Supplementary materials A: interview guide

INTERVIEW GUIDE WITH CASE STUDY ORGANISATION LEADERS

Dear Sir or Madam,

My name is ..... and I am a researcher on the PULPIT project. Thank you for your participation in the Patient and Public Involvement (PPI) interview.

PULPIT aims to improve undergraduate healthcare education by addressing unmet needs, such as limited patient interaction during early training, lack of person-centred care, or poor understanding of different healthcare professions' roles. The project seeks to promote patient and public involvement (PPI) in the classroom and interprofessional education (IPE) of undergraduate healthcare students, promoting discussion on the physical, mental and social implications of illness, based on real cases.

The purpose of the interview is to obtain key information necessary for the successful involvement of patients and the public in the education of health professionals.

The interview will be conducted via Zoom and will be recorded. The interviews will be transcribed verbatim at a later stage and any information that could identify an individual or an institution will be anonymised. Do you agree with recording?

Any questions before we start the recording?

Opening questions

1. Please introduce yourself.
2. Could you please provide an overview of your role and responsibilities within the education setting and, if you can, describe to me your experience of PPI initiatives in education?
3. What are the main objectives and goals of the PPI initiatives implemented in your educational setting?
4. Please tell me more about the project, when it started and its history (timeline).

Main questions

5. Can you walk me through the process of planning, implementing, and evaluating PPI initiatives in your educational setting? (ongoing)
6. How do you involve stakeholders (e.g., students, teachers, patients, community members) in PPI activities?
7. What strategies have been successful in promoting cooperation and participation between stakeholders?
8. What challenges have you had with stakeholder engagement and how have you addressed them?
9. What steps are taken to ensure that patients and the general public are involved and respected in educational activities in an appropriate way?

10. What resources and support are needed to implement PPI initiatives effectively?
11. What results or changes have you seen as a result of PPI's involvement in education?
12. How do you measure the impact of PPI initiatives on stakeholders and educational outcomes?
13. Can you give examples of how PPI has impacted student learning, professional development or patient care?
14. How do you ensure that PPI initiatives are integrated into existing educational curricula and programs?
15. What key lessons have you learned from implementing PPI initiatives in education?
16. How do you address ethical considerations related to PPI in education, such as consent, confidentiality, and representation?
17. Do students learn together with other disciplines? How do you implement this?

Ending questions

18. What advice would you give to other educational institutions interested in implementing PPI initiatives?
19. Can you please point me to the three most important publications related to your PPI in education project? Can you share any other documents or resources with us, such as videos or websites?
20. Can you suggest anyone else who would be suitable to interview for this study?
21. Would you be willing to take part in a follow-up interview if we have any further questions?

Suppl. Table S1. Examples of the analytical process, from meaning unit to theme

Meaning unit (verbatim)	Condensed meaning unit	Code	Category	Theme
"Though we are well-established in the Faculty of Medicine, we still face some miscomprehension of our own work. So we constantly have to re-explain to our own faculty what it is to recruit patients, how much energy it takes, how much time it takes to do the coaching" (Interview 5).	Even an established office must keep justifying and explaining its work to faculty colleagues	Recurring need to re-explain involvement to faculty	Challenges in PPI in education	Experiential knowledge as expertise requiring continual legitimation
"We match four students and the mentor in a group of five, and they meet monthly for nine months, and they have a number of different topics that they discuss as a group" (Interview 1).	One patient mentor is shared by a group of students from four professions over nine months	Longitudinal mixed-profession matching	Stakeholder engagement and interprofessional collaboration	The patient partner as connective tissue of interprofessional learning
"Students report that they remember better when they have a real person mobilising a real-life situation. That makes a lot more sense. And it stays with them a lot longer than just reading something from a book" (Interview 5).	Learning anchored in a real person is remembered longer than learning from books	Durability of experientially anchored learning	Evaluation and measuring impact	The patient partner as connective tissue of interprofessional learning
"We need the higher level to say we are doing patient engagement. We need dedicated people, staff. So I'm a full-time employee of the Faculty of Medicine … And I have two other employees" (Interview 5).	Involvement is sustained by an institutional mandate and by paid, dedicated staff	Coordination as a funded role	Implementation strategies	Sustainability as invisible relational and organisational labour
"Our health mentor program doesn't offer any patient partner honorariums … it's strictly folks that have the time and the ability to volunteer their time … If we truly want to have representation from more folks, this would need to be a paid role" (Interview 1).	Without remuneration only those who can afford to volunteer take part, which limits who is represented	Unpaid involvement as a barrier to diversity	Recruitment of patient partners	Sustainability as invisible relational and organisational labour

