

STACKABLE CREDENTIALS

WHAT WE KNOW, WHAT WE DON'T KNOW

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EdPolicyResearch.org


OUTLINE

1. Our Team

2. Our Focus

3. Stackable Credentials

- What are stackable credentials?
- How common is credential stacking?
- How does credential stacking work?
- Does credential stacking yield labor market benefits?
- What are the key takeaways from research on stackable credentials?
- What don't we know about stackable credentials?



What do we know about stackable credentials in health fields?



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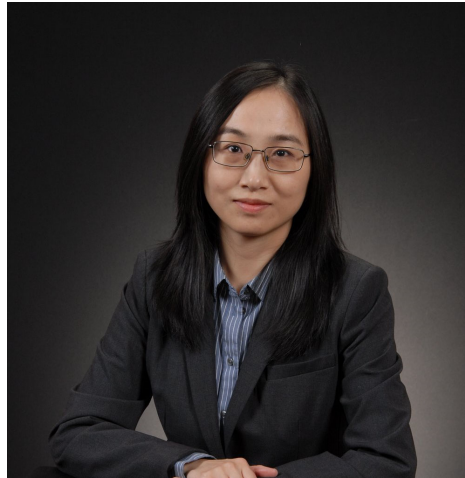


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MY RESEARCH TEAM (THE “WE” AND “OUR”)



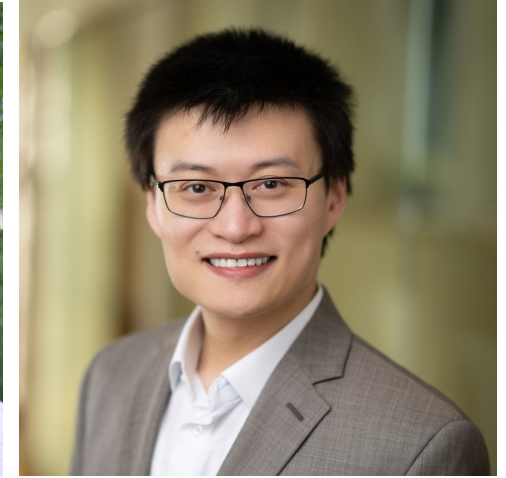
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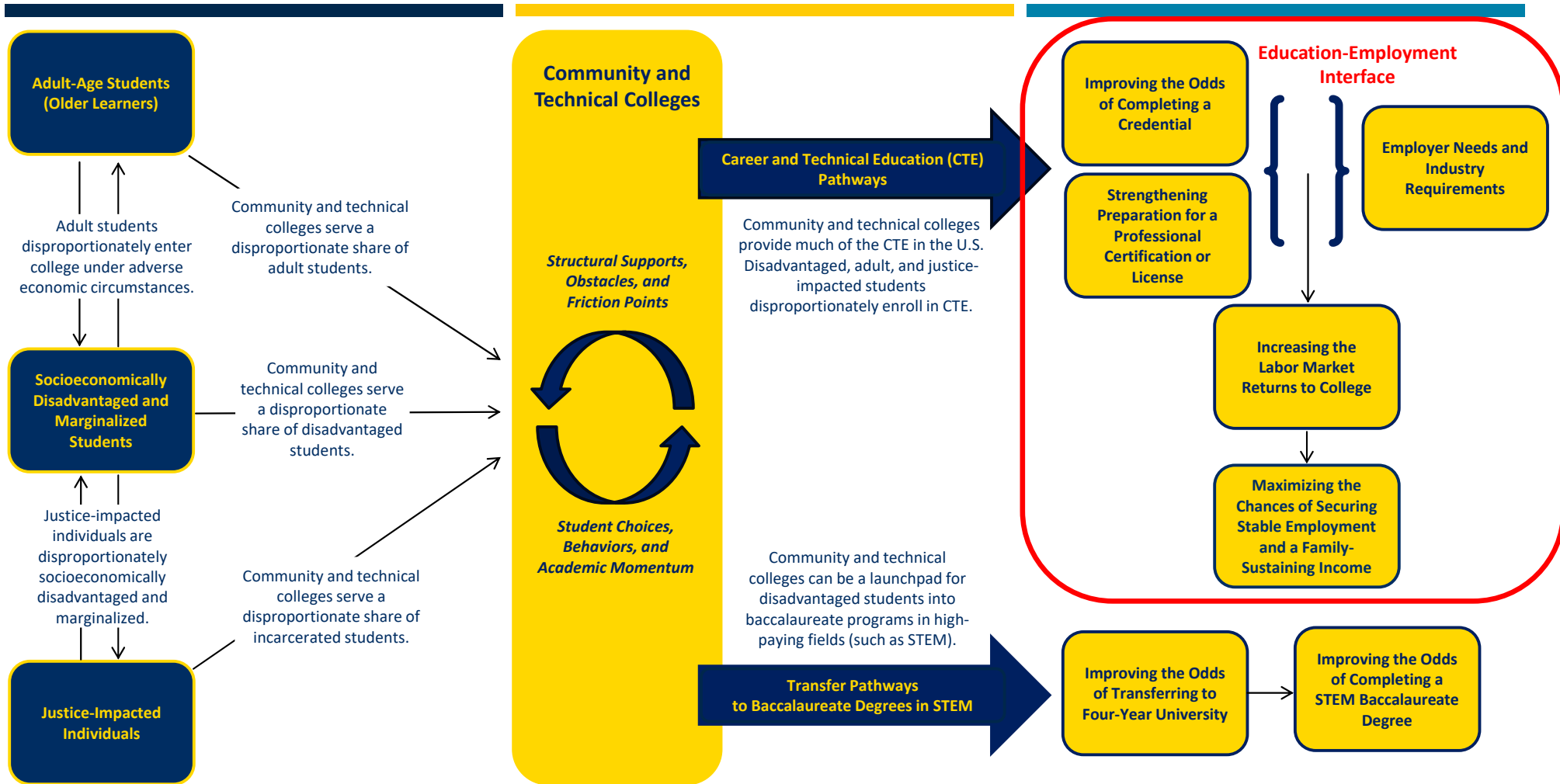


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MY RESEARCH TEAM (THE “WE” AND “OUR”)

THE CENTRAL QUESTION OF OUR WORK

How do we create, grow, and sustain educational and economic opportunity for those with the greatest obstacles?



