

**Michael Reese Health Trust High School-
Hospital Initiative****Summary Evaluation Report
June 2019****Background**

The Michael Reese Health Trust High School-Hospital Initiative (Initiative) is a partnership program, which began in school year 2013. The partnership includes the Chicago Public Schools Career and Technical Education (CTE) Health Sciences programs, neighborhood high schools with Health Sciences programs, area hospitals, and the Michael Reese Health Trust (MRHT). It provides participating students an opportunity to take part in a range of career-focused opportunities along a student development continuum. The high schools are paired with hospital partners who provide students with opportunities to participate in various activities that expose them to practical, hands-on experience for jobs throughout various departments of the hospital. The purpose of the Initiative is to enhance the outcomes of the Health Sciences curriculum, increase student interest in pursuing a career in a healthcare-related field, and fulfill an industry need for a trained workforce.

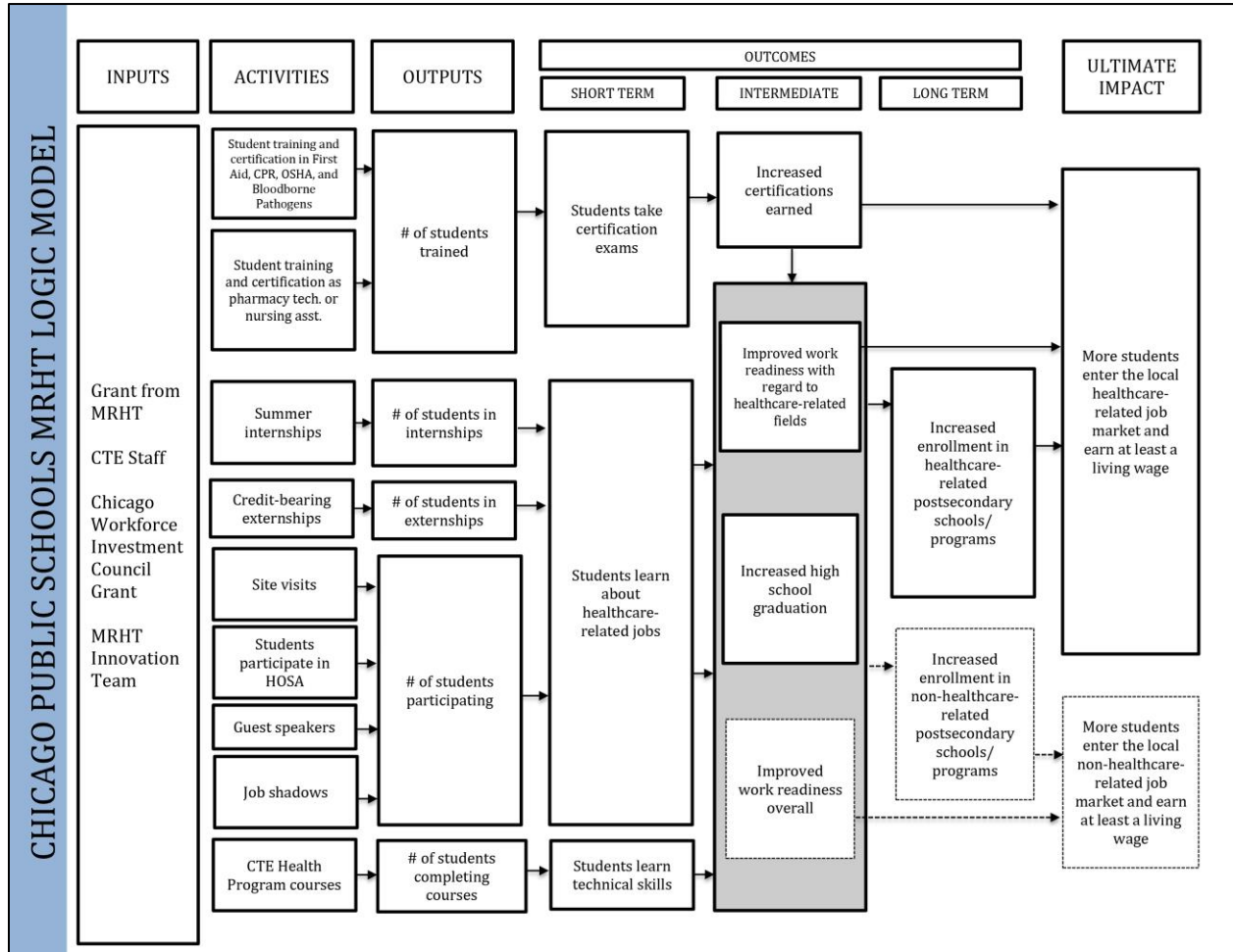
In 2013, the Chicago Public Schools and MRHT engaged Maple Grove Objective to serve as an external evaluator for the Initiative. Maple Grove Objective worked with all Initiative partners to design the evaluation and implement a formative evaluation. Maple Grove Objective also analyzed student outcome data to understand the impact of the Initiative on student's outcomes at the end of high school. This summary evaluation report highlights the results from the evaluation activities from the first six years (2013-2018) of the Initiative's implementation and draws from the following evaluation activities:

Years	Evaluation Activities
2013	<ul style="list-style-type: none">• Development of Initiative logic model and annual scorecard to be used for formative evaluation
2014-2016	<ul style="list-style-type: none">• Development and refinement of data collection systems to populate data in annual scorecard• Production of annual scorecard to monitor progress• Focus groups and interviews to inform program delivery
2017-2018	<ul style="list-style-type: none">• Analysis of student outcome data to understand the impact of the Initiative on student's outcomes at the end of high school• Continued production of annual scorecard to monitor progress

Evaluation Design

The evaluation was comprised of a formative evaluation and a summative evaluation. The outcomes evaluated in both the formative and summative evaluation were based on the logic model developed at the beginning of the project in collaboration with all Initiative partners.

Michael Reese Health Trust High School-Hospital Initiative Logic Model



Formative Evaluation

- An annual scorecard was developed to monitor Initiative activities and to quantify the number of students served each year and their immediate outcomes. The scorecard includes program outputs, short-term outcomes, and intermediate outcomes. The scorecard was primarily designed to be used as a formative evaluation tool.
- To support the population of the annual scorecard with accurate student-level data, early evaluation efforts focused on implementing new data collection methods within CPS.
- In the early years of the Initiative, focus groups and interviews were conducted with students, teachers, and hospital partners to inform refinements for program delivery.

Summative Evaluation

- An analysis of student outcome data was conducted to understand the impact of the Initiative on student's outcomes at the end of high school. The following outcomes were analyzed for CPS graduates who participated in the MRHT program.¹
 - % of graduates who plan to continue their education after high school (source: CPS Senior Exit Questionnaire)
 - % of graduates who plan to continue their education in the Health Sciences field (source: CPS Senior Exit Questionnaire)
 - % of graduates enrolled in college in the fall after high school graduation (source: National Student Clearinghouse)

Outcomes for MRHT graduates were compared to the outcomes of all Health Sciences students, all CTE students, and all CPS students.

- To complement the outcome study, the annual scorecard was used as a summative evaluation tool to report on the increase in students participating in the Initiative activities over time.

Improved Data Collection Processes

During the evaluation design in 2013, a list of ideal evaluation metrics was compiled for use in the scorecard. At the time, there was only one metric on the scorecard for which student-level data was available: completion of CTE courses with a passing grade. Data for all other metrics were captured haphazardly and often in the aggregate, making it impossible to ensure all participating students were counted and that students were not double counted. In the 2013 column of the scorecard (see Appendix), only aggregate data was reported. Between 2013 and 2016, new data collection processes were implemented and existing data collection processes were refined to ensure all numbers reported were based on student-level data. Below is a summary of when the data collection systems were developed or refined to support the external evaluation.

School Year 2014

- New system for certifications
- New system for internships
- New system for job shadows
- New student survey on learning relevant information about healthcare-related jobs

School Year 2015

- New system for guest speakers
- New system for externships/practicums
- New system for site visits

¹ Initially, the evaluation design included an analysis of employment outcomes for CPS graduates that participated in the Initiative. However, shortly after the Initiative began, CPS lost access to employment data through the Illinois Department of Employment Security.

School Year 2016

- Refined system for internships and job shadows
- HOSA

Focus Groups and Interviews

In 2014 and 2015, focus groups and interviews were completed with teachers, students, academy coordinators, and hospital partners to provide information about the implementation of the Initiative. Every Initiative teacher from each of the partner schools was interviewed, as were all of the programmatic leaders from each of the partner hospitals and academy coordinators from a few of the schools. Student focus groups were held at Julian High School, Sullivan High School, and Westinghouse College Prep with between six to 10 students participating in each group.