Suppl. Table S2. Categories with codes and citations

Main category	Subcategories (Themes)	Supporting quotes (with interview reference)
Objectives and goals of Patient and Public Involvement (PPI)	• Enhancing medical training with patient input • Improving student empathy and communication • Developing interprofessional collaboration	*"We integrate a plurality of perspectives from the beginning of training to postgraduate studies"* (Interview 1). *"We must educate students in humility and allow them to work with, not just for, patients"* (Interview 2). *"We want to make sure doctors are trained with patient perspectives from the start"* (Interview 4). *"Our goal is to demystify the patient's role and treat them as experts in their experiences"* (Interview 5).
	• Enhancing medical training through patient partnerships • The primary goal of PPI is to improve the quality of medical education by incorporating real patient experiences • This approach provides a more holistic, person-centred care (PCC) perspective that extends beyond traditional textbook learning	*"We want to ensure that doctors are well-trained to face today's reality in the field"* (Interview 5). *"Students report remembering lessons with patient partners much better than traditional lectures"* (Interview 4).
	• Broadening perspectives beyond traditional training • Historically, medical education has been doctor-centred, but PPI integrates diverse perspectives, including those of patients and social workers, to create collaborative, multi-perspective learning environments	*"Traditionally, doctors were trained by doctors to become doctors – we want to change that by including patient voices"* (Interview 4). *"The existing knowledge in psychiatry is limited; patients' lived experiences provide crucial insights"* (Interview 5).
	• Building professional identity and communication skills By interacting with patient partners, students develop critical soft skills, including active listening, empathy, and communication, which are essential for effective healthcare practice	*"Students who engage with patients early on develop more humility and a greater capacity for collaboration"* (Interview 5). *"Psychotherapy students need to learn how to communicate effectively with clients, and real interactions are the best way to do this"* (Interview 6).

Main category	**Subcategories (Themes)**	**Supporting quotes (with interview reference)**
Implementation strategies	• Faculty involvement and support • Structuring PPI within curricula • Developing pedagogical methodologies	*"Our office works to create new pedagogical spaces where patient partners can be mobilised for enhanced learning"* (Interview 1). *"We had patients on every table during the redesign of our entire medical curriculum"* (Interview 2). *"We ensure our students engage with over 70 different field placements before advancing"* (Interview 5). *"We built a sustainable recruitment system to mobilise patient partners in the curriculum"* (Interview 6).
	• Patient partnership in curriculum development Patients are actively involved in designing, developing, and delivering curriculum content to ensure their perspectives are embedded in medical education from the start	*"Patients were included in redesigning our entire medical curriculum, ensuring their voice was present at every stage"* (Interview 5). *"We must integrate lived experience into the educational structure rather than making it an optional add-on"* (Interview 6).
	• Interprofessional collaboration across disciplines • PPI is most effective when it involves students from multiple healthcare disciplines, fostering team-based, interprofessional learning	*"We mix and match our students – for example, we put medical students with social work students and pharmacy students – to train them in teamwork"* (Interview 5). *"Collaborating across disciplines provides deeper insight into patient experiences"* (Interview 6).
	• Faculty training and support for PPI Faculty members must be trained to work with patient partners effectively • This includes understanding the role of patient educators, managing classroom dynamics, and addressing faculty scepticism	*"We still need to re-explain what patient involvement really means to faculty members every year"* (Interview 4). *"For this to work, we need allies at different levels of the faculty who truly believe in partnership"* (Interview 5).
Recruitment of patient partners	• Identifying and selecting suitable patient partners • Training and coaching patient partners • Ensuring patient diversity and representation	*"We carefully select and train over 200 patient partners based on competency, not just willingness to share their story"* (Interview 1).