A CLOSER LOOK AT CTE PATHWAYS IN MY RESEARCH

Career and Technical Education (CTE) Pathways

Noncredit
Occupational
Education

Upskilling &
Reskilling

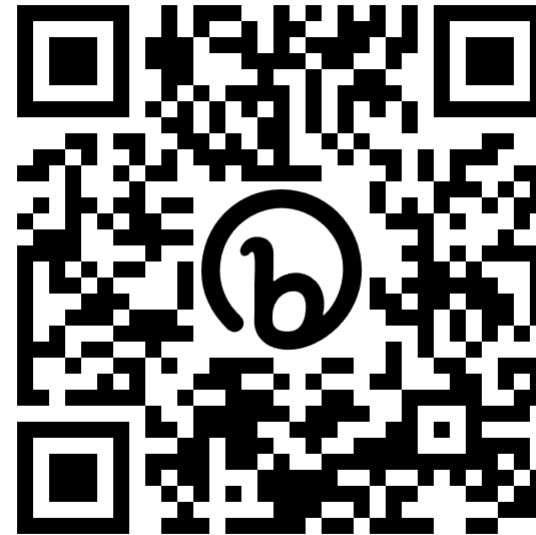
Stackable
Credential
Sequences

Postsecondary
Education in
Prison

FOR MORE INFORMATION



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STACKABLE CREDENTIALS

WHAT WE KNOW, WHAT WE DON'T KNOW



www.edpolicyresearch.org/stackable

KEY TAKEAWAYS

- Definitions of credential-stacking and estimates of the percentage of certificate-holders who stack vary.
- Credential-stackers may not follow anticipated pathways from their first credential to their stacked credential.
- Transitioning from noncredit to credit coursework and stacking credit-based awards on noncredit awards are rare.
- Stacking a higher-level credential on a lower-level credential is associated with increased employment rates and earnings. Other types of stacking are not associated with improvements in labor market outcomes.
- Stacking in health is associated with increased employment rates and earnings, driven by stacking associate degrees on certificates and stacking in nursing.
- Due to data limitations, most research has focused on students who earn multiple credentials, regardless of whether they completed a designated stackable credentials program.

WHAT ARE STACKABLE CREDENTIALS?


Stackable credentials are “a sequence of credentials that can be accumulated over time to build up an individual’s qualifications and help them to move along a career pathway or career ladder to different and potentially higher-paying jobs.”

[\(U.S. Department of Labor, 2010, Attachment 2, p. 6\)](#)


WHAT ARE STACKABLE CREDENTIALS?

Sequences can include . . .


Baccalaureate degree




Associate degree




Certificate (15 credits)




Certificate (6 credits)




Noncredit Certificate



License (e.g., LPN)



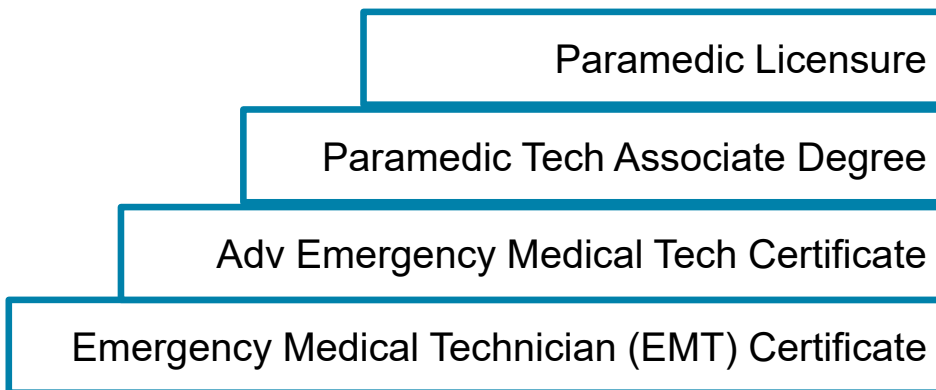
Certification (e.g., CPR for health)



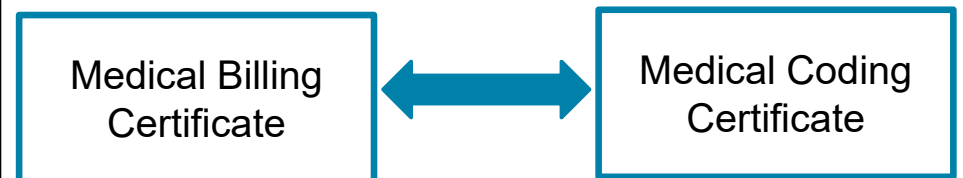
WHAT ARE STACKABLE CREDENTIALS?

Students can stack from a lower-level to a higher-level credential, called vertical or progressive stacking, or earn multiple credentials of the same level, called horizontal, lateral, or independent stacking

Example of Vertical Stacking



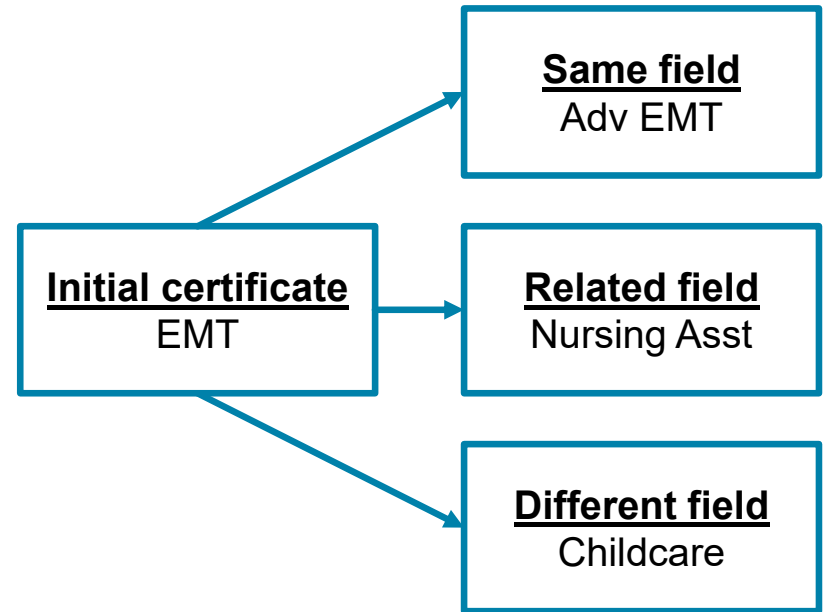
Example of Horizontal Stacking



*assumes certificates are of approximately equal length

WHAT ARE STACKABLE CREDENTIALS?