Overall Perceptions

- A predominance of the teachers, coordinators, hospital partners, and students all loved the program and wanted to expand the quantity and breadth of available opportunities. Some were concerned expansion would be constrained by the extent of funding for the program.
- Teachers generally praised the Initiative as being "exceptional" and "high quality." They felt it offered students unique experiences beyond what are available at other schools and helped them build work-related experience and skills, such as researching jobs, writing resumes, and garnering a more specific and nuanced familiarity with the particulars of the litany of jobs in medicine.
- Many felt the Initiative helped students learn to be professional without being supervised and helped students get a better understanding of what is expected of them in a professional work environment with regard to timeliness, proper dress, and behavior.
- When the program was operating at its best, the collaboration between the teachers, the coordinators, and the hospitals, combined with the relationships that developed between the students over the years, fostered a family-like environment and a sense of belonging.
- The hospital partners in general were very complementary about MRHT's assistance and what the grant enabled them to accomplish, not only in terms of the money allowing them to stretch resources, but also in bringing all the partners together, enabling them to share ideas and best practices, and giving their activities structure and focus.

Feedback on Student Opportunities

- Students generally enjoyed the hands-on learning involved in the opportunities and appreciated the experience. The opportunities provided students a better idea of the breadth of careers available in medicine and the academic requirements and professional expectations necessary for pursuing any of those careers.
- Some students described the opportunities as giving them purpose and direction, guiding them toward understanding what they do and do not want to do. It provided them with a

deeper understanding of what they need to do to pursue these careers and the confidence that doing so was well within their capabilities.

- Exposure to various jobs throughout the hospitals had driven many of the students to want to pursue careers in healthcare that they had not previously known existed in medicine, such as accounting or computer science.
- These opportunities had, at times, also demonstrated to students what they do *not* want to do. For example, one student had wanted to go into nursing, but after her experiences, discovered that she is too sensitive to be a nurse. Another ruled out phlebotomy after discovering an aversion to needles.
- The hands-on learning offered by the student opportunities reinforced the concepts that were taught in the classroom and allowed students to put those concepts into practice. The Initiative provided teachers additional focus and structure for what to include the curriculum and when to introduce those concepts.

Impact on Student Experiences

The data in the scorecard (see Appendix) shows that, overall, the Initiative has resulted in more opportunities for students to experience hands-on learning in the Health Sciences field. When reviewing the data from year to year, it is important to remember that the offering of any student opportunity could be swayed by external factors, such as funding availability and the existence or lack of business partnership opportunities. However, overall between 2013 and 2018, there was an upward trend in students participating in all the activities monitored by the scorecard. For example, an increased number of students participated in internships (77 compared to 145), job shadows (100 compared to 186), and HOSA (peak participation was 232 students participating at local HOSA). Over the six years of the program, there were also increases in the certifications earned, increasing from 155 total certifications earned in 2014 to 949 total certifications earned in 2018.

By examining a snapshot in time between 2014 and 2016, it is apparent that these increased opportunities for students translated into more students graduating with at least one student experience.

- 42% of 2016 MRHT program graduates completed a job shadow during high school compared to 9% of 2014 MRHT program graduates.
- 40% of 2016 MRHT program graduates completed an internship during high school compared to 35% of 2014 MRHT program graduates.
- 59% of 2016 MRHT program graduates earned a certification during high school compared to 4% of 2014 MRHT program graduates.

- 13% of 2016 MRHT program graduates earned a certification of economic value² (e.g., CNA/BNA, Pharmacy Tech, Phlebotomy) during high school compared to 3% of 2014 MRHT program graduates.

Impact on Student Outcomes

An analysis of student outcome data was conducted to understand the impact of the Initiative on students' outcomes at the end of high school. Overall, graduates who participated in the MRHT program had more positive outcomes than the overall CTE or CPS graduate populations.

The following outcomes were analyzed for CPS graduates that participated in the MRHT program³:

- % of graduates who plan to continue their education after high school (source: CPS Senior Exit Questionnaire)
- % of graduates who plan to continue their education in the Health Sciences field (source: CPS Senior Exit Questionnaire)
- % of graduates enrolled in college in the fall after high school graduation (source: National Student Clearinghouse)

The number of graduates per cohort were⁴:

- 2014: 132 students from 5 MRHT schools (represents 43.7% of all CPS Health Sciences graduates)
- 2015: 179 students from 5 MRHT schools (represents 37.8% of all CPS Health Sciences graduates)
- 2016: 291 students from 8 MRHT schools (represents 71.3% of all CPS Health Sciences graduates)
- 2017: 302 students from 9 MRHT schools (represents 70.1% of all CPS Health Sciences graduates)

