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Introduction

This scoping review examines interventions implemented by governments and institutions to encourage medical students to choose family medicine as their residency specialty in Latvia and other countries.

Despite the critical role of family medicine in healthcare, it remains a less popular residency choice among medical students worldwide. This study aims to identify interventions described in the literature and assess their outcomes.

Materials and methods

Articles, published in U.S. National Institutes of Health's National Library of Medicine database, have been chosen as materials for the comparison.

Interventions have been grouped for comprehensibility and compared.

Impact of interventions reviewed in literature																																			
Reference No.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
Clinical Training & Rotations	Green	Green	Green					Green						Green		Green			Green					Orange	Green		Orange	Green				Green		Green	Green
Student Exchange programs																				Green															
Structured educational pathways			Green								Green						Green									Green	Green	Green							
Short Electives				Green				Green	Green		Green	Green								Green															
Student-led initiatives and Community engagement									Orange				Green													Orange				Orange		Green			Green
Institutional support and learning environment	Green		Green				Green							Green	Green		Green	Green	Green								Green				Green				
Mentorships and role models	Green				Green	Green	Green				Green			Green		Green	Green	Green	Green		Green				Green	Green		Green							
Rural and Regional training	Green																	Green					Green								Green				
Financial support																				Green			Orange								Orange				

Table 1. Articles and their described interventions categorized into groups, with their related impact highlighted in color. Green – interventions in group are generally associated with a positive impact on attracting students to family medicine. Orange – interventions are with mixed results or without clear positive or negative impact. Systematic review reference numbers are highlighter in yellow.

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Results

No research articles were found on interventions used in Latvia and their impact analysis. Globally, the most reported interventions include clinical rotations, institutional changes, and mentorship programs. Clinical training and rotations in primary care offices have been shown to improve students' perceptions of primary care providers. Additionally, the length of the rotation correlates with an increased likelihood of choosing primary care as a residency specialty. Student exchange programs were associated with a broader perspective on medicine and a higher likelihood of selecting a broad specialty. Similarly, student-led clinics provide a wider exposure to medicine, but their impact on specialty choice remains mixed. Interestingly, participation in student primary care interest groups showed no significant effect. Structured educational pathways and the integration of primary care into various parts of the curriculum have been linked to a

higher percentage of students choosing primary care as their specialty. Mentorship and role models were emphasized as the most effective tools for guiding students toward a career in primary care. Rural and regional training were associated with a higher likelihood that students would choose to practice in these areas. Literature also highlights the significant role of institutional support. The hidden curriculum and the perception of primary care by secondary care doctors and fellow students can discourage from pursuing family medicine. Addressing these issues has a positive impact. Financial support is considered a short-term measure. While it increases interest in primary care, it does not effectively retain doctors in the long term.

Conclusions

Many countries are implementing and researching the most effective interventions to influence students' choice of family medicine as a career. Creating and implementing such interventions requires careful planning, research, and significant resources.

To prevent the decline of primary care, these steps are of utmost importance. In Latvia, such research is necessary and has yet to be conducted.

1. Alavi, M. et al. (2019). Factors that influence student choice in family medicine: A national focus group. *Family Medicine*, 51(2), 143-148. <https://doi.org/10.22454/FamMed.2019.927833>

2. Alberti, H. et al. (2017). Exposure of undergraduates to authentic GP teaching and subsequent entry to GP training: a quantitative study of UK medical schools. *British Journal of General Practice*. <https://doi.org/10.3399/bjgp17x689881>

3. Amin, M. et al. (2018). Do primary care placements influence career choice: What is the evidence? *Education for Primary Care*. <https://doi.org/10.1080/14739879.2018.1427003>

4. Beverly, E. A. et al. (2014). Changing first-year medical students' attitudes toward primary care. *Family Medicine*, 46(9), 707-712.

5. Bhatnagar, V. et al. (2020). The Need for More Mentorship in Medical School. *Cureus*, 12(5), e7984. <https://doi.org/10.7759/cureus.7984>

6. Brooks, J. V. (2016). Hostility During Training: Historical Roots of Primary Care Disparagement. *Annals of Family Medicine*, 14(5), 446-452. <https://doi.org/10.1370/afm.1971>

7. Chan, S. C. et al. (2020). Perceptions of Malaysian medical students from different academic years on primary care: A qualitative research. *Family Medicine and Community Health*, 8, e000188. <https://doi.org/10.1136/fmch-2019-000188>

8. Deutsch, T. et al. (2015). Who wants to become a general practitioner? Student and curriculum factors associated with choosing a GP career - A multivariable analysis with particular consideration of practice-oriented GP courses. *Scandinavian Journal of Primary Health Care*, 33(1), 47-53. <https://doi.org/10.3109/02813432.2015.1020661>

9. Dunleavy, S. et al. (2024). Effect of student-run free clinics on family medicine match rates: A multisite, regression discontinuity study. *Family Medicine*, 56(7), 422-427. <https://doi.org/10.22454/FamMed.2024.329555>

10. Fang, Y. et al. (2022). Medical students' attitudes towards and views of general practice careers in Singapore: a cross-sectional survey and qualitative analysis. *BMC Medical Education*. <https://doi.org/10.1186/s12909-022-03298-7>

11. Gjessing, S. et al. (2024). Would you like to be a general practitioner? Baseline findings of a longitudinal survey among Danish medical trainees. *BMC Medical Education*. <https://doi.org/10.1186/s12909-024-05074-1>

