

TAPPING THE POWER OF HEALTH PATHWAYS IN EARLY COLLEGE HIGH SCHOOLS



MassINC

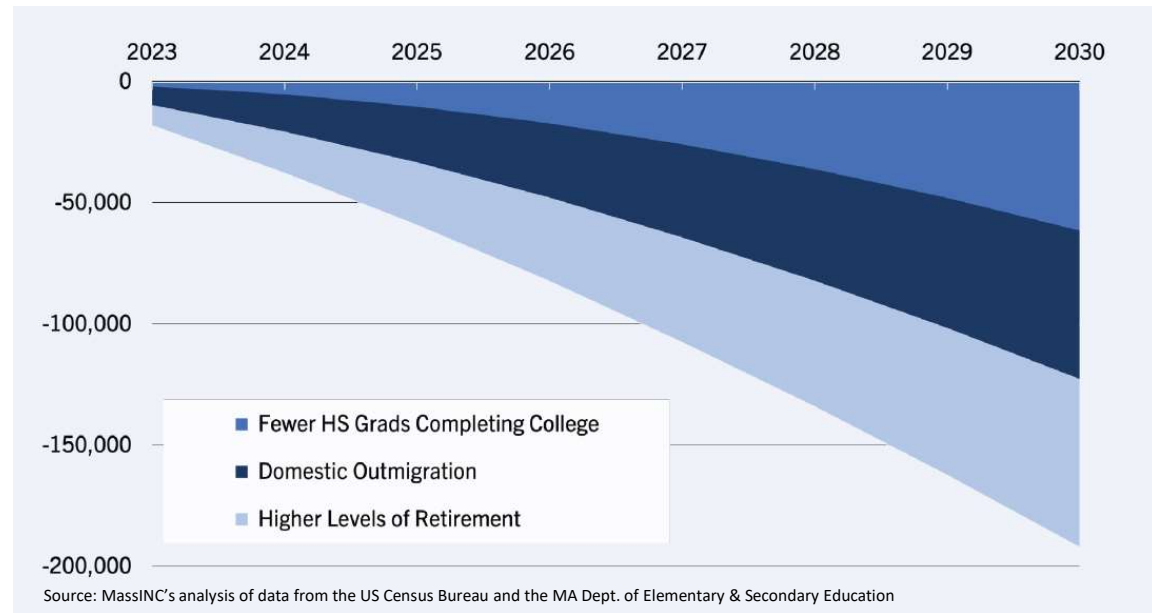
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Business Alliance for Education

Massachusetts General Hospital
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Massachusetts faces a looming workforce crisis.

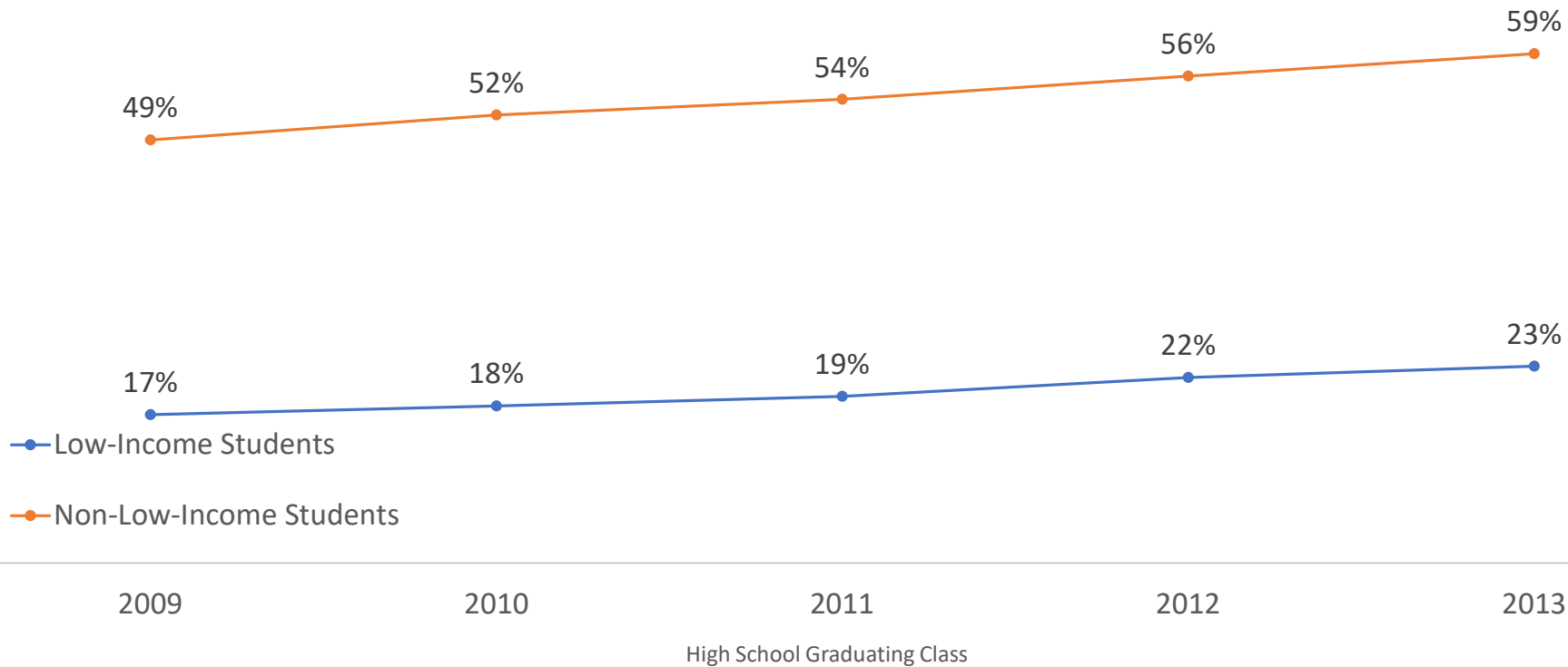
- Massachusetts hospitals are 19,000 workers short; vacancy rate for LPNs is 56 percent (MHHA).
- Half of all doctors plan to reduce hours or leave the field altogether, partially due to lack of nurses and staff turnover (MMS).
- The worker shortage is undermining efforts to contain rising medical costs (MHPC).