Main category	**Subcategories (Themes)**	**Supporting quotes (with interview reference)**
		"Patient partners self-identify or are referred by clinicians; we then assess their readiness through an interview process" (Interview 2). *"We collaborate with organizations like 'Kralji ulice' to bring in marginalised voices"* (Interview 6). *"So I think that would reduce the threshold, and to build on to that maybe for that to happen you would need links with social welfare organisations to make that sustainable. So I think that's the main one"* (Interview 3).
	• Competency-based recruitment approach: Not all patients are automatically suitable for educational settings • Recruitment is based on specific competencies, such as the ability to communicate effectively, willingness to share experiences, and understanding of pedagogical boundaries	*"We carefully recruit patient partners based on competencies, not just based on who volunteers first"* (Interview 5). *"Patients should be trained to tell their stories in an educational setting rather than just recount their medical history"* (Interview 4).
	• Establishing clear guidelines for patient roles Defining clear roles and expectations prevents confusion about what patients are expected to contribute, and ensures a structured, respectful learning environment	*"We need to manage both faculty and patient expectations – some think the partnership will solve all problems overnight"* (Interview 5). *"It's important to clarify roles and responsibilities, so we don't just put patients everywhere without purpose"* (Interview 2).
Challenges in PPI in education and strategies for prevention	• Faculty resistance and scepticism • Logistical difficulties (scheduling, resources, funding) • Emotional preparedness of patient partners • Ensuring meaningful PPI	*"Some faculty members still don't see the value of patient involvement and we constantly have to explain why it's needed"* (Interview 1). *"Patients might expect to see rapid change, but institutional shifts take time"* (Interview 2). *"We need more funding for sustainable PPI. We struggle to support free therapy for those who need it"* (Interview 5).

Main category	**Subcategories (Themes)**	**Supporting quotes (with interview reference)**
		"Students initially question why patients should be part of medical education, but this changes over time" (Interview 4).
	• Faculty and student resistance is a common barrier. Some educators feel patients lack the expertise to teach, while some students are sceptical of learning from non-medical professionals • Overcoming these biases requires structured integration of patient voices into education	*"Some students used to ask, 'Why would a patient be part of a faculty of medicine?' We don't get that question anymore, but it took years of work to get here"* (Interview 5). *"We still need to re-explain what patient involvement really means to faculty members every year"* (Interview 4).
	• Logistical barriers (scheduling, space, coordination): coordinating large-scale PPI requires dedicated resources, including scheduling systems, classroom availability, and faculty time • The transition back to in-person learning post-pandemic has added further logistical challenges	*"Organising 1,500 students and patient partners in small groups across campuses is a logistical nightmare"* (Interview 5). *"The lack of physical classroom space post-pandemic makes in-person education harder"* (Interview 4).
	• Expectation management for all stakeholders: different groups (faculty, patients, students) have different expectations about what patient partnerships should achieve • Managing these expectations requires clear role definitions, structured feedback mechanisms, and ongoing communication	*"We need to manage both faculty and patient expectations – some think the partnership will solve all problems overnight"* (Interview 5). *"It's important to clarify roles and responsibilities, so we don't just put patients everywhere without purpose"* (Interview 2).
	• Faculty training on working with patients • Coaching for both students and patient partners • Structuring clear roles and expectations • Continuous evaluation and improvement	*"We train faculty on how to engage meaningfully with patients in pedagogical activities, not just as guest speakers"* (Interview 1). *"We don't just place a patient in a session; we carefully prepare them and the students for meaningful interactions"* (Interview 2). *"We train faculty members to work collaboratively with patient partners and manage expectations"* (Interview 4).

