 Keep it small to reduce risk



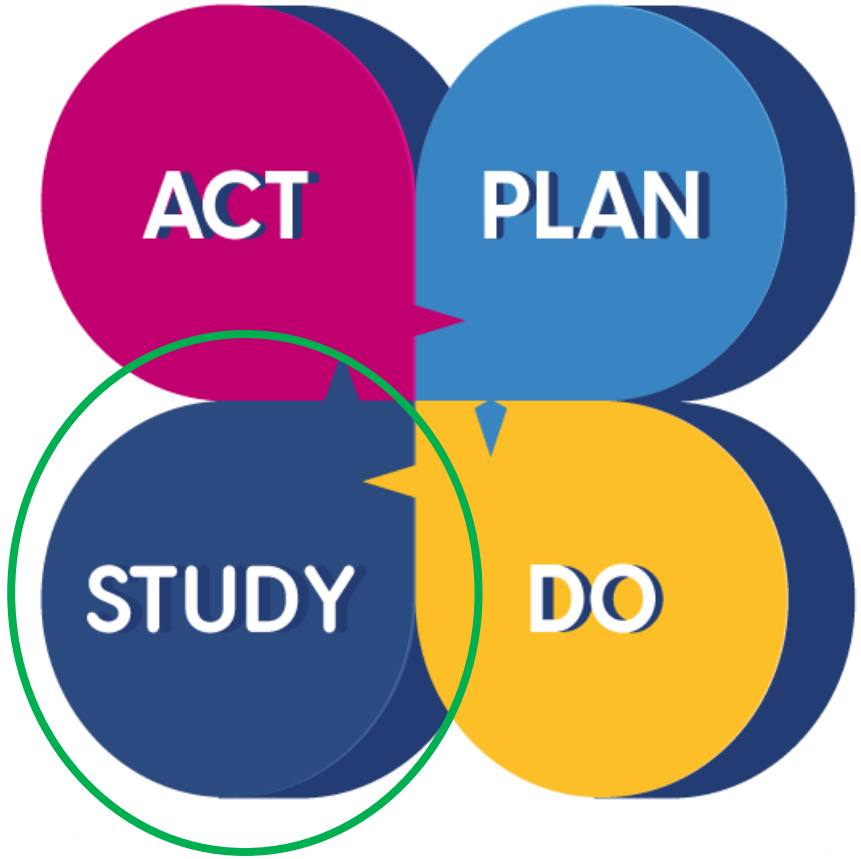
Study

- Analyse the data collected
- Compare results with expectations

Examples:
Did infection rates drop?
Did patient technique improve?