Projected Change in Massachusetts' College-Educated Labor Force



Less than one-quarter of low-income students in Massachusetts complete college.

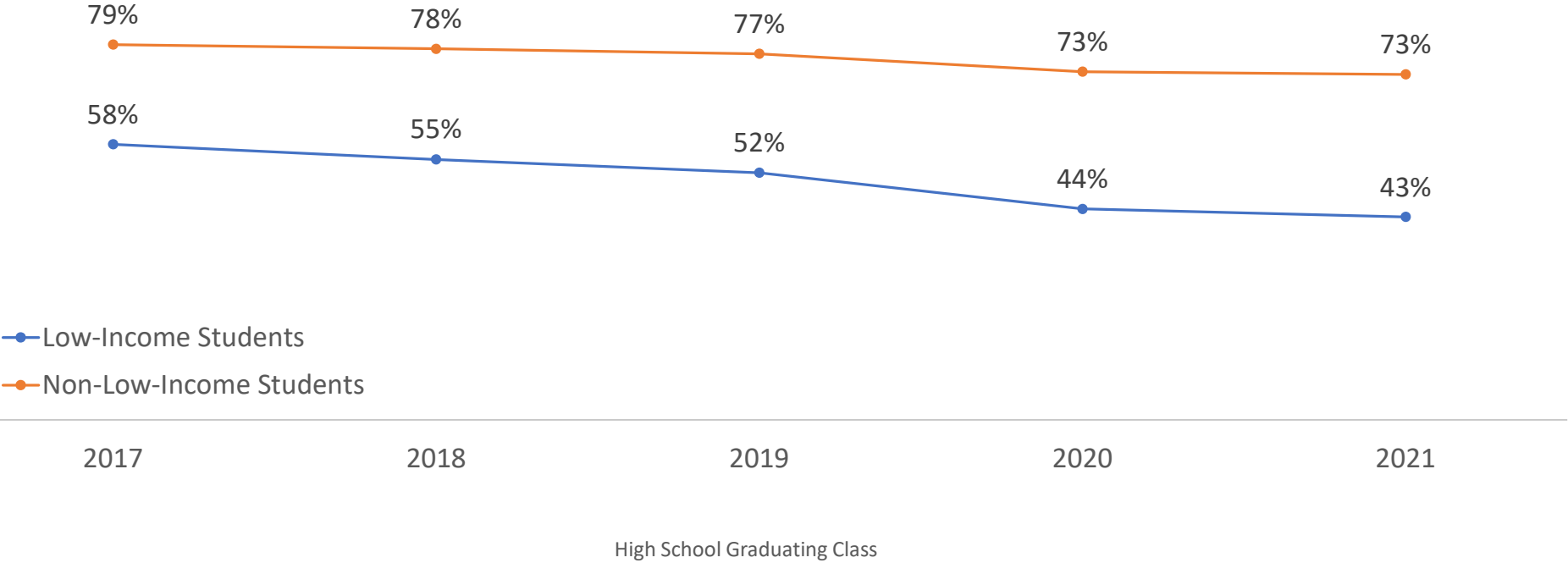
Share of Students in Cohort Completing Postsecondary Degree within Six Years of Anticipated High School Graduation



Source: Massachusetts Department of Elementary and Secondary Education

Low-income students find it increasingly difficult to continue their studies.