Planning to Continue Education

MRHT program graduates have said they plan to continue their education after high school at rates consistently higher than CTE graduates and CPS graduates overall. In 2017, 92% of MRHT program graduates said they planned to continue their education after high school. While this is less than the 97% of 2016 MRHT graduates that planned to continue their education after high

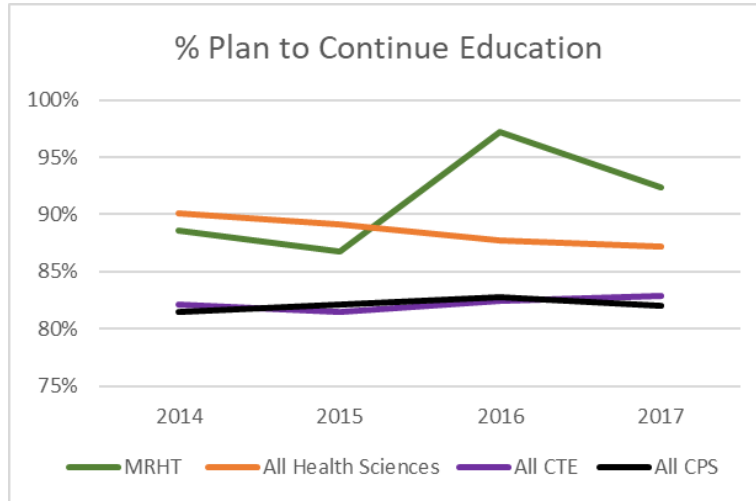
² The determination of “certification of economic value” is made through the CPS School Quality Rating Policy (SQRP).

³ Initially, the evaluation design included an analysis of employment outcomes for CPS graduates that participated in the Initiative. However, shortly after the Initiative began, CPS lost access to employment data through the Illinois Department of Employment Security.

⁴ MRHT schools for 2014 and 2015 include Dunbar, Kelvyn Park, North Grand, Sullivan, and Westinghouse. MRHT schools for 2016 include Dunbar, Kelvyn Park, North Grand, Sullivan, Westinghouse, CVCA, Juarez, and Julian. MRHT schools for 2017 include Dunbar, Kelvyn Park, North Grand, Sullivan, Westinghouse, CVCA, Juarez, Julian, and Crane Medical.

school, it is still substantially higher than CTE graduates and CPS graduates overall (see the following chart).

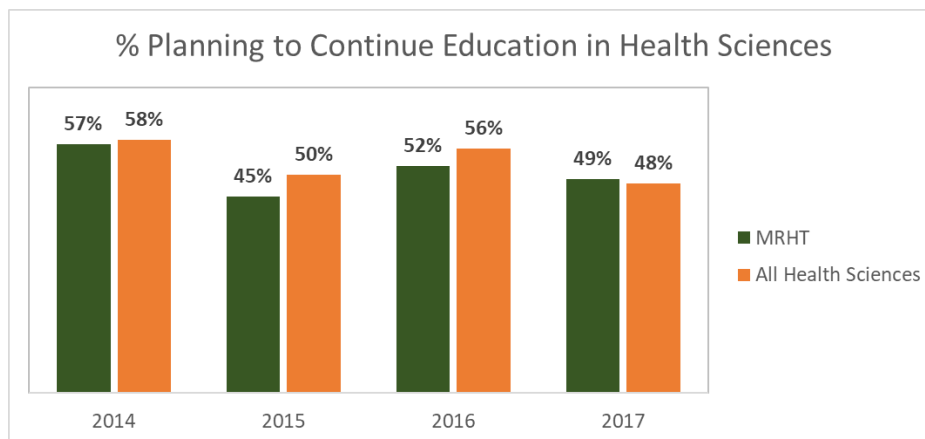
Percent of Graduates Planning to Continue their Education



Planning to Continue Education in Health Sciences

Across the years, roughly half of MRHT program graduates who plan to continue their education indicated they planned to stay in the Health Sciences field. In 2017, 49% of MRHT program graduates who planned to continue their education indicated they planned to stay in the Health Sciences Field (see the following chart).

