CHAPTER 6
A road map for attending to medical students’ professionalism lapses

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A road map for attending to medical students’ professionalism lapses

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Aim
The purpose of this study was to develop a road map for educators attending to medical students’ professionalism lapses, aiming to offer an empirical base for approaching students who display such lapses.

Methods
Between October 2016 and January 2018, 23 in-depth interviews with 19 expert faculty responsible for remediation from 13 medical schools in the United States were conducted about the way they handle students’ professionalism lapses. Three researchers independently completed three rounds of coding. Data collection, coding, and analysis were performed in a constant comparative process. A constructivist grounded theory approach was used to develop an explanatory model for attending to students’ professionalism lapses.

Results
Based on participants’ descriptions, the authors developed a 3-phase approach for attending to professionalism lapses. In phase 1 experts enacted the role of concerned teacher, exploring the lapse from the student’s perspective. In phase 2, they functioned as supportive coach, providing feedback on professionalism values, improving skills, creating reflectiveness, and offering support. In phase 3, if the student did not demonstrate reflectiveness and improvement, and especially if (future) patient care was potentially compromised, participants assumed an opposite role: gatekeeper of the profession.

Discussion
An explanatory model for attending to professionalism lapses that fits in the overarching ‘communities of practice’ framework was created. Whereas phase 1 and 2 aim at keeping students in the medical community, phase 3 aims at guiding students out. These findings provide empirical support to earlier descriptive, opinion-based models, and may offer medical educators an empirical base for attending to students who display professionalism lapses.
Introduction

Attending to professionalism lapses of undergraduate medical students is a demanding and time-consuming task for educators [1]. How to manage professionalism lapses is not taught, nor does expertise come easily [2]. Despite its acknowledged importance, there is no evidence indicating which behaviours should be remediated to prevent future problems, nor which behaviours are not amenable to change. Knowledge about managing professionalism lapses will provide institutions with evidence based tools by which to make decisions about their students (i.e., whether a student should be allowed to graduate). An empirically derived model that can guide medical educators to make these decisions about professionalism lapses is required.

Teaching, modeling, and monitoring professionalism in undergraduate medical education are crucial for the delivery of good patient care by future physicians [3-8]. Previous research shows that students’ professionalism lapses occur in four domains, the so called 4 I’s: lapses in involvement, integrity, interaction and insight [9]. Additionally, patterns of professionalism lapses indicate that a lack of reliability, insight and adaptability are aspects of unprofessional behaviour [10-12]. Contributing factors are often a combination of individual influences, such as deficits in cognition, skills and attitude [13-14], and contextual influences from the learning environment [15-17]. Despite a growing understanding of (un)professional behaviour, better identification and remediation is hampered by educators’ reluctance to report it [18-21]. Educators often consider remediation of lapses difficult and ineffective [18, 22-24]. Also, a wide variability among schools regarding professionalism remediation practices can be observed [25-26]. Educators would be more willing to report professionalism lapses, if policies regarding the management of professionalism lapses and the effects such management has on the learner were clearer to them [18].

Models for managing professionalism lapses have been described in several theoretical papers. These models are of two types: specific models that target professionalism concerns, and general models that are applicable to knowledge, skills or attitude problems [6, 8, 27-30]. See Table 6.1 for an overview of these models and their major concepts.

Existing models are based on different levels of (under)performance of learners. In each model, the different levels have specific actors, rules and regulations that the literature does not adequately describe. So far, it is unclear what constitutes the thresholds between the levels. From these prior publications, we can conclude that there is a need for empirical evidence that supports a more detailed and explanatory model for attending to professionalism lapses.