Main category	**Subcategories (Themes)**	**Supporting quotes (with interview reference)**
		"Patients are coached to reflect on their experiences differently depending on the context of education" (Interview 5).
	• Recruitment and training strategies for patient partners Patient recruitment should be competency-based rather than simply seeking volunteers • Once recruited, patient partners should receive training in storytelling, communication, and boundaries to ensure effective participation in medical education	*"So we have a methodology of recruitment, which is different from recruiting an employee for a firm [...] That's basically one of my jobs to recruit patients, meet with patients, identify their competency, and see how they could potentially collaborate with either faculty of medicine, but it could be how they could potentially collaborate with a research team or in clinical settings as well"* (Interview 5). *"Training the patient partners is just as important as training the students"* (Interview 2).
	• Encouraging a culture shift through continuous discussion Institutional buy-in requires long-term efforts to embed patient involvement into medical culture • This means ongoing faculty training, patient engagement, and research on impact	*"For this to be sustainable, it must be more than a project – it must become part of institutional culture"* (Interview 5). *"We cannot assume everyone is on board – culture change takes time"* (Interview 4).
Stakeholder engagement & interprofessional collaboration	• Multi-disciplinary teaching and teamwork • Cross-profession education (students from different health/social fields working together)	*"We organise IPE workshops for over 5,200 students annually, co-facilitated by patient partners and clinicians"* (Interview 1). *"We mix students from 13 different disciplines so they learn from each other and not just within their profession"* (Interview 2). *"We connect psychology, social work, and health services so students experience real-world interprofessional cases"* (Interview 5).
	• Faculty and clinician support • Faculty members and clinicians must be trained and prepared to work with patient partners. There is often initial resistance to patient involvement, requiring a culture shift within medical institutions. Faculty need to recognise	*"Faculty sometimes resist the idea of patients being in the classroom. It requires ongoing discussions to change their perception"* (Interview 2).

Main category	**Subcategories (Themes)**	**Supporting quotes (with interview reference)**
	the value of co-teaching alongside patient partners and adopt a more collaborative educational model	*"For this to work, we need allies at different levels of the faculty who truly believe in partnership"* (Interview 5).
	● Interprofessional collaboration (across disciplines & students) ● PPI is most effective when students from different healthcare disciplines engage together. This simulates real-world medical settings, where diverse professionals must collaborate to deliver patient care. Educational settings should create structured opportunities for interprofessional discussions and team-based learning	*"We mix and match our students – for example, we put medical students with social work students and pharmacy students – to train them in teamwork"* (Interview 5). *"When students from different programs interact, they start to realise how different disciplines can complement each other"* (Interview 6).
	● Patient as co-educators, not just test subjects ● Patients should be active participants in education rather than just case studies used for observation. When patients engage in open dialogue, students develop critical thinking skills, adaptability, and empathy. Their role is pedagogical, helping students understand complex conditions beyond medical symptoms	*"We don't want patients to become educators, but we want them to educate"* (Interview 2). *"Students report remembering lessons with patient partners much better than traditional lectures"* (Interview 5).
Evaluation & measuring impact	● Student feedback and reflection on patient involvement ● Long-term impact on professional identity formation ● Tracking institutional shifts	*"Students consistently report that patient interactions are the most memorable and impactful part of their education"* (Interview 1). *"Our patients have noticed changes in the field – more empathy, more collaboration, more patient-centred care"* (Interview 2). *"We track students' readiness and self-confidence through assessments and post-training reflections"* (Interview 5). *"We conduct qualitative assessments and workshop debriefs to refine our programs"* (Interview 4). *"We no longer measure whether patient involvement is necessary – we know it is"* (Interview 5).
	● Assessing student learning outcomes The effectiveness of PPI is measured through student feedback surveys, self-reflections, and performance evaluations. These assessments help determine if	*"Students report that their most memorable and insightful learning moments come from real patient interactions"* (Interview 5). *"We evaluate students' preparedness for complex*