Percent of Graduates Planning to Continue Education in Health Sciences

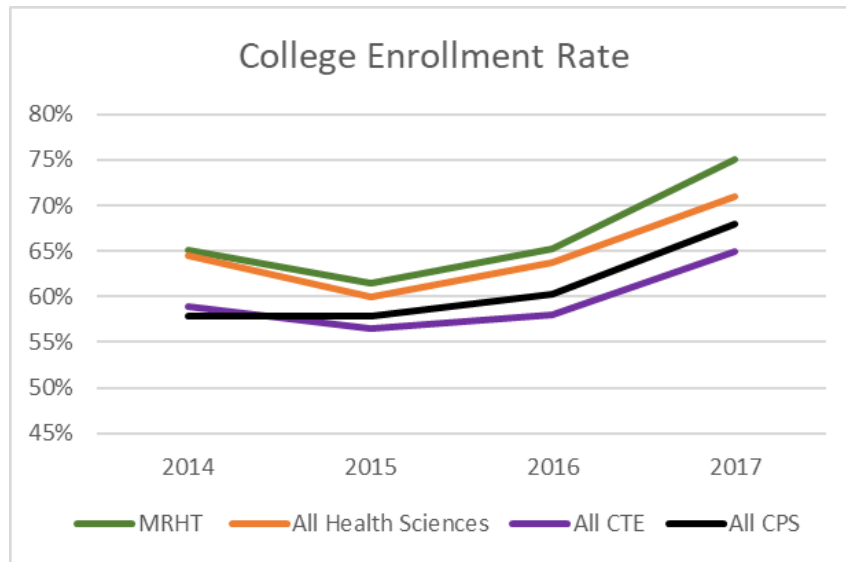


College Enrollment

MRHT program graduates enroll in college in the fall after high school graduation at rates consistently higher than CTE graduates and CPS graduates overall. In 2017, 75% of MRHT program graduates enrolled in college in the fall after high school graduation—10 percentage

points higher than CTE graduates (65%) and 7 percentage points high than CPS graduates overall (68%). (See the following chart.)

Percent of Graduates Enrolling in College in the Fall after High School Graduation



Conclusion

Based on its first six years of implementation, the Michael Reese Health Trust High School-Hospital Initiative has yielded positive benefits for CPS, Health Sciences students, and hospital partners. These benefits include:

- More opportunities for students to have exposure to and hands-on learning in the Health Sciences field.
- More Health Sciences students graduating high school with at least one Health Sciences experience outside of traditional classroom learning.
- An increase in Health Sciences students planning to continue their education after high school, and an increase in Health Sciences students actually enrolling in college in the fall after high school graduation.
- Improved data collection systems for CPS to track student participation in work-based learning activities, allowing leaders and evaluators to monitor progress over time.
- An increased feeling of engagement reported by hospital partners in providing a well-rounded experience for CPS Health Sciences students.

Appendix: MRHT Scorecard 2013-2018

MICHAEL REESE HEALTH TRUST PROGRAM SCORECARD 2017-18

Outputs	Year 1 (FY 12-13)	Year 2 (FY 13-14)	Year 3 (FY 14-15)	Year 4 (FY 15-16)	Year 5 (FY 16-17)	Year 6 (FY 17-18)
# of students in at least one credit-bearing healthcare-related externship/practicum	41	22	61	59	24	49
# of students in at least one healthcare-related summer internship overall	77	95	108	221	268	145
# of students participating in at least one site visit	140	80	283	28	57	76
# of students attending at least one guest speaker event	155	404	297	115	154	74
# of students participating in at least one job shadow	100	76	240	226	126	186
# of students participating in HOSA Chapter	N/A	93	101	N/A	90	135
# of students participating in HOSA competitions at the local level	132	0	232	207	0	107
# of students participating in HOSA competitions at the state level	103	86	62	128	N/A	85
# of students participating in HOSA competitions at the national level	11	20	11	4	16	19
# of students completing all CTE Health Program courses during the school year with a passing grade	459	573	732	993	1300	1191
Short Term Outcomes	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
% of students who report they learned relevant information about healthcare-related jobs	N/A	86.2%	85.5%	N/A	N/A	N/A
Intermediate Outcomes	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
# of certifications earned	569	155	513	579	855	949
# of students earning First Aid certification	142	23	127	128	189	143
# of students earning CPR certification	180	37	173	130	206	280
# of students earning OSHA certification	68	87	109	158	219	271
# of students earning Bloodborne Pathogens certification	174	0	63	104	161	217
# of students earning Pharmacy Tech. certification	0	0	3	21	18	0
# of students earning Phlebotomy certification	N/A	N/A	6	15	43	15
# of students earning Nursing Assistant certification	5	8	32	23	19	23