Therefore, the goal of this study was to explore views of expert faculty on the guidance of unprofessional behaviour in medical students, informed by behavioural profiles outlined by previous research [10]. These empirical data were used for the development of a model: a road map for attending to medical students’ professionalism lapses. Our underlying
<table>
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<th>Model</th>
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<th>Major concept</th>
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| The disruptive behaviour pyramid                                     | Hickson et al., 2007 [27]                             | Pyramid with five levels of (un)professional behaviour and corresponding interventions:  
1. Professional behaviour  
3. Apparent pattern: Level 1, Awareness intervention  
4. Pattern persists : Level 2, Authority intervention  
5. No change: Level 3, Disciplinary intervention                                                                                                                                                                                                                                   |
| Model of a program for remediation of performance deficits of medical trainees and practicing physicians | Hauer et al., 2009 [8]                                | Model describing four steps:  
1. Competence assessment: multimodal assessment  
2. Diagnosis of deficiency and development of an individualised learning plan  
3. Instruction/remediation activities with deliberate practice, feedback and reflection  
4. Focused reassessment and certification of competence  
Mentoring and coaching takes place during steps 2 and 3.                                                                                                                                                                                                                   |
| The disruptive behaviour pyramid describing a possible approach to unprofessional behaviour | Van Mook et al., 2010 [28]                           | Additions to Hickson’s model, regarding institutional responsibilities for the levels:  
• Level 1 and 2: Low threshold for reporting lapses  
• Level 2, 3, 4: Adequate faculty training and instruction  
• Level 4 and 5: Strong leadership                                                                                                                                                                                                                                           |
| A stepped approach to intervention                                    | Levinson, 2014 [6]                                    | Pyramid with four levels of unprofessional behaviour and corresponding interventions:  
1. Minor to moderate single event:  
   Level I, Coaching = Coaching in the moment  
2. Major single event or multiple minor to moderate events:  
   Level II, Awareness = Counseling after the moment  
3. Recurrent behaviour after counselling:  
   Level III, Consequences = Correction and consequences  
4. Refractory behaviour despite improvement plan: Sanction                                                                                                                                                                                                                 |
| Four-Tier Continuum of Academic and Behavioural Support (4T-CABS) Model | Stegers-Jager, 2017 [30]                              | Four levels of support for students who are experiencing academic and/or behavioural difficulties:  
1. Adequate instruction  
2. Targeted small group interventions  
3. Individualized support  
4. Exit support                                                                                                                                                                                                                                                         |
| A five-zone model of rules and practices associated with different performance levels | Ellaway, 2018 [29]                                    | Model describing 5 zones of performance and progression, each with corresponding remediation strategies:  
1. Zone 1 = Performance at or above expected level  
2. Zone 2 = Performance below expected level: Correction  
3. Zone 3 = Performance below acceptable level: Remediation  
4. Zone 4 = Performance below unacceptable level: Probation  
5. Zone 5 = Performance below unacceptable level: Exclusion                                                                                                                                                                                                              |

**Table 6.1** Existing models for attending to (professionalism) performance deficits
research question was: How do expert educators, who are responsible for remediation of professionalism lapses, make choices for interventions for undergraduate medical students who display lapses in professionalism?

**Method**

**Study design**
We employed a grounded theory approach to conduct this study [31, 32], as it allowed us to develop an understanding, and propose a theoretical model regarding the management of professionalism lapses. A grounded theory approach is often used as an inductive method but can also be used to build further on existing knowledge [33]. In this study, the data acquisition and analysis was guided by findings from our previous research [10, 35].

**Reflexivity**
We used a constructivist paradigm, in which knowledge is seen as actively constructed and cocreated as a result of human interactions and relationships [35]. Among the author team, we are all educational researchers and/or medical educators experienced in teaching and guidance of medical students' professional behaviour. Our shared vision on professional behaviour is guided by this experience and by our earlier research on this topic. MM, GC and RAK are general medical doctors, WvM is a practicing clinician, AT is an education researcher and AdlC is a linguist. MM and WvM are actively involved in the guidance of students who display unprofessional behaviour. As the other authors have more distance from the daily practice of medical education, they ensured that conclusions were not drawn too prematurely, and were grounded in the data. To consider our own contribution to the research process, and thus to enhance the trustworthiness of our findings, we kept an audit trail that was regularly discussed with each other and debated in research meetings of the Department of Research in Education, VUmc School of Medical Sciences, Amsterdam.

**Procedures and participants**
Between October 2016 and January 2018, we iteratively collected qualitative data through 23 open-ended in-depth interviews with 19 experts from 13 medical schools in the United States. A maximum of 2 participants per school were included. Four participants were interviewed twice as part of the iterative approach. Ten participants were current or former deans or associate deans, 7 were curriculum directors, and 2 were faculty members responsible for professionalism remediation at their school. All had, for at least three years, the task of supervising the remediation process for professionalism in their school and will in this article be referred to as ‘professionalism remediation supervisor’ (PRS). They were identified through accessibility and snowballing, meaning that people who were willing to participate in turn referred others. We sampled PRSs from 8 public and 5 private medical schools from 8 states across the United States, including
schools founded between 1824 and 1972, to explore multifold viewpoints and perspectives from settings that possibly differ in the way professionalism lapses are managed. MM conducted the interviews, in which findings from a previous study were used as starting point for an exchange of ideas about managing professionalism lapses. Participants were aware that MM is an experienced medical educator and researcher of professionalism. All interviews were audio-recorded and transcribed verbatim, after which the recording was destroyed. We continued sampling until the research team members collectively considered that sufficiently rich data had been gathered to have an adequate understanding of the processes underlying the choice for attending to professionalism lapses, and to be able to construct a model in the form of a road map [36].

Data analysis

Three researchers (MM, AdIC and RAK) performed the qualitative analysis, concurrent with data collection. Using ATLAS.ti, (Scientific Software Development GmbH, Berlin, Germany) initially one interview transcript was independently coded, (by MM and RAK) using, but not limited to our previous research findings. For the initial coding phase we used an early coding scheme originating from the pilot interview, which evolved in a constant comparative process of reading, coding, and discussing. On the basis of the initial findings we employed additional sampling. After analysing these additional data, a final set of codes and categories was established, and a preliminary model was drafted. For the second coding phase, MM recoded all transcripts using the final set of codes, discussing difficulties with the other coders. MM and AdIC went through the data a third time to especially look for any cases that would challenge the preliminary model. During the analytic process we used memos, diagrams and minutes of research meetings to collect ideas. We raised the results from the categorical to the conceptual level through discussions with the full research team. By exploring relationships between the codes and themes, we aimed to understand the meaning of the data, thus finalizing the road map model for attending to professionalism lapses.

