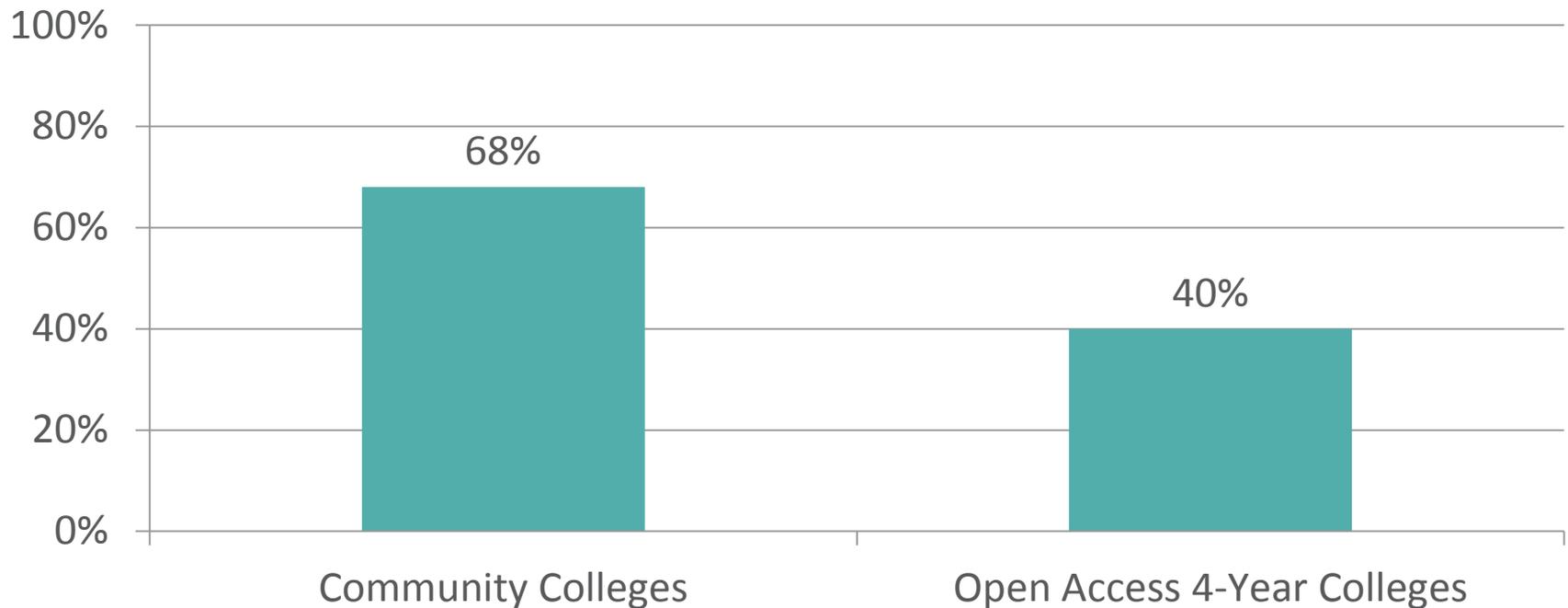


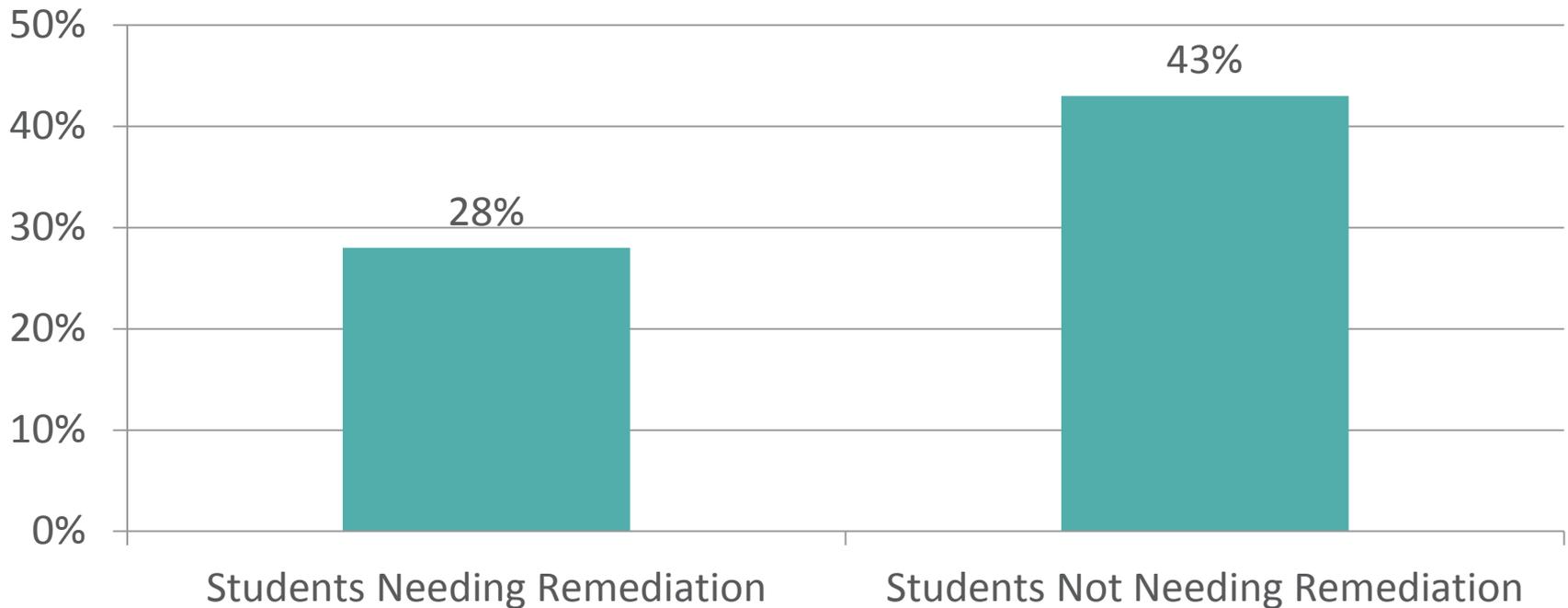
Research on Alternative Placement Systems