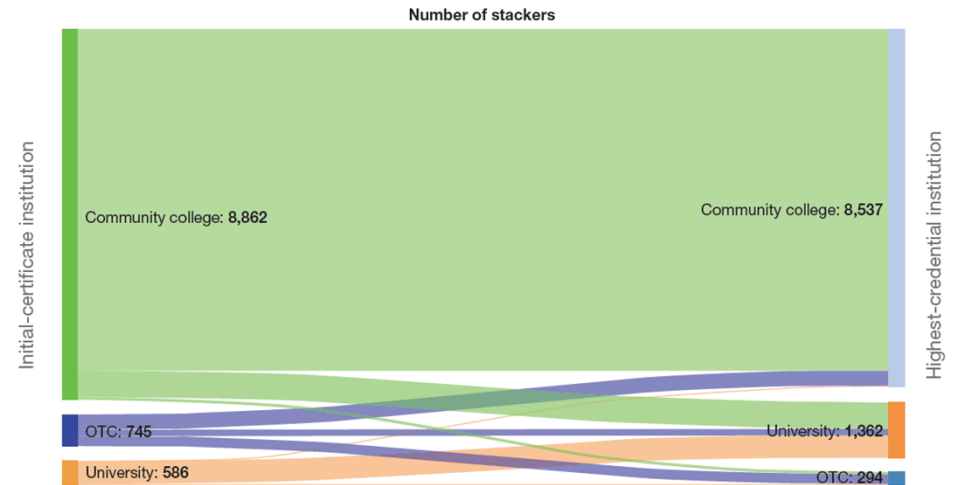
Stacked credentials might be in the same field as their first credential, in a related field, or in a different field



WHAT ARE STACKABLE CREDENTIALS?

Stacking might occur at the same institution and sector or at a different institution and sector.

FIGURE 12
Diagram of Stackers' Transition Between the Institution at Which the Initial Certificate Was Earned and the Institution Where the Highest Level of Credential Was Earned



(from Daugherty et al., 2020)

WHAT ARE STACKABLE CREDENTIALS?

- In practice, interpretations of what constitutes **stacking** vary widely
- Identifying programs that are designed or intended to be stackable is challenging
 - Most research has focused on **individuals who earn multiple credentials**, regardless of whether they complete a designated stackable credentials program
- We use the term **credential-stacking** to distinguish individuals who earn multiple credentials that may or may not be part of a designated program

WHAT ABOUT STACKABLE CREDENTIALS IN HEALTH?

- Health professions are especially well-suited to stackable credentials pathways ([Bohn et al., 2019](#); [Daugherty et al., 2020, 2023](#))
 - Large number of certificates awarded in health
 - Growth in health care industry, including many entry-level jobs requiring certificates and opportunities for earnings growth with higher-level credentials
 - Well-defined, ladder-like structure of many health fields (e.g., nursing)
 - Early stackable credentials model: RN to BSN

HOW COMMON IS CREDENTIAL-STACKING?

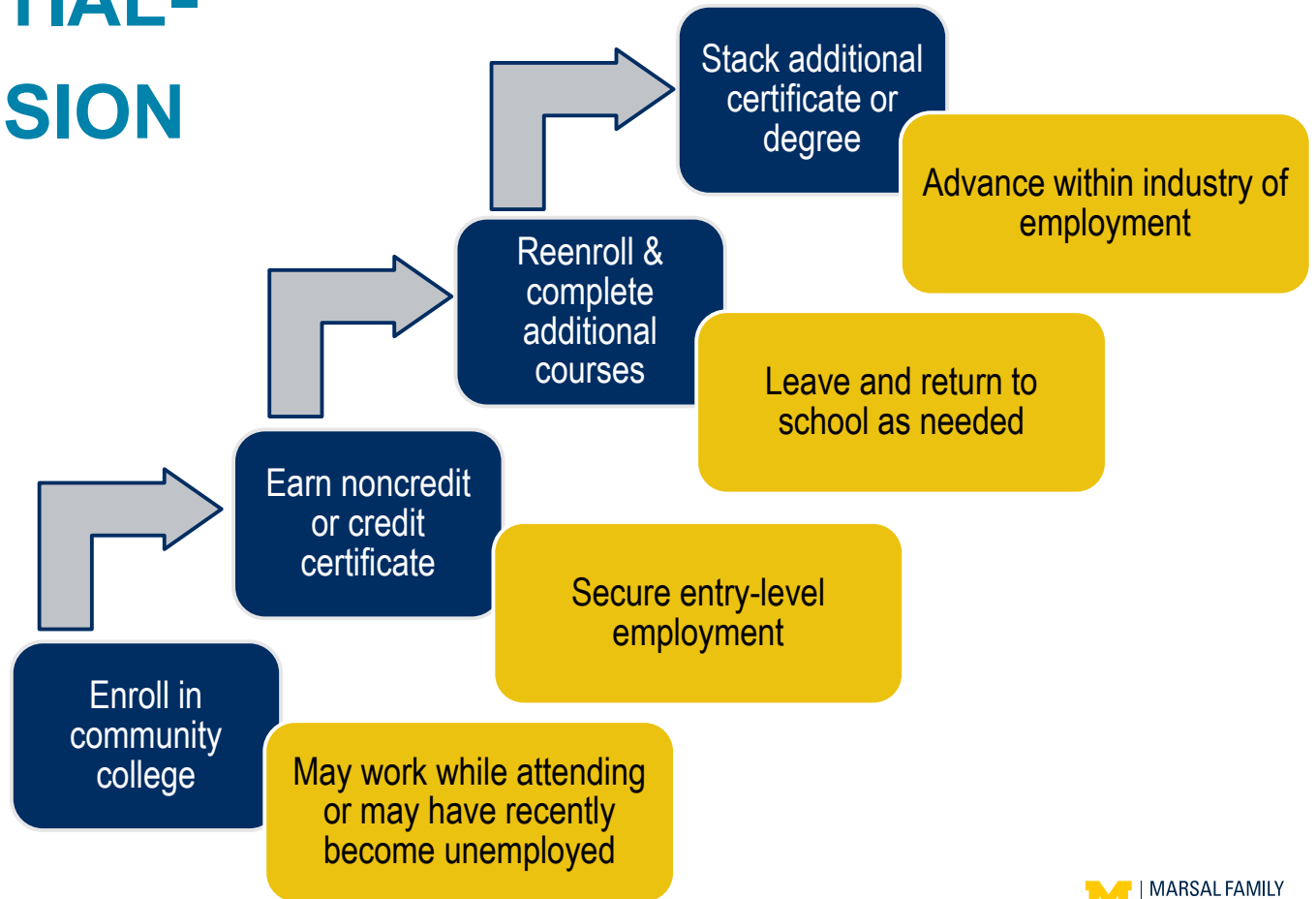
- Estimates vary due to differences in definitions of *credential-stacking* and timeframes used to measure stacking as well as differences in contexts
- In our research, 41% of Colorado certificate-earners and 44% of Ohio certificate-earners stack credentials within four years ([Daugherty et al., 2023](#))
 - Consistent with finding that, nationally, 40% of certificate-earners stack ([Bailey & Belfield, 2017](#))
 - In other studies, stacking rates have ranged from 16% to 33% ([Bohn & McConville, 2018](#); [Leibert, 2017](#))
- In health fields, between 22% and 33% of certificate-earners stack credentials ([Daugherty et al., 2020, 2023](#))