👉 Focus on **learning, not blaming**

COMPARE



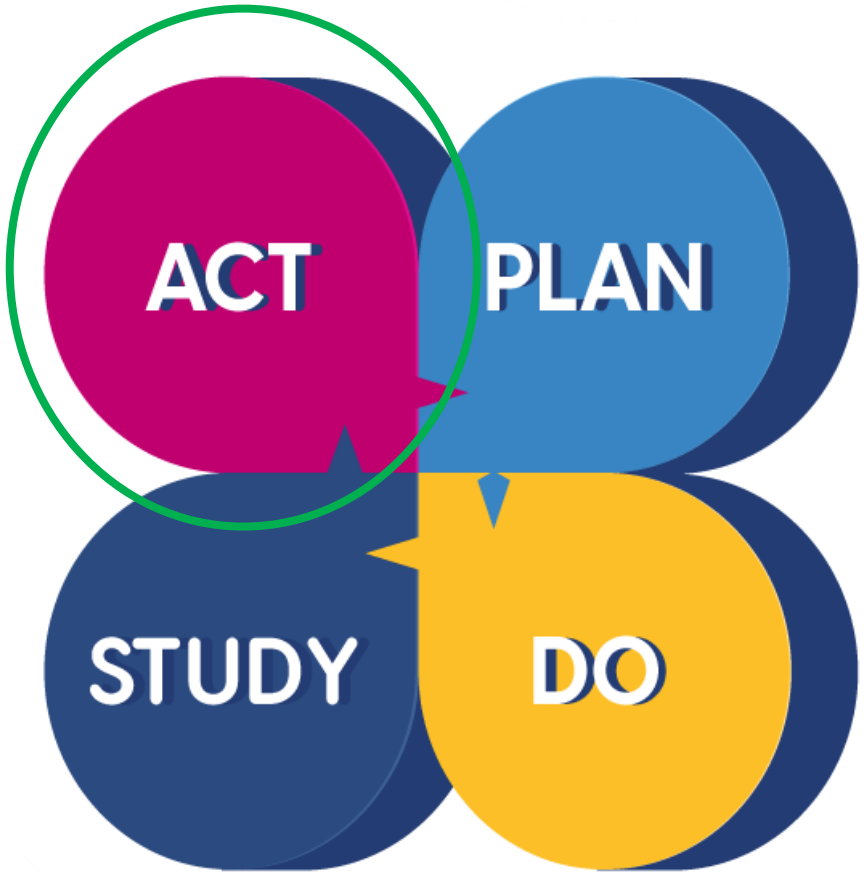
Act

Based on findings:

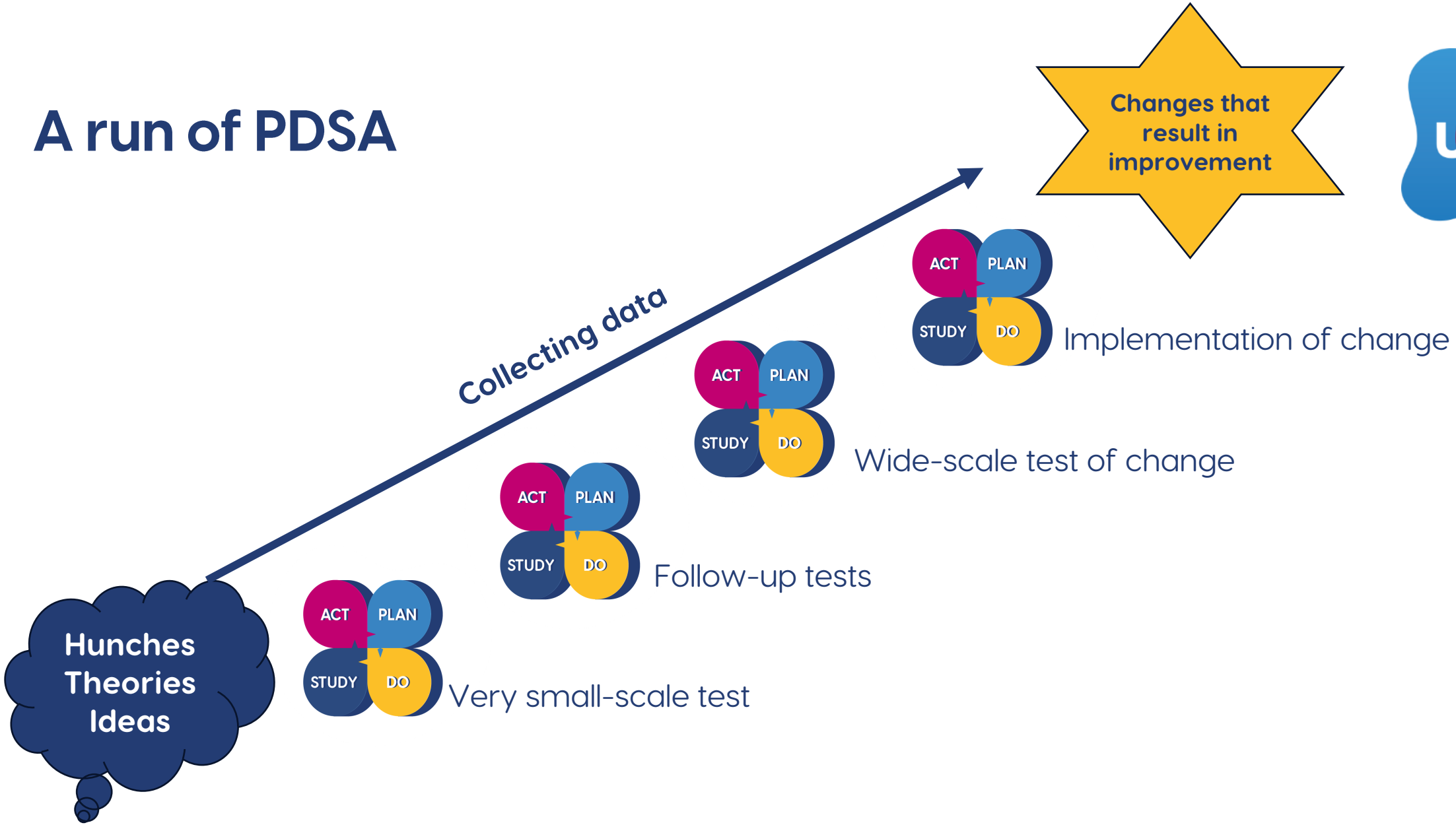
- **Adopt** (if successful)
- **Adapt** (modify and retest)
- **Abandon** (if ineffective)