Using Predictive Analytics to Place Incoming College Students

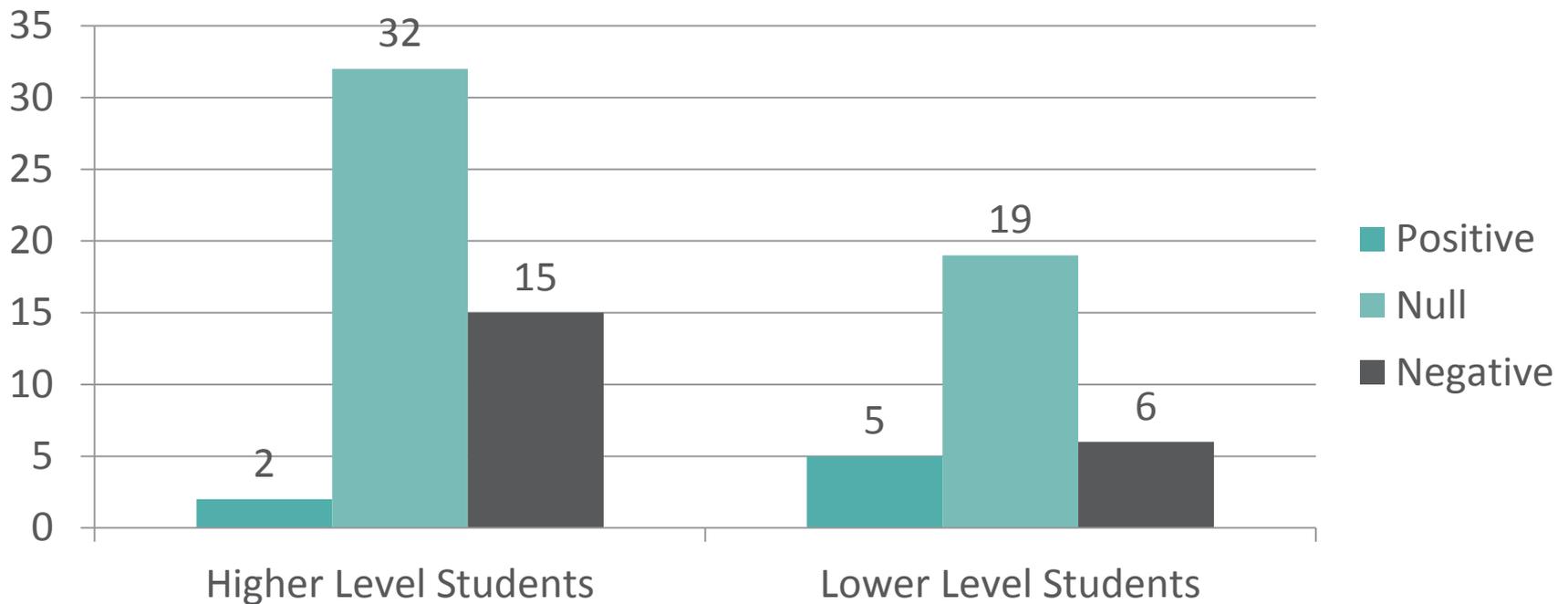
Students needing 1+ developmental education course (NCES, 2013)