HOW COMMON IS CREDENTIAL-STACKING?

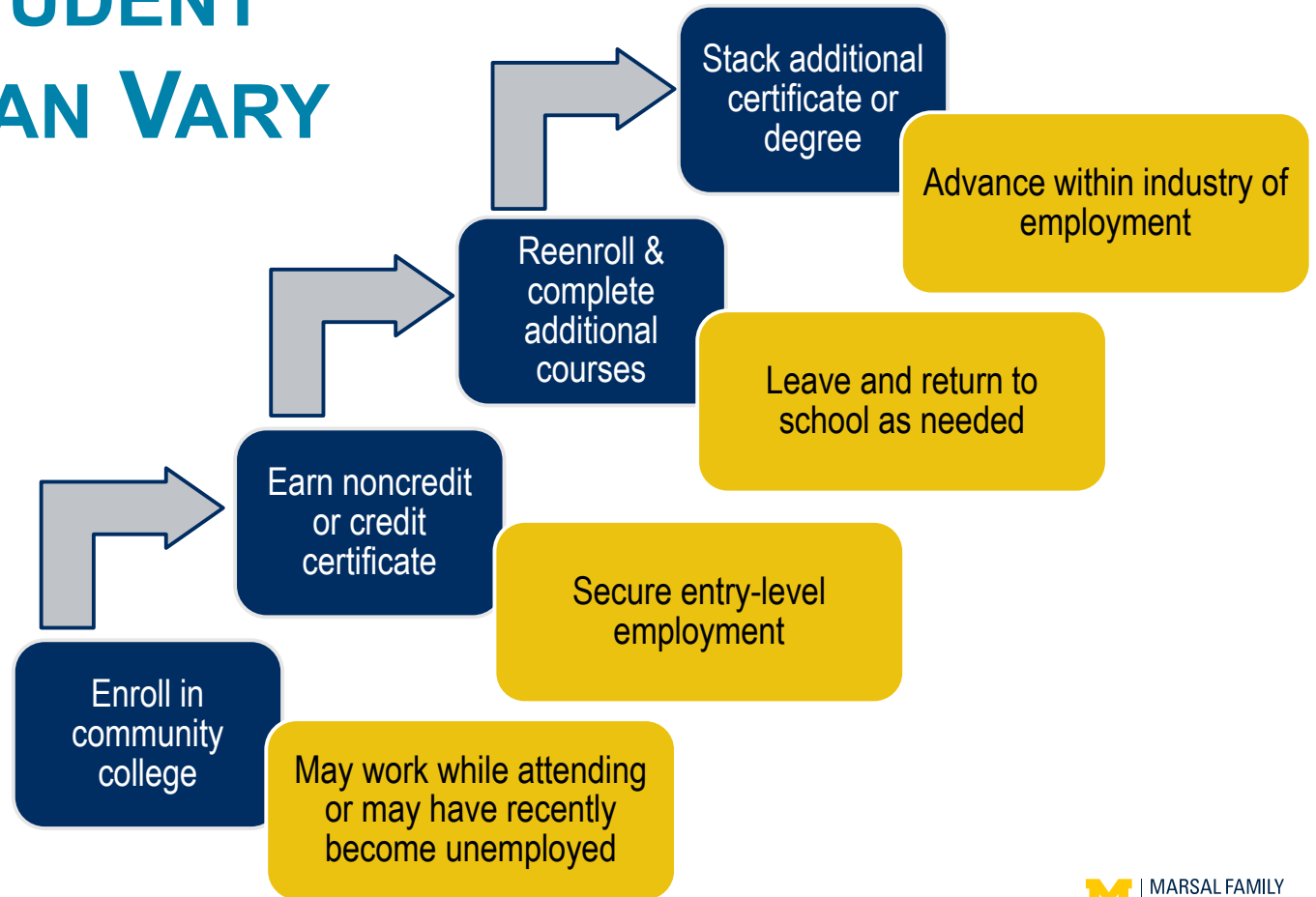
- Stackable credentials programs are touted as promising opportunities for adult learners, students from low-income backgrounds, and other historically underserved groups
- Available evidence is limited and mixed, but shows signs of promise
 - In our research, certificate-earners from low-income backgrounds stack at the same or higher rates ([Bahr et al., 2024](#); [Daugherty et al., 2023](#))
 - Other research has likewise found no difference in credential-stacking between Pell Grant recipients and non-recipients ([Giani & Fox, 2017](#))
 - Adult learners age 25 or older stack at lower rates ([Bohn & McConville, 2018](#); [Daugherty et al., 2020](#))
 - Findings on stacking among students of color are mixed ([Anderson & Daugherty, 2023](#); [Bohn & McConville, 2018](#); [Daugherty et al., 2020](#); [Giani & Fox, 2017](#))

HOW DOES CREDENTIAL- STACKING WORK?