- Then repeat the cycle → **continuous improvement**

NEXT



A run of PDSA


Changes that result in improvement
Collecting data
ACT PLAN STUDY DO
Implementation of change
ACT PLAN STUDY DO
Wide-scale test of change
ACT PLAN STUDY DO
Follow-up tests
ACT PLAN STUDY DO
Very small-scale test
Hunches
Theories
Ideas

Example

Plan
Introduce standardized PD training checklist

Do
Test with 3 new PD patients

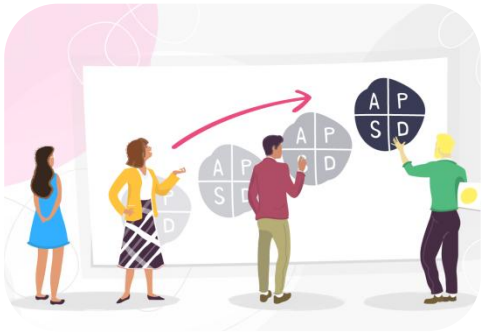
Study
Assess technique errors & feedback

Act
Refine checklist before wider rollout

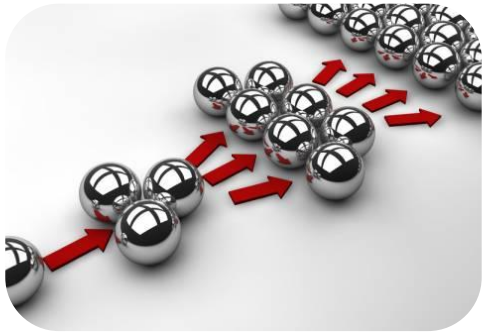
Common Pitfalls to Avoid

- Trying to change too much at once
- Poor data collection
- Lack of team engagement
- Skipping the “Study” phase

PSDA - Top tips



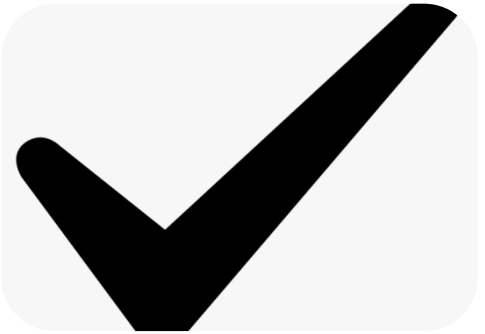
Plan multiple cycles to test



Test on a really small scale



Test with those who believe in the improvement



Only implement the idea when all possibilities have been exhausted

PDSA - Top tips



Plan multiple cycles to test



Test on a really small scale



Test with those who believe in the improvement



Only implement the idea when all possibilities and improvements have been exhausted