Main category	Subcategories (Themes)	Supporting quotes (with interview reference)
	students develop greater empathy, improved communication, and deeper clinical understanding	*patient interactions and their confidence in handling real cases"* (Interview 6).
	• Tracking long-term impact on clinical practice PPI is designed to create long-lasting changes in how students approach patient care after graduation. Programmes track alumni to assess how their PCC training influences their medical careers	*"Patients report seeing changes in the healthcare field as more students trained with this model enter practice"* (Interview 5). *"We are working on long-term research to assess the impact of patient partnership on professional practice"* (Interview 4).

Note: PPI – Patient and Public Involvement; PCC – Person-Cantered Care; IPE – Interprofessional Education

Suppl. Table S3: Shared effective strategies in the implementation of PPI within IPE

Area	Best practice	Examples and notes from interviews
Recruitment of patients	Implement structured recruitment processes and identify patient competencies	- **Interview 1:** Leverage patient referrals and partnerships with community organisations to expand patient networks, especially among underrepresented groups. - **Interview 2:** Emphasise diversity by recruiting patients with varied social identities and lived experiences (e.g., LGBTQ+, racialized individuals). - **Interview 3:** Use a combination of referrals from doctors and patient organisations. - **Interview 4:** Rigorous recruitment with clear mandates to avoid tokenism. - **Interview 5:** Competency-based recruitment process (resilience, navigation knowledge). - **Interview 6:** Promote word-of-mouth recruitment to reduce stigma and encourage younger patients to seek involvement independently.
Preparation and training	Provide thorough preparation for both patients and faculty to ensure effective collaboration	- **Interview 1:** Offer storytelling workshops for patient partners, including guidance on how to share impactful, concise, and relevant experiences. - **Interview 2:** Provide workshops for patient partners and facilitators to prepare them for meaningful engagement and address potential biases. - **Interview 3:** Maintain balance in training to avoid over-directing patient stories.

Area	Best practice	Examples and notes from interviews
		- **Interview 4:** Prepare faculty and stakeholders on the value and role of PPI. - **Interview 5:** Train patients to navigate pedagogical roles and emotional challenges. - **Interview 6:** Train both students and faculty to approach patients with empathy and humility, acknowledging their expertise as equal partners.
Sustainability	Secure institutional support, funding, and dedicated staff for long-term PPI integration	- **Interview 1:** Address challenges of scaling programs by balancing voluntary participation with paid opportunities to increase diversity. - **Interview 2:** Secure funding to pay patient partners fairly, ensuring equitable participation across socio-economic groups. - **Interview 3:** Start small with pilot projects to gain institutional buy-in. - **Interview 4:** Institutional allies are needed to support PPI long-term. - **Interview 5:** Full-time staff to manage patient partnerships and logistics. - **Interview 6:** Advocate for public funding to ensure the sustainability of psychotherapy programs and reduce dependence on private resources in Slovenia.
Integration into curriculum	Embed PPI early and throughout educational programs, including redesigning curriculum with patients	- **Interview 1:** Use programs like the Health Mentor Program to integrate long-term patient involvement and interprofessional learning into student education. - **Interview 2:** Incorporate patient perspectives into interprofessional education activities through co-facilitation and curriculum co-creation. - **Interview 3:** Start with smaller mandatory activities and expand gradually. - **Interview 4:** Include patients where there is clear added value. - **Interview 5:** Co-construct a redesigned curriculum with patients from start to finish. - **Interview 6:** Include patient-led interviews and discussions in curriculum design to create meaningful engagement and practical learning opportunities for students.
Logistical planning	Use structured systems for group coordination, scheduling, and space management	- **Interview 1:** Maintain a centralised network of patient partners to streamline recruitment and matching processes for various activities. - **Interview 3:** Ensure early scheduling of classrooms and participants. - **Interview 4:** Clarify mandates and timelines to avoid short-notice conflicts. - **Interview 5:** Digital tools (Moodle) to automate team formation and schedules. - **Interview 6:** Address high administrative workloads by employing more staff to handle logistics, including scheduling, documentation, and online materials.