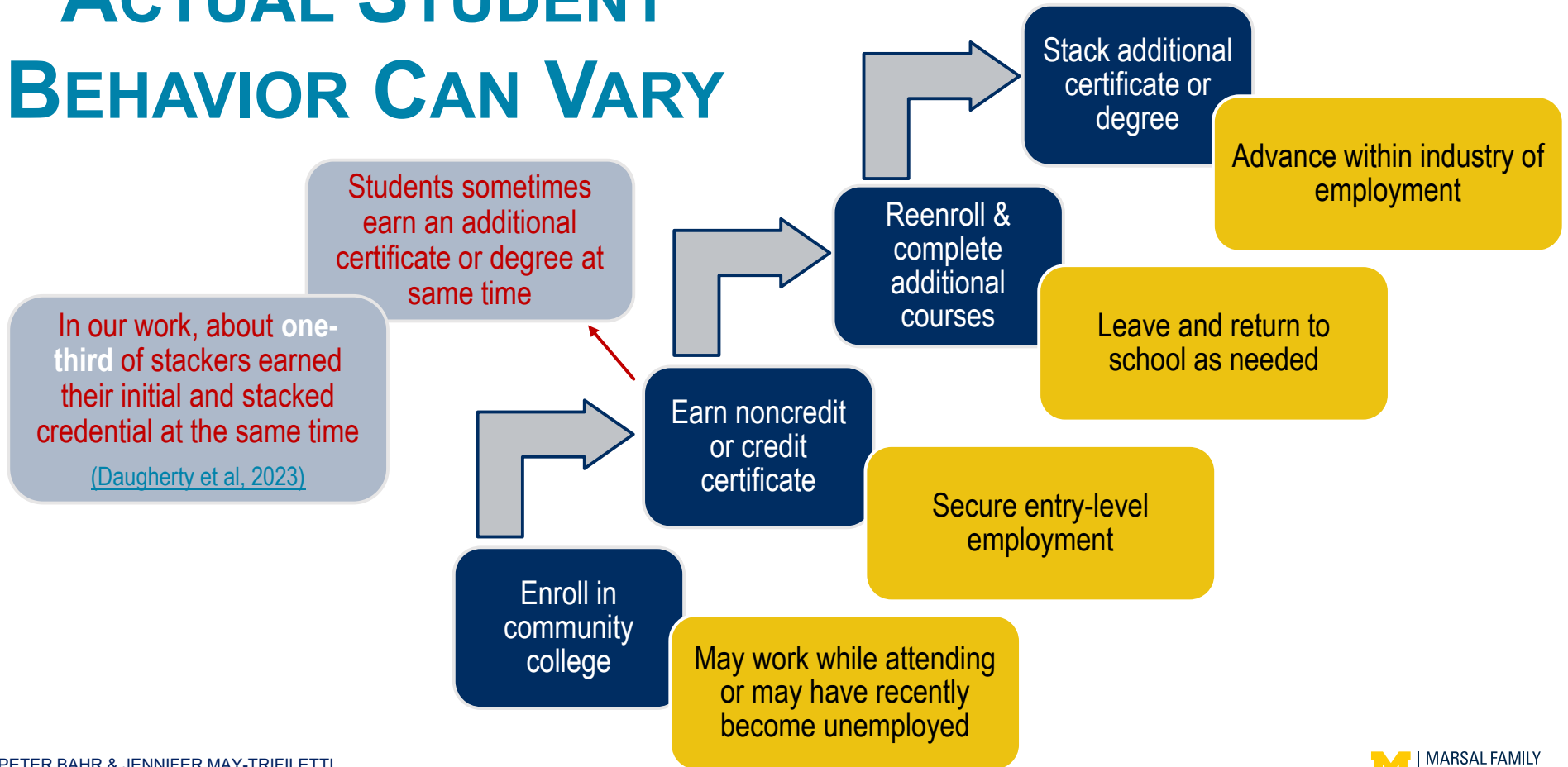
THE CREDENTIAL-STACKING VISION



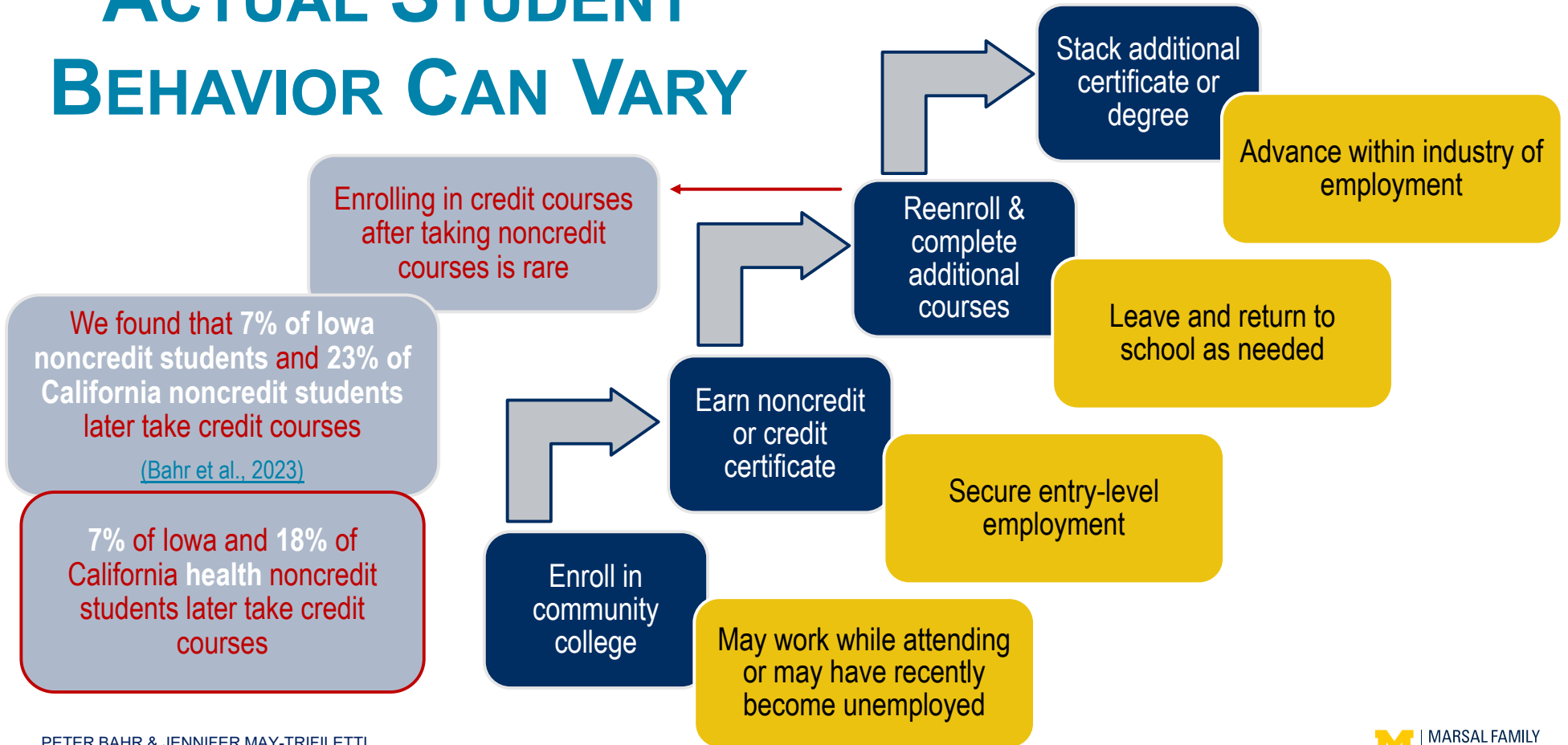
ACTUAL STUDENT BEHAVIOR CAN VARY



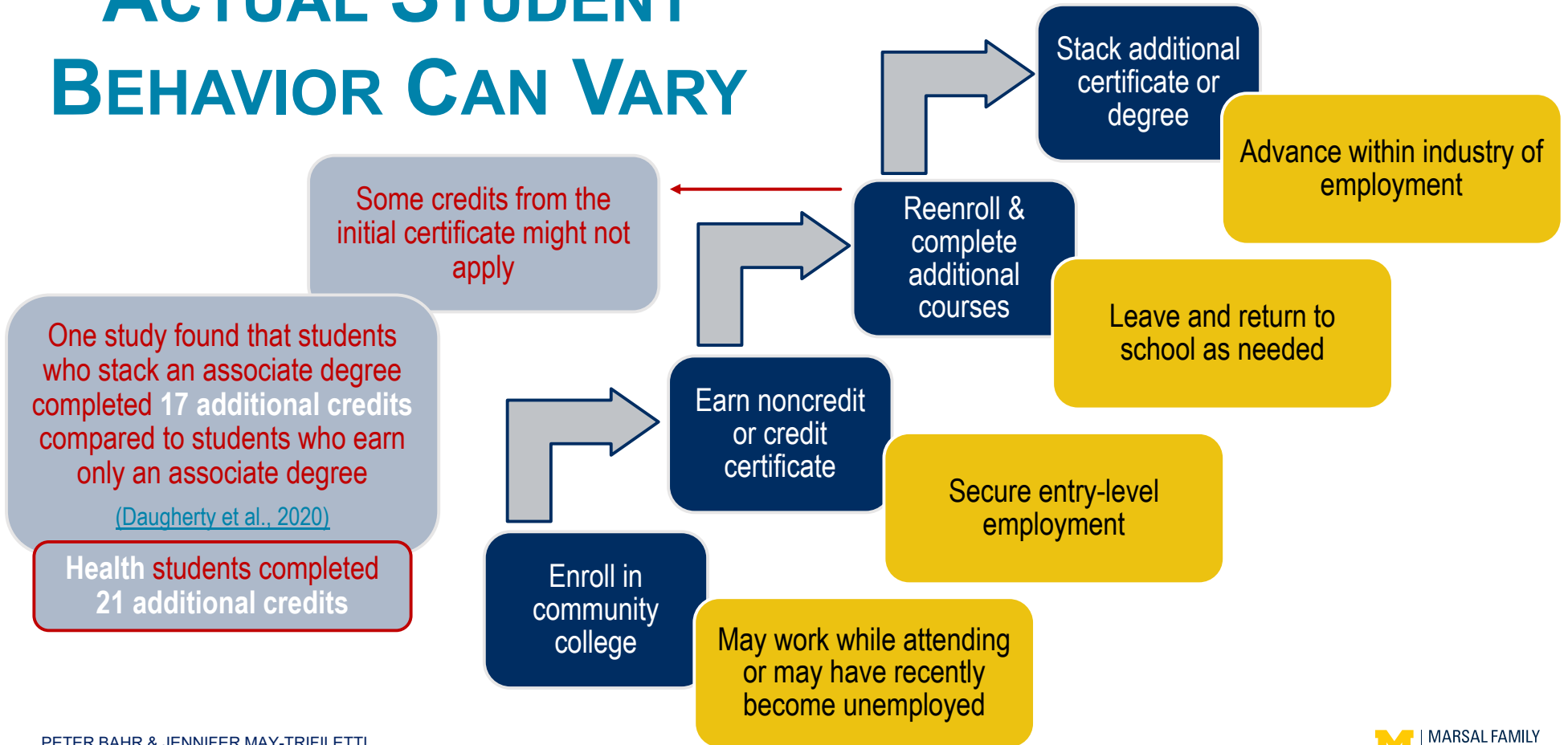
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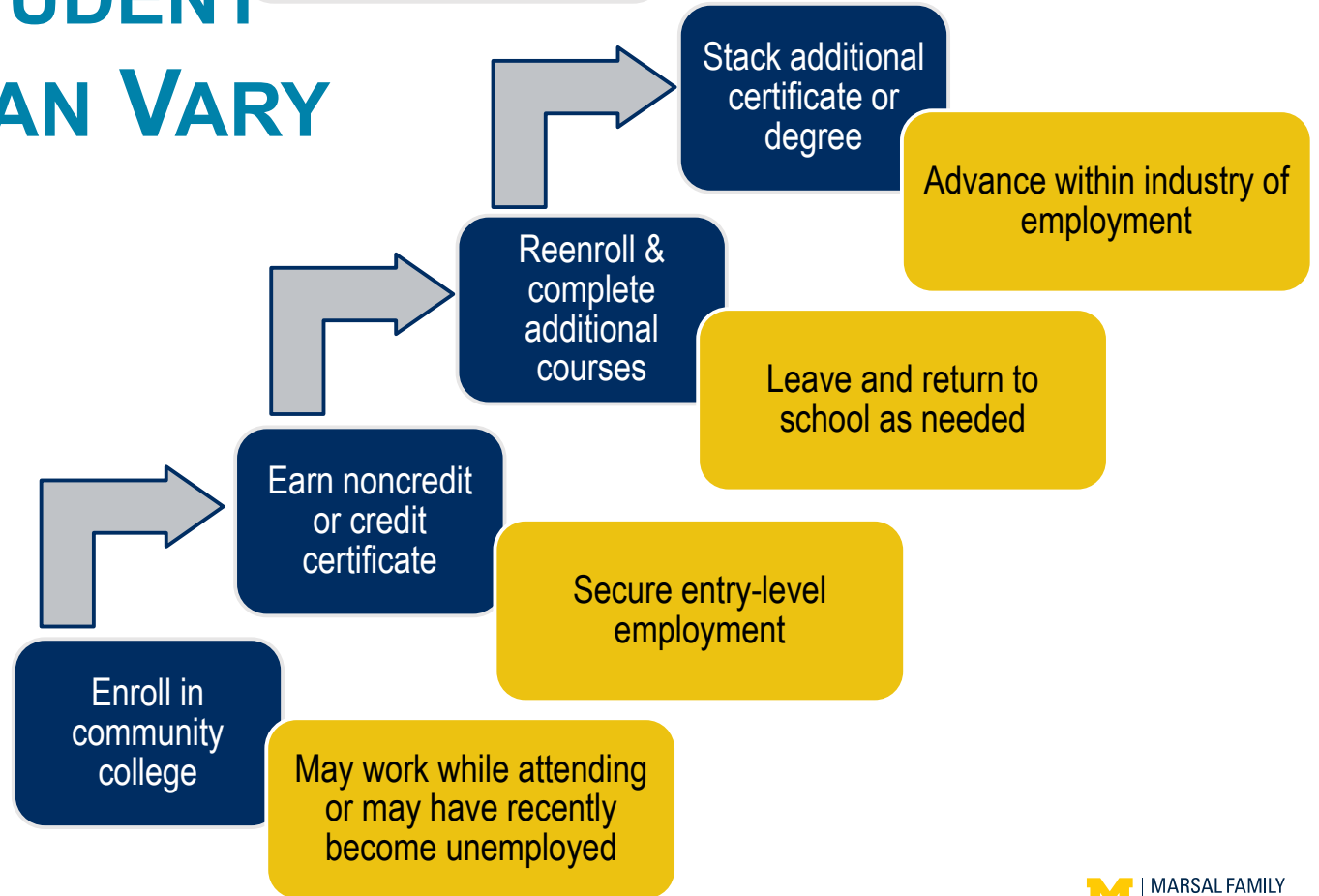
ACTUAL STUDENT BEHAVIOR CAN VARY



(Bahr et al., 2022; Daugherty et al., 2023; Daugherty & Anderson, 2021; Xu & Ran, 2020)

Few noncredit certificate-earners, including those in health, go on to a credit-based credential

ACTUAL STUDENT BEHAVIOR CAN VARY



ACTUAL STUDENT BEHAVIOR CAN VARY

Between one-quarter and one-third of stackers—including one-quarter of health stackers—earn their stacked credential in a different field (Daugherty et al., 2020, 2023)