Action Planning

Action planning supports each stage of PDSA:

Plan → Define actions
Do → Implement actions
Study → Measure outcomes
Act → Adjust plan

👉 Action plans make PDSA **operational**

Challenges in Action Planning

Lack of time
→ Prioritise high-impact actions

Poor engagement
→ Involve staff early

Unclear responsibilities
→ Assign ownership clearly

Data gaps
→ Simplify data collection

Why Action Planning matters in QI

Without action planning:

- Good ideas **don't get implemented**
- Changes are **inconsistent**
- Accountability is unclear

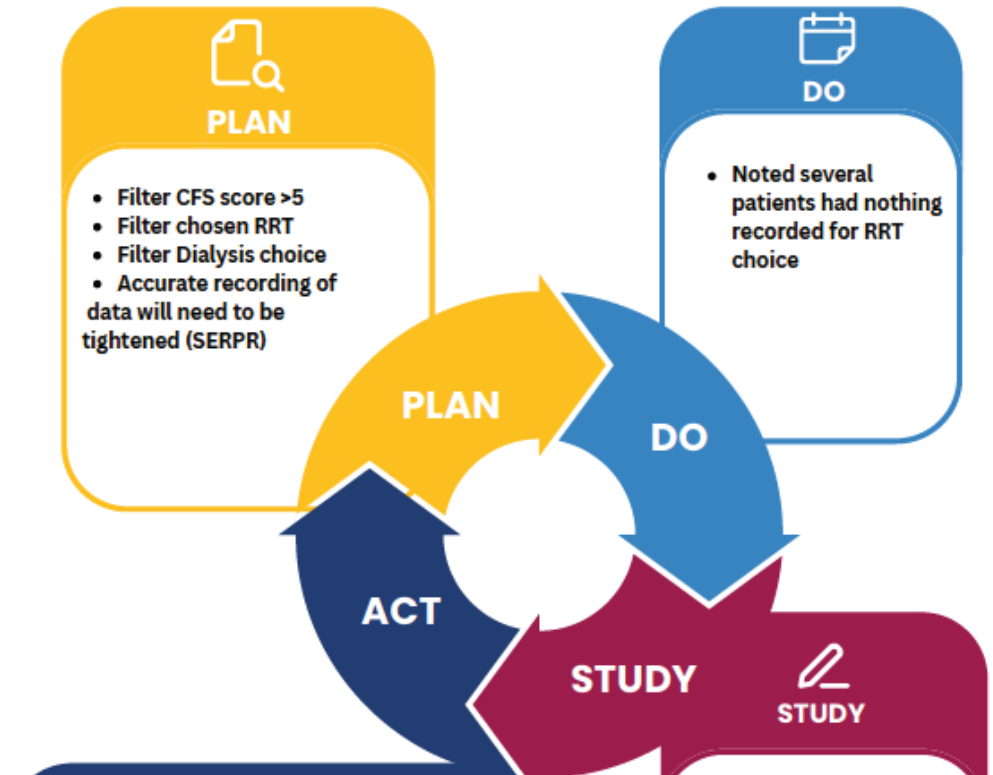
With action planning:

- Clear **direction and ownership**
- Improved **team coordination**
- Measurable **progress and outcomes**

30/60/90 day plan

Within	We want to achieve … (actions)	We want to complete this by … (insert date)
30 days		
60 days		
90 days		

PDSA1 - Audit CFS recording against RRT choice



Over to you to prioritise and start planning your PDSA

Activities:

1. Prioritise your change ideas from driver diagram
2. Pick one change idea to implement
3. Plan your first PDSA – who, what, where, when, what do you predict will happen