Evaluation testing phase HEAL

Maastricht University

HEAL
internsHips in futurE hospitALs

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1. Description of the Intervention

The project at Maastricht University was initiated in response to several key challenges identified through a needs assessment. These included a high perceived workload for students during hospital-based clinical rotations, overcrowding on wards, and a decreasing staff-to-student ratio. Additionally, students expressed a strong desire for more exposure to out-of-hospital workplaces and a deeper understanding of public health and community-based education. From the staff's perspective, the high administrative burden was a significant concern.

> Some data on workload: Between January 2019 and July 2023, 83% of students in the surgery rotation and 44% in the general practice rotations reported experiencing workload as "high or too high" Notably, the number of hours spent in the hospital did not correlate with perceived workload, as it was mostly influenced by the scope and volume of assignments.

To address these challenges, Maastricht University developed and implemented two core innovations, during the HEAL project period:

1. Health Prevention and Society (HPS) Elective: This is an eight-week community-based elective where students are placed in non-hospital settings such as local/regional governments, NGOs, policy development organizations, or other prevention-related contexts. Students engage in three teaching sessions at the university and complete two assignments: one focused on social determinants of health and another on the local exploration or implementation of a prevention-related intervention.
2. Study Days: To reduce the time spent on the wards during hospital-based rotations, students were given one study day per week, effectively reducing their time in the hospital by 20%.

Testing Phase: These interventions were fully implemented for all Year 4 medical students. By the time of writing, 130 students had participated in the HPS elective, and over 300 had experienced rotations with study days. No formal pilot phase was conducted, as the innovations were directly integrated into the core curriculum.

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2. Description of the Implementation Process

Participants & Timeline:

- HPS Elective: Between December 2023 and July 2024, 10 groups (12-15 students per group) participated in the HPS elective. These students were supervised during their placements across more than 40 locations. The planning and execution of the elective were supported by 10 university staff members, five of whom also facilitated the teaching sessions.
- Study Days: More than 300 students participated in hospital-based rotations across medicine, surgery, and neuroscience between October 2023 and July 2024. No additional staff or resources were needed for this intervention.

Evaluation Methods:

- Students were asked to complete standardized evaluation surveys at the end of each rotation. These surveys were aligned with the HEAL project evaluation template to reduce survey fatigue and ensure a high response rate.
- 266 students responded to the surveys, with 94 commenting on workload and 59 specifically on the HPS elective. Additionally, 30 HPS students participated in group interviews to provide more in-depth feedback.
- Staff feedback was collected more informally during staff intervision sessions and curriculum planning meetings.

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3. Evaluation Report: Participants/Learners

- HPS Elective:
    - Quantitative Data: Feedback on the workplace experience and assignments was generally positive, although students expressed mixed, often critical opinions about the teaching sessions.
      They rated the instructiveness of the education offer with a mean of 5.23 (on a 10 point scale), the alignment between the assignments and the workplace 3.38 (on a 5 point scale) and critiqued the information availability.
      Interestingly, the students who were abroad for this elective scored higher on all indicators.
      Student rated the workplace supervision high (8.08/10) and rated the learning climate highly (4.6/5).
    - Qualitative Data:
      Two key comments were illustrated as below
        - "Big compliments to the guidance of our workplace supervisor and all other colleagues involved. I felt tremendously welcome and had a tremendously good time. In addition, the lines of communication were short and they actively thought along with us. Very nice that we were able to see a subject that is normally not or little during the study. This is definitely of great value for our future."
        - It would be better for productivity and perhaps job quality if it were a lot clearer for the workplace what exactly I came to do. I have now tried to explain myself as best I could and gave a presentation to the whole department about the HPS. This made it difficult for at first to find what I could do for the assignment.

- Study Days/Workload:
    - Quantitative Data: 75% of students took five study days in their 10-week rotations, while 14% took four days. Among students in the internal medicine rotation, 72% reported that the workload was "just right," and 22% felt it was "high." In surgery, 60% felt the workload was "just right," and 38.3% found it "too high." Students rated the statement "study days contributed to a better spread of workload" at 4.6 on a 5-point Likert scale.

    - Qualitative Data: Students appreciated the increased autonomy and flexibility the study days provided, allowing them to better manage their workload and balance between assignments and clinical duties. The intervention led to an overall improvement in their work-life balance.

Summary of Strengths, Weaknesses, and Suggestions for Improvement:

- Strengths included better workload management and enhanced student autonomy. A possible area for improvement could be the clarity of assignments and expectations during the HPS elective, particularly in the teaching sessions.

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4. Evaluation Report: Service Users / Clinicians / Teaching Staff

- HPS Elective:
    - Supervisors at the elective workplaces were generally enthusiastic about the elective's design and purpose, and praised the level of student performance. However, they suggested clearer guidance from the university regarding the specific expectations for assignments and feedback.
    - University teachers enjoyed leading the teaching sessions and observed significant student progress. One challenge mentioned was the difficulty in assessing students' full capabilities based on limited contact during the elective.
- Study Days:
    - Staff expressed concerns about the reduced time spent on the wards, particularly in terms of not always knowing where students were or what they were learning during their study days. In some instances, clinical teams established schedules in advance, which alleviated some concerns about student oversight.

Summary of Strengths, Weaknesses, and Suggestions for Improvement:

- Strengths included high student performance during the HPS elective and improved workload distribution for students. Areas for improvement focused on communication between the university and workplace supervisors as well as addressing staff concerns about ensuring student learning outcomes with study days.

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5. Evaluation by Project Implementers

- Strengths:
    - A significant strength of the project was the direct implementation of the interventions into the core curriculum. This ensured broad stakeholder involvement, including teachers, clinical supervisors, and students, which

guarantees further development and long-term sustainability of the innovations.

- Weaknesses:
  - One key challenge was navigating larger faculty regulations and processes, as it was sometimes unclear which aspects were part of the HEAL project and which were components of the regular curriculum.
  - Another weakness as a result was that we missed the opportunity to pilot the teaching sessions and assignments, and could only implement improvements in the next (current) academic year, beyond the scope of the HEAL project
- Lessons Learned:
  - The direct integration of these interventions provided valuable lessons regarding the relationship between educational theory and practical implementation in clinical education. The context-specific needs of the students and faculty shaped the final design, emphasizing workload management and public health-focused learning experiences.

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6. Conclusions & Recommendations

- Learning and Teaching Methods Developed:
  - Two concrete innovations emerged from the project: the HPS elective focused on health prevention, which included assignments on social determinants of health and planetary health, and the introduction of study days to better manage student workload during rotations.
- Promoting Factors and Barriers:
  - A key promoting factor was the integration of the interventions into the core curriculum, which supported widespread adoption and sustainability. However, challenges included coordinating between university and clinical supervisors and addressing staff concerns about students' reduced presence in clinical settings.
- Adaptations and Future Improvements:
  - To ensure sustainability and potential scaling, clearer communication and guidance for workplace supervisors, particularly regarding the expectations for assignments, will be essential. Additionally, further monitoring and feedback collection on the study days could help refine this intervention.
- Contribution to the Overall Project:
  - The Maastricht University interventions contributed to the overall project goals by addressing critical issues of workload management and public health education, offering scalable models that could be adapted by other institutions in the Erasmus+ network