Changing fields is common

Stack additional certificate or degree

Advance within industry of employment

Reenroll & complete additional courses

Leave and return to school as needed

Earn noncredit or credit certificate

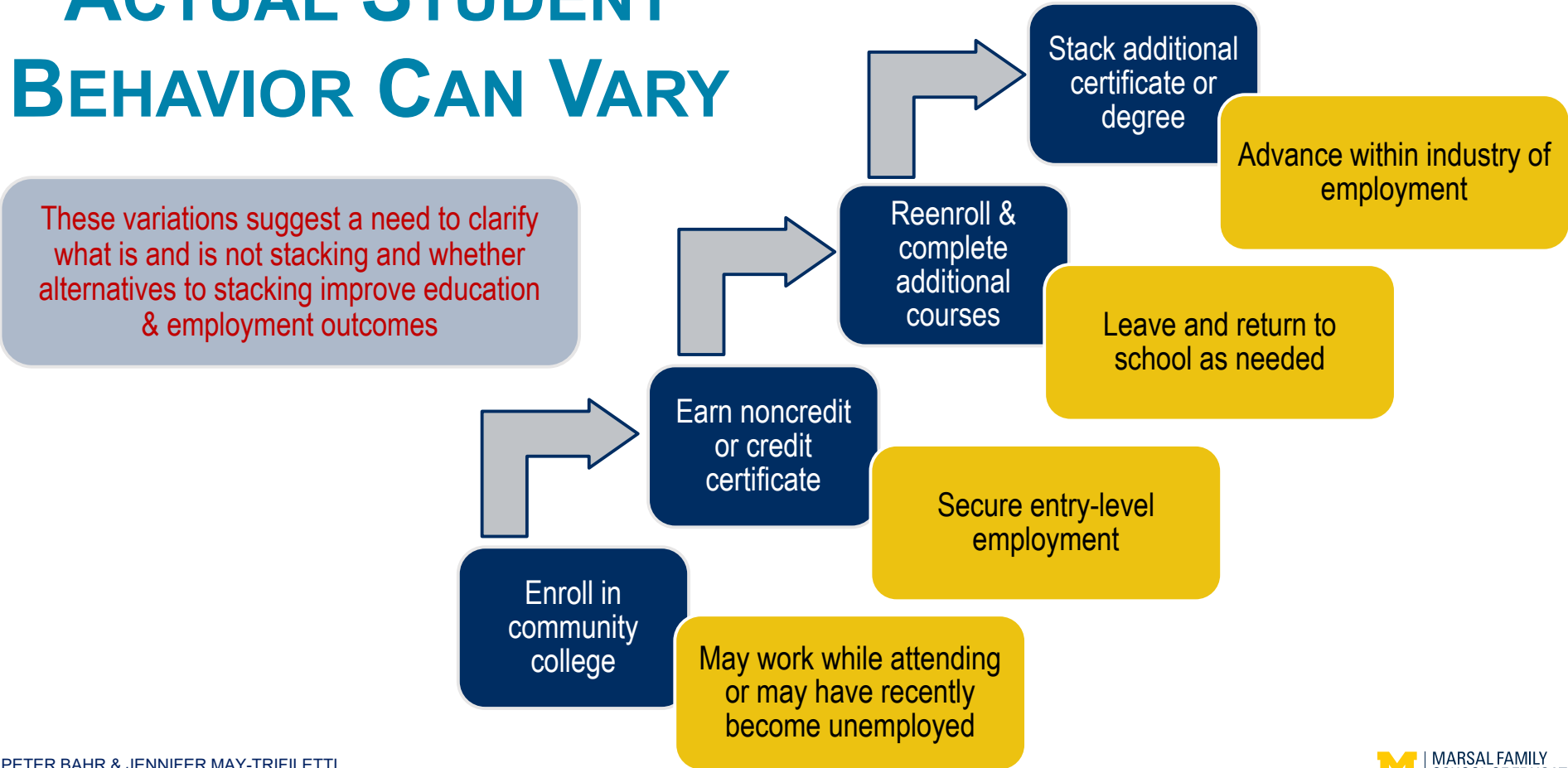
Secure entry-level employment

Enroll in community college

May work while attending or may have recently become unemployed

This might signal a change in career or industry of employment instead of advancement

ACTUAL STUDENT BEHAVIOR CAN VARY



DOES CREDENTIAL-STACKING YIELD BENEFITS IN THE LABOR MARKET?

- Overall, credential-stacking is associated with increased employment rates and earnings ([Bohn et al., 2019](#); [Daugherty & Anderson, 2021](#); [Daugherty et al., 2023](#); [Meyer et al., 2022](#))
- However, this masks substantial variation by level of credential and field of study ([Bohn et al., 2019](#); [Daugherty & Anderson, 2021](#); [Daugherty et al., 2023](#); [Meyer et al., 2022](#))
 - Clear returns to vertical stacking; limited or no returns to horizontal stacking
 - Stronger returns when stacking occurs in the same field as the first certificate
- Stacking in health tends to yield higher returns—and, in some cases, the highest returns—compared to other fields ([Bailey & Belfield, 2017](#); [Bohn et al., 2019](#); [Daugherty & Anderson, 2021](#); [Daugherty et al., 2023](#); [Meyer et al., 2022](#))
 - Driven by vertical stacking to associate degrees ([Bohn et al., 2019](#); [Daugherty & Anderson, 2021](#); [Giani & Fox, 2017](#))
 - Driven by stacking in nursing ([Bohn et al., 2019](#); [Daugherty et al., 2023](#))

HAS ANY RESEARCH LOOKED AT PROGRAMS DESIGNED OR INTENDED TO BE STACKABLE?

- Yes—just a few
- A recent Ohio study defined a program to be stackable if the college offered multiple credentials in the same narrow field ([Daugherty & Anderson, 2023](#))
 - Adding a new program in the same narrow field increased re-enrollment among students who earned a first credential in that field—and did not decrease transfer rates
- Another study leveraged course catalogs to identify stackable programs in California ([Bohn & McConville, 2018](#))
 - Student stacked credentials at higher rates when they enrolled in programs with stackable features (e.g., certificates were explicitly identified as “intermediate” or “advanced;” credentials shared a common set of “launchpad” courses)
- A third study focused on a stackable credentials pathway in health offered by a consortium of nine community colleges ([Giani & Fox, 2017](#))
 - Students participating in the program re-enrolled and stacked at higher rates

WHAT DON'T WE KNOW ABOUT STACKABLE CREDENTIALS?

1. If stackable credentials programs benefit adult learners and students from historically underserved backgrounds or divert these students from associate and baccalaureate degree programs
 - Research to date is promising, but mixed and in need of replication
2. The extent to which credential-stackers can apply credits earned as part of their first credential to their second credential, including how this might vary by field
3. Whether programs that are *designed* to be stackable increase credential attainment rates and improve labor market returns, and, if so, which program features drive outcomes
 - Obtaining data that identifies stackable credentials programs remains challenging
4. Why noncredit-to-credit transitions are not happening, including the relative roles of student goals and structural barriers
 - Quality of noncredit data vary widely between, and sometimes within, states

RETURNING TO OUR KEY TAKEAWAYS

- Definitions of credential-stacking and estimates of the percentage of certificate-holders who stack vary.
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FOR MORE INFORMATION

Stackable Credentials



www.edpolicyresearch.org/stackable

Noncredit-to-Credit Transitions



<https://www.edpolicyresearch.org/noncredit>

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