Share of Students in Cohort Enrolling in College Immediately After High School Graduation



Source: Massachusetts Department of Elementary and Secondary Education

Structural challenges make it even harder to prepare the next generation of health care workers.

- Too few students have early exposure to see if the field suits them and to learn what they must do prepare.
- The economics of health education make it difficult for public colleges to expand capacity.
- Clinical educator salaries are uncompetitive, and the profession lack the prestige it merits.



Developmental psychology provides a strong theoretical basis for Early College health pathways.

- **Identity formation is the key task of adolescence.** As high school students consider what they like, what they can do, and where they belong, a distinct *career identity* takes shape.
- **Environment has a huge influence on career identity development.** Future-orientation is reduced by attending schools with poor reputations, regular exposure to the threat of violence, parents who have struggled with discrimination in society and the workplace.
- **Racial and ethnic identity evolves in adolescence.** Racial stereotypes present a *social identity threat*; *critical consciousness*, or deeper knowledge of the processes behind oppression and inequality, empowers teens, giving them belief that they can actively work to create change through their career choice.
- **Career development theory suggests success is largely a function of *self-efficacy*.** An individual's beliefs about their ability to build and execute a plan is highly predictive of labor market outcomes.

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EARLY COLLEGE AS A SCALABLE SOLUTION TO THE LOOMING WORKFORCE CRISIS

I. INTRODUCTION

The painful labor shortages many sectors of our economy face today foreshadow far more grueling challenges in the coming years. Absent aggressive action, projections show the Commonwealth will lose hundreds of thousands of skilled workers before the end of this decade.¹ While Massachusetts has never led a workforce development intervention at the scale now required, there are numerous reasons why Early College can, and should, be the first.

For starters, North Carolina and Texas have demonstrated that the strategy delivers exceptional results at scale. These states put thousands of students through Early College each year, dramatically increasing their odds of completing postsecondary degrees.² Although still relatively small in comparison, Early College programs in Massachusetts appear to be on course to replicate these gains; students in the first few cohorts are twice as likely to enroll in college after high school and stick with it for a second consecutive year.³

Equally important from a workforce development perspective, Early College can help more graduates build skills that align with the needs of employers. In recent years, there has been considerable mismatch.⁴ This is largely due to insufficient college readiness, not because students lack interest in STEM fields, where labor supply and demand are especially unbalanced.⁵ By engaging students at the beginning of their journey, Early College is uniquely situated to help them hone the skills that jobs in our knowledge industries require.

Equity is a third compelling argument for making Early College a primary response to the state's skilled worker shortage. The intervention is clearly benefiting all students, but consistent with results in other states, it is producing outsized postsecondary completion gains for low-income students and students of color in Massachusetts.⁶ Other potential avenues to find more skilled labor, such as providing tax incentives to attract and retain workers or advocating for a larger number of H1B visas, will not reduce inequality.

To get the most from Early College across these three dimensions—providing impact at scale, matching employer demand for skilled workers, and ensuring that we achieve equitable outcomes—Massachusetts must continue to enhance its programs.

Our relatively young Early Colleges remain underdeveloped in terms of both the number of college credits that students can earn, and the industry-focused counseling, mentoring, and career development experiences that they receive. The combination of fewer credits and modest career development opportunities means Early College is not living up to its full potential to provide underserved students with a firm boost into the fields where they are less represented.