Area	Best practice	Examples and notes from interviews
Creating safe and ethical spaces	Establish clear ethical guidelines for patient involvement and ensure safe environments for open dialogue	- **Interview 1:** Use feedback loops to evaluate the safety and impact of patient involvement on both students and patient partners. - **Interview 2:** Pay attention to equity and ensure diverse representation while addressing unconscious bias and power dynamics. - **Interview 3:** Introduce clear rules for confidentiality and interaction expectations. **- Interview 4:** Avoid exploitation by defining roles and respecting patient boundaries. - **Interview 5:** Address patient emotional readiness during recruitment. - **Interview 6:** Establish ethical safeguards to prevent burnout in patients, ensuring their involvement remains empowering and not overwhelming.
Impact on learning	Emphasise the value of real-life stories for deep and long-lasting learning outcomes for students	- **Interview 1:** Use programs like storytelling workshops to ensure students develop empathy and practical understanding of PCC. - **Interview 2:** Encourage long-term evaluation of student outcomes, revealing transformative impacts of PPI on clinical practice. - **Interview 3:** Real stories create stronger emotional and educational impact than simulated patients. - **Interview 4:** Students learn empathy, communication, and PCC. - **Interview 5:** Students gain confidence and relational skills. - **Interview 6:** Facilitate student reflection by encouraging them to connect their personal experiences with patient interactions, fostering deeper learning.
Collaboration across disciplines	Promote IPE to reflect real-world healthcare teamwork	- **Interview 1:** Use patient feedback and cross-discipline collaboration to address community concerns, such as shortages of healthcare providers. - **Interview 2:** Expand collaborative practice models to include patients, families, and non-health professionals like housing and social service providers. - **Interview 3:** Address logistical barriers for multi-discipline participation. - **Interview 4:** Encourage shared learning to overcome discipline silos. - **Interview 5:** 13 programs collaborate through structured IPE activities with patients and clinicians. - **Interview 6:** Foster interprofessional collaboration between psychotherapy, social work, and psychiatry to address complex patient needs holistically.

Note: PPI – Patient and Public Involvement; IPE – Interprofessional Education

Suppl. Table S4. Themes, categories, codes, and illustrative quotations

Theme (latent)	**Category (manifest)**	**Codes**	**Illustrative quotation**
Experiential knowledge as expertise requiring continual legitimation	Objectives and goals of PPI; recruitment of patient partners; challenges	Experiential knowledge as expertise; competency-based recruitment; inclusive recruitment; preparation without scripting; faculty scepticism; managing faculty expectations	*"The help of people who are experts, with experience, is extremely important, more than in other fields"* (Interview 6). *"We constantly have to re-explain to our own faculty what it is to recruit patients, how much energy it takes"* (Interview 5).
The patient partner as connective tissue of interprofessional learning	Stakeholder engagement and interprofessional collaboration; evaluation	Longitudinal mixed-profession matching; patient as a shared reference point; authenticity of the real account; perceived learning impact	*"We match four students and the mentor in a group of five, and they meet monthly for nine months"* (Interview 1). *"When he says it, there's a weight to it, there's a*[n] *authenticity to it … it's very educational"* (Interview 4).
Sustainability as invisible relational and organisational labour	Implementation strategies; challenges	Coordination as a funded role; remuneration and equity; institutional mandate; starting small; logistics and scheduling; safe and ethical spaces	*"We need dedicated people, staff. So I'm a full-time employee of the Faculty of Medicine"* (Interview 5). *"In our case, there was no budget whatsoever. So we begged … for years to get some funding"* (Interview 3).