Community college 8-year graduation rates (Attewell, Lavin, Domina, and Levey, 2006)



Developmental education student outcomes (Results from 8 studies)



Under-placement and Over-placement

		Placement According to Exam	
		Developmental	College Level
Student Ability	Developmental		Over-placed <i>(English – 5%)</i> <i>(Math – 6%)</i>
	College Level	Under-placed <i>(English – 29%)</i> <i>(Math – 18%)</i>	

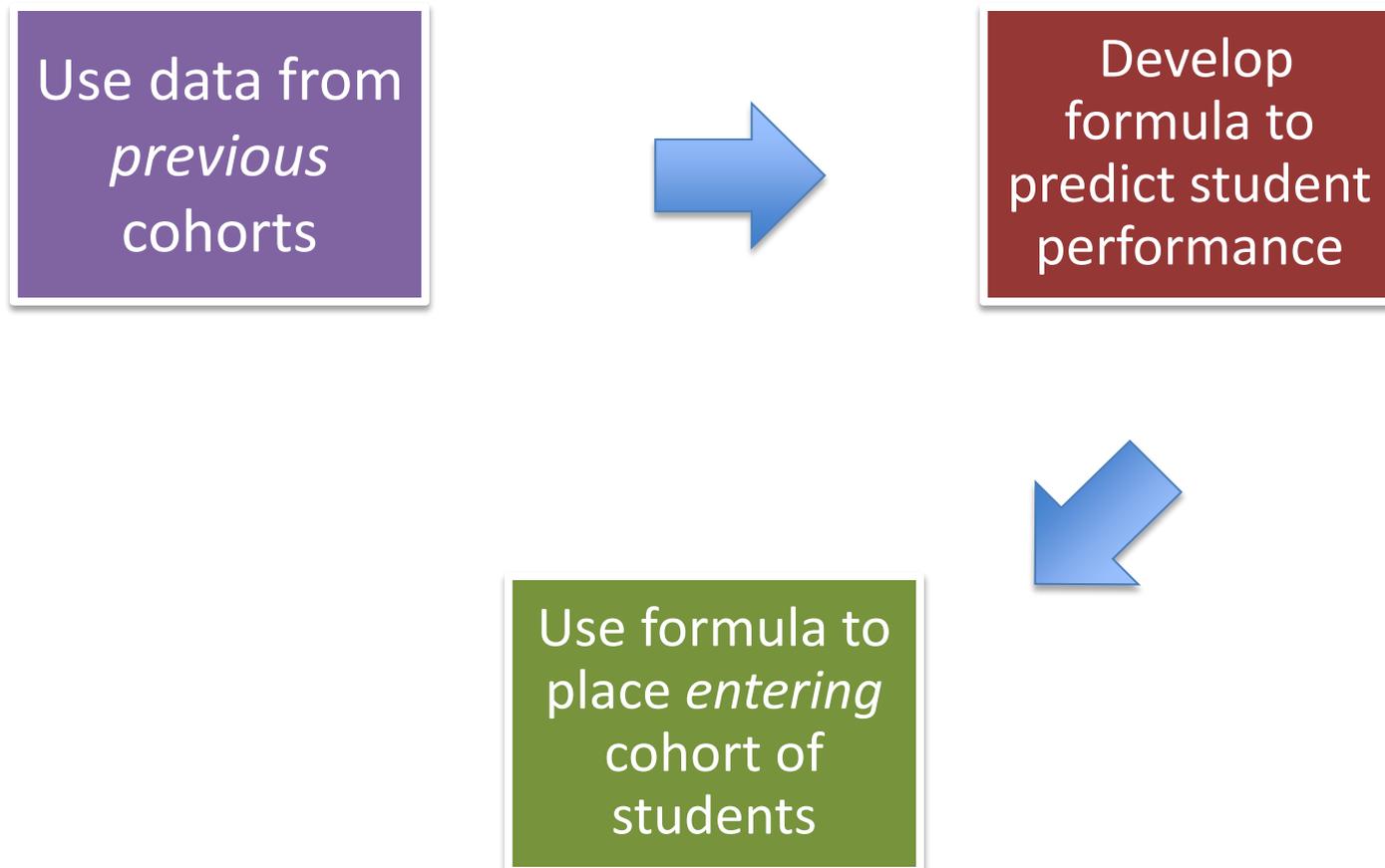
One solution: Multiple measures used when placing students