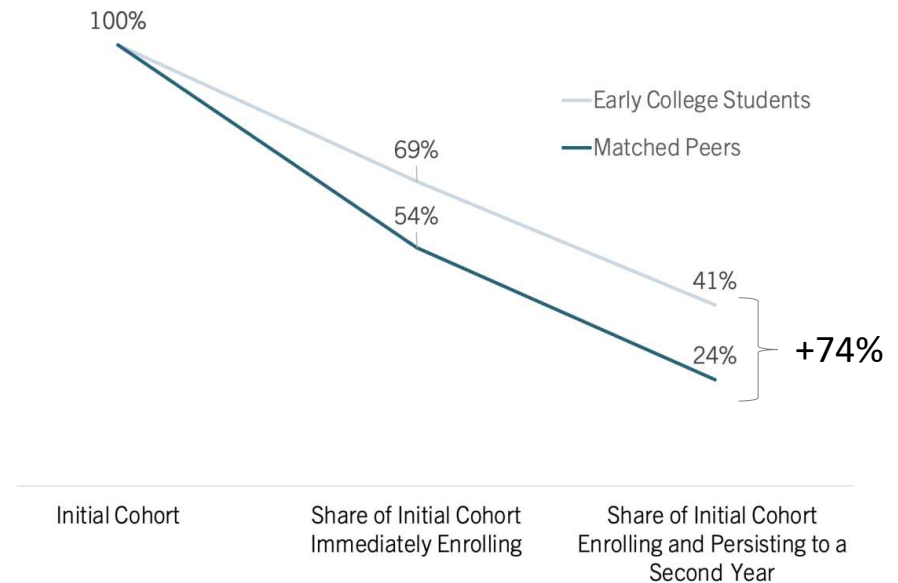
While this is largely a function of not having sufficient and predictable resources available at the start, it is also important to recognize hesitancy among some education policy leaders, who are understandably uneasy about rushing high school students onto narrow college and career paths.

Early College is a highly structured intervention that is perfectly attuned to career identify development.

| 7 th and 8 th grades | 9 th grade | 10 th grade | 11 th grade | 12 th grade |
|--------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------|
| College and Career Exploration | | | Career Development | |
| Outreach and Family Engagement | | Comprehensive system of supports for college and career planning and to develop academic skills and behavior needed for success | | |
| | | Rigorous high school coursework | Introduction to college-level coursework | Students take up to 60 credits aligned to a college major |

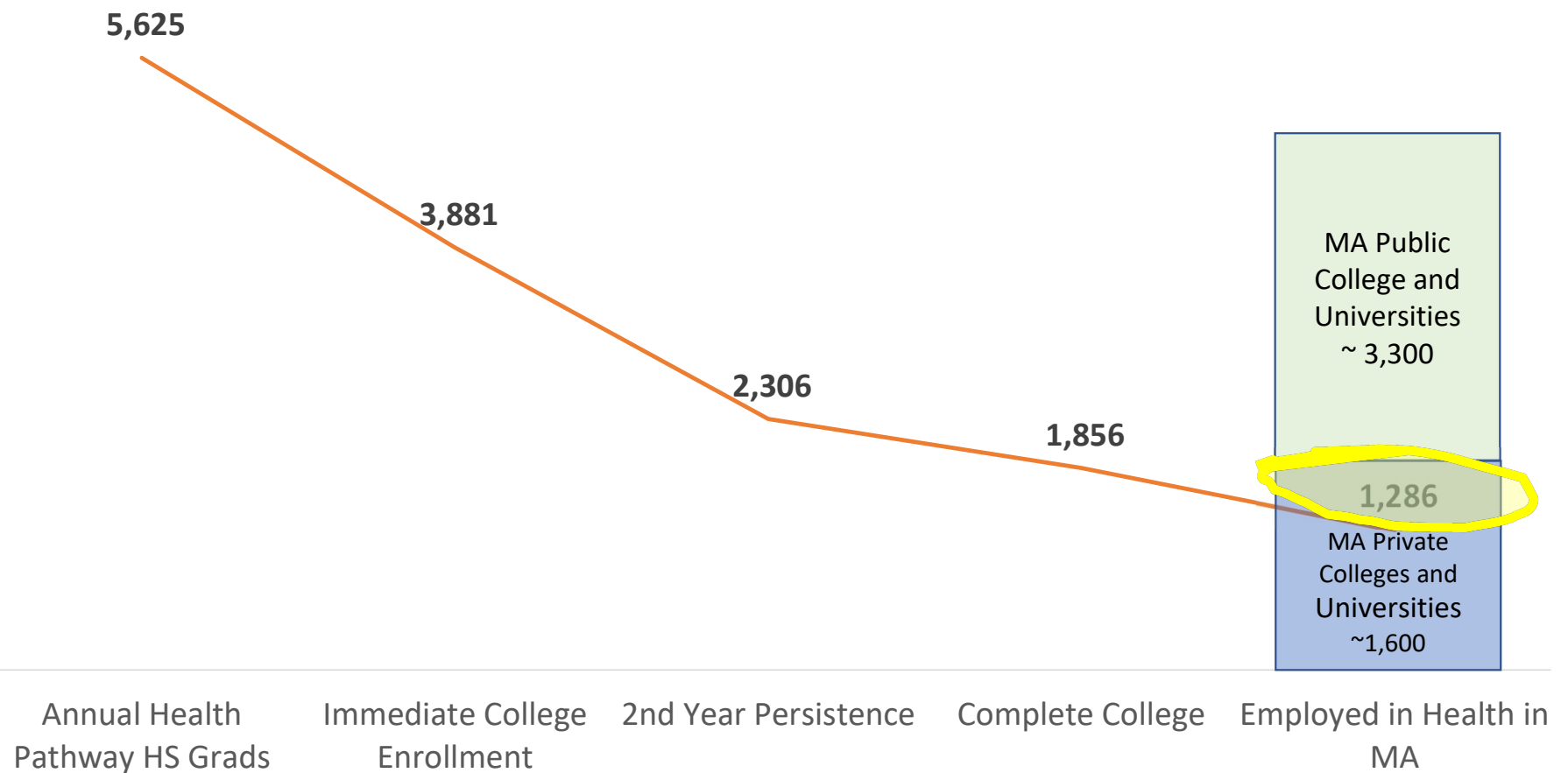
The value proposition of Early College is strong.