12. Henschen, B. L. et al. (2021). From Passive Gatekeeper to Quarterback: Evolving Perceptions of Primary Care Among Medical Students in Longitudinal Outpatient Clerkships. *Journal of General Internal Medicine*. <https://doi.org/10.1007/s11606-021-06914-2>

13. Kao, A. C. et al. (2018). Medical students’ views of medicine as a calling and selection of a primary care-related residency. *Annals of Family Medicine*, 16(1), 59-61. <https://doi.org/10.1370/afm.2142>

14. Keman, W. N. et al. (2015). The selling of primary care. *Journal of General Internal Medicine*, 30(9), 1376-1380. <https://doi.org/10.1007/s11606-015-3364-9>

15. Kost, A. et al. (2022). The influence of role modeling and mentorship on primary care career choice: What can be gleaned from 30 years of research? *Family Medicine*, 54(7), 555-563. <https://doi.org/10.22454/FamMed.2022.980735>

16. Lamb, E. et al. (2022). The impact of role modelling on the future general practitioner workforce: a systematic review. *Education for Primary Care*, 33(5), 265-279. <https://doi.org/10.1080/14739879.2022.2079097>

17. Ledford, C. J. W. et al. (2022). How Medical Education Pathways Influence Primary Care Specialty Choice. *Family Medicine*, 54(7), 512-521. <https://doi.org/10.1080/10872981.2021.1890901>

18. Lee, A. L. et al. (2022). The relationship between medical school clerkships and primary care specialty choice: A narrative synthesis. *Family Medicine*, 54(7), 564-571. <https://doi.org/10.22454/FamMed.2022.857219>

19. McDonald, C. et al. (2021). Assessing factors for choosing a primary care specialty in medical students: A longitudinal study. *Medical Education Online*, 26(1), 1890901. <https://doi.org/10.1080/10872981.2021.1890901>

20. Nguyen, B.-M. et al. (2022). Impact of curricula and electives on primary care specialty choice: A narrative synthesis. *Family Medicine*, 54(7), 572-577. <https://doi.org/10.22454/FamMed.2022.638811>

21. Parekh, R. et al. (2021). Medical students' experience of the hidden curriculum around primary care careers: A qualitative exploration of reflective diaries. *BMJ Open*, 11, e049825. <https://doi.org/10.1136/bmjopen-2021-049825>

22. Parlier, A. B. et al. (2017). The Road to Rural Primary Care: A Narrative Review of Factors That Help Develop, Recruit, and Retain Rural Primary Care Physicians. *Academic Medicine*. <https://doi.org/10.1097/ACM.0000000000001839>

23. Pfarrwaller, E. et al. (2021). Geneva medical students increasingly identify primary care physicians as role models after introduction of a compulsory clerkship. *European Journal of General Practice*, 27(1), 326-330. <https://doi.org/10.1080/13814788.2021.1999925>

23. Framework-Based Qualitative Analysis Focusing on Primary Care. *Journal of General Internal Medicine*. <https://doi.org/10.1007/s11606-023-08567-9>

24. Pfarrwaller, E. et al. (2024). Feasibility and acceptability of a primary care mentoring programme for undergraduate students. *Education for Primary Care*, 35(3-4), 101-108. <https://doi.org/10.1080/14739879.2024.2330999>

25. Pfarrwaller, E. et al. (2015). Impact of interventions to increase the proportion of medical students choosing a primary care career: A systematic review. *Journal of General Internal Medicine*, 30(9), 1349-1358. <https://doi.org/10.1007/s11606-015-3322-9>

26. Phillips, J. P. et al. (2022). Medical school characteristics, policies, and practices that support primary care specialty choice: A scoping review of 5 decades of research. *Family Medicine*, 54(7), 542-554. <https://doi.org/10.22454/FamMed.2022.440132>

27. Reilly, J. M. et al. (2023). An 8-Year Review of Match Outcomes From a Primary Care Pipeline Program. *Family Medicine*, 55(10), 646-652. <https://doi.org/10.22454/FamMed.2023.297644>

28. Sairenji, T. et al. (2022). The impact of family medicine interest groups and student-run free clinics on primary care career choice: A narrative synthesis. *Family Medicine*, 54(7), 531-535. <https://doi.org/10.22454/FamMed.2022.436125>


29. Seehusen, D. A. et al. (2022). Institutional characteristics influencing medical student selection of primary care careers: A narrative review and synthesis. *Family Medicine*, 54(7), 522-530. <https://doi.org/10.22454/FamMed.2022.837424>


30. Smith, S. D. et al. (2014). The effect of involvement in a student-run free clinic project on attitudes toward the underserved and interest in primary care. *Journal of Health Care for the Poor and Underserved*, 25(2), 877-889. <https://doi.org/10.1353/hpu.2014.0083>

31. Studerus, L. et al. (2018). Optional part-time and longer GP training modules in GP practices associated with more trainees becoming GPs – a cohort study in Switzerland. *BMC Family Practice*, 19(5). <https://doi.org/10.1186/s12875-017-0706-1>

32. Thai, T. T. N. et al. (2020). Can a family medicine rotation improve medical students' knowledge, skills and attitude towards primary care in Vietnam? A pre-test–post-test comparison and qualitative survey. *Tropical Medicine and International Health*, 25(2), 264-275. <https://doi.org/10.1111/tmi.13326>

33. Thomson, K. B. et al. (2022). The impact of volunteering with a student-run free clinic on medical student specialty selection. *BMC Medical Education*. <https://doi.org/10.1186/s12909-022-03788-8>

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