- Hierarchy of measures (North Carolina, some NY colleges)
- Review panel looking at a range of measures (Wisconsin)
- Use of an algorithm (Long Beach, CA)

Data Analytics

- Placement exams often place incorrectly
- **Can we do better?**
- Use better data + Predictive Analytics
- More accurate placement
 - **Reduces students who fail college-level classes**
 - **Increases share of students who receive B or better**
- Improved longer term outcomes?

How Does the Algorithm Work?



Research Questions (working)

1. Do student outcomes improve when they are placed using predictive analytics?
2. How does each college adopt/adapt and implement such a system?

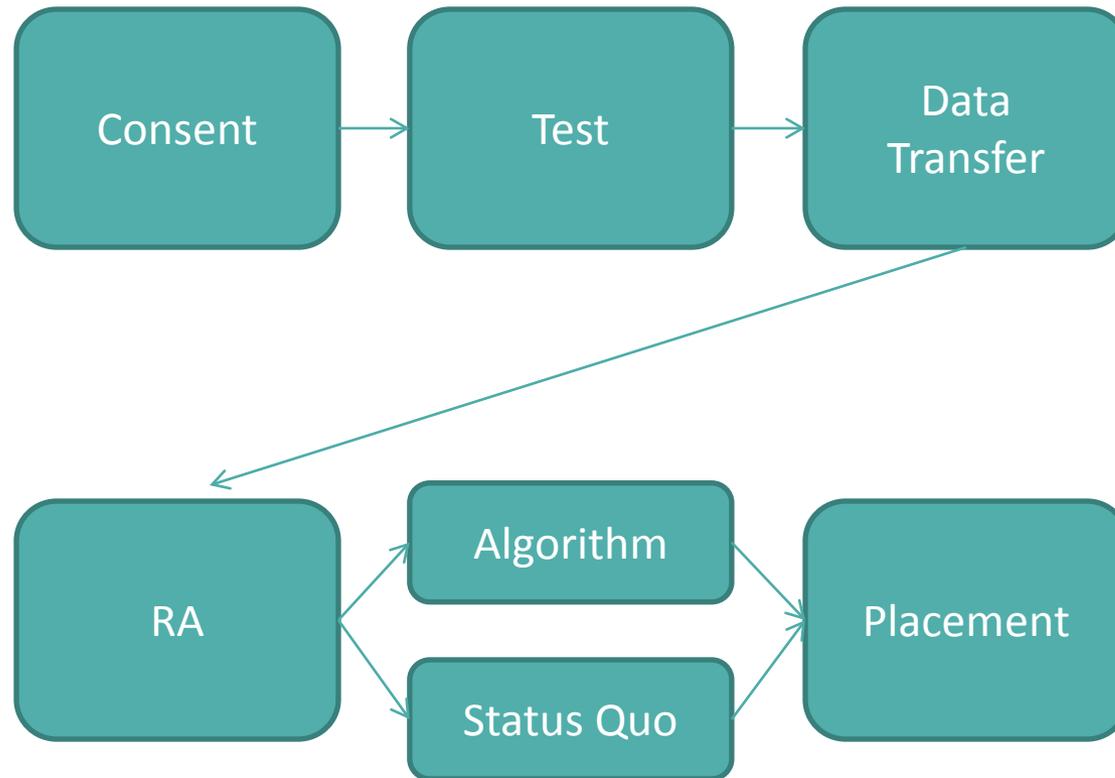
Phases of the Research

- Recruit/finalize sites.
- Develop algorithm with each college
- Randomly assign students to placement with algorithm or “business as usual”
- Pilot test the research process
- Conduct impact research on 4 cohorts of students (spring16-fall17)
- Conduct implementation research, including cost analyses
- Analyze outcomes.

Outcomes of interest

- Completion of first college-level courses in related area.
- Accumulation of college credits.
- Other outcomes under consideration....

Components of the RA Process



Emerging Issues

1. Assessment, placement and developmental education practices are changing rapidly.
2. Data are not always available for key variables that may predict success in college (e.g. “non-cognitive” measures).
3. High school data are seldom in college data systems.
4. There is a tension between setting up a placement system optimal for research and one that can be sustained over time.

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