- Early college is doubling the likelihood that students enroll and persist in college.
- Early College has momentum to achieve scale.
- Early College will diversify the healthcare workforce.
- By challenging us to seek solutions to the structural issues that lead so many students who aspire to clinical health careers to stop out, Early College can be a disruptive force for the health care industry.



Source: MassINC's analysis of data from the MA Dept. of Elementary & Secondary Education

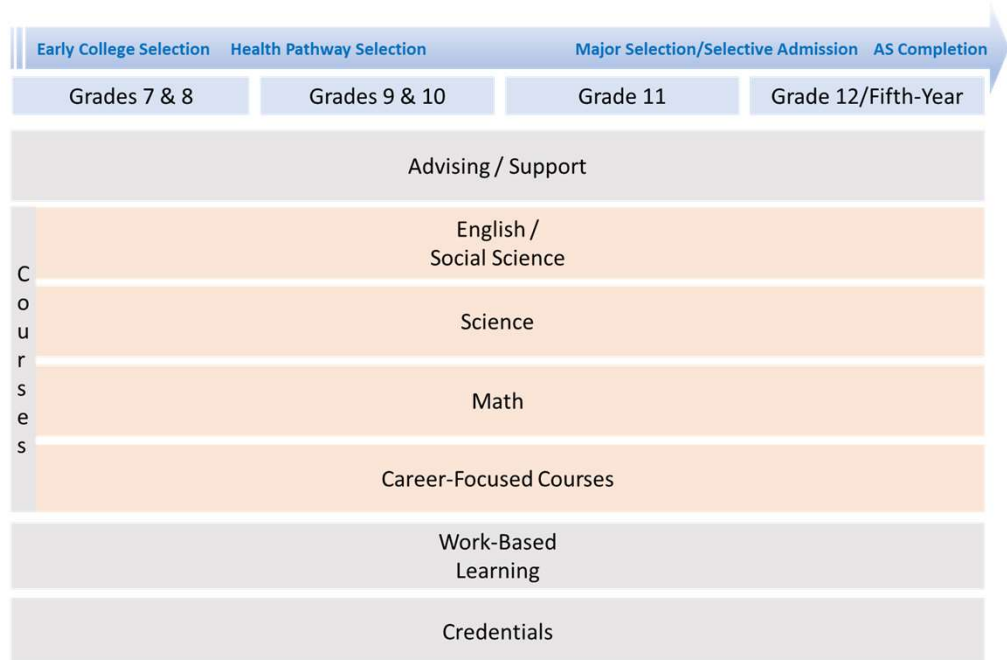
At scale, Early College could increase the number of graduates entering the health workforce by 25% annually.



Design guidelines for robust Early College health pathways:

- Build health pathways that prepare students for admission to selective clinical programs.
- Select major offerings based on current local labor market conditions.
- Accelerate health pathway selection, but extend entry into a college major as long as possible.
- Provide access to advisors with expertise in health care.
- Provide high-quality career exploration, internships, and mentoring experiences beginning in middle school and continuing through high school.

A Model Health Pathway Design



To-do list for state policymakers:

- Increase the state's per-credit reimbursement for Early College lab sciences.
- Create a consistent and predictable process for selective admissions health programs.
- Work with intermediaries to build a menu of scalable career development opportunities.
- Provide professional development for faculty teaching intro-level college science courses.



To-do list for Early College partnerships:

- Build one piece at a time, but move expeditiously.
- Prioritize extending the health pathway down into earlier grades.
- Work with a knowledgeable workforce development intermediary.



To-do list for business leaders:

- Engage Early College leaders as allies in the effort to build a diverse health care workforce for the future.
- Create a community of practice around internships and other work-based learning experiences for Early College students.