Ethical approval

This study was qualified as exempt from ethical approval by the University of California, San Francisco Institutional Review Board (reference no. 176957).

Results

On the basis of the interviews, we visualized how educators attended to professionalism lapses as a 3-phase process. Phase 1 was characterized as ‘Explore and understand’, phase 2 was the ‘Remediate’ phase, and phase 3 was the ‘Gather evidence for dismissal’ phase. The threshold between phases 1 and 2 appeared to be constituted by the underlying causes for the lapse. The threshold between phases 2 and 3 appeared to be constituted by the student’s reflectiveness and (lack of) improvement.
Each of the three phases differed in the goals to be achieved, the individuals involved, the type of activities undertaken, and the reasoning behind decisions that were made. Individuals that the participants described as being involved in remediation were the (associate) dean, course directors, regular (clinical) teachers, remedial (clinical) teachers, experts outside the school, members of promotion committees and sometimes members of Student Honor Councils. For each phase these individuals fulfilled different roles. In phase 1 these individuals had the role of a concerned teacher, in phase 2 of a supportive coach, and in phase 3 they became gatekeepers of the profession. Participants’ remarks illustrating each of these phases follow; speakers are identified by participant number.

Phase 1: Explore and understand
After a student had been cited for a professionalism lapse, the PRSs reported holding a conversation with the student, in which the PRS initially sought the student’s understanding of what happened and the emotions regarding the lapse.

The first question that I ask the student when he comes into my office is probably just: “Explain to me what happened.” (P2)

In this phase the PRS was tasked to understand what personal or contextual factors influenced the behaviour.

We have to look at what the underlying issues are, whether it’s you're just not taking it seriously, or there are other issues going on in their life, or is it drug and alcohol abuse or is it depression? Any number of things. Knowing what the underlying features are is much more important to us than just the behaviour itself. (P12)

One PRS recognised that an additional and important goal of the initial conversation was to show that the school takes professionalism seriously. PRSs felt that students are developing physicians who can accidentally behave unprofessionally. Hence, in phase 1, the PRS assumed the role of a concerned teacher who aims to support and help, not to punish the student, as is evidenced by this quote:

Even though I'm not going to penalise the student, they have to come and talk to me and they know that their behaviour was noticed. I think that’s kind of powerful itself. Without any penalties or anything like that. For someone simply to know: “Oh, actually, they take this seriously.” (P12)

In this phase, PRSs reported often encountering a conflict of interest about being allowed to ‘diagnose’ a learner.
I'm very, very reluctant to give any student any kind of diagnostic label whatsoever. You know, there are clear, strong reasons for that. At the same time, it's impossible for me to eliminate my mental health knowledge and insight from my role as an educator. (P5)

Interview responses show that the PRS and the student would ideally arrive at a mutual understanding about the contributing factors for the professionalism lapse, which were classified as personal, external, interpersonal, or contextual. See Table 6.2 for a list of contributing factors that were mentioned by the participants in this study.

In the case that both the PRS and the student were of the opinion that the lapse was accidental, and there was no further need to prevent repetition, participants indicated that the student continued his or her education in the normal curriculum. If both agreed that the student needed further support (e.g., to fill in a knowledge gap or to develop certain skills), the student was offered remediation, and phase 2 commenced.

In the case of unlawful behaviours, the student sometimes immediately moved to phase 3. It seemed that such immediate dismissal was exceptionally rare and would only be considered in the case of an extreme event. As one participant stated:

Although, I would say that even for dismissal, it's unusual to be an event of such magnitude in the absence of other data that would result in dismissal. (P16)
Phase 2: Remediate

The goal of this phase was to improve students’ ability to reflect, and for students to overcome identified deficiencies in knowledge, skills and competencies that contributed to the professionalism lapses. Therefore, individual support was offered for difficult personal factors or external contributing factors for the lapse, although participants acknowledged that these issues were hard to solve. In collaboration with the student, a remediation plan was set up that described interventions tailored to the student’s personal needs. PRSs described creativity in designing remediation interventions, and considered different options, each with its specific goal: assignments to improve the knowledge base of professionalism and to clarify the consequences of unprofessional behaviour for (aspiring) physicians and patient care; skills’ training to improve specific skills and create the student’s awareness about own performance; one-to-one mentoring to teach values and offer guided reflection on experiences. PRSs often chose a core faculty member with adequate expertise to conduct the remediation.

They’re often people who we know do this well, but they’re respected faculty. Students respond to them well, students respect them. Handpicked, yeah. (P10)

In this phase the PRS and remedial teachers were described as supportive coaches. The expectations and consequences of not reaching the goals were set out clearly, including a time frame in which improvement must be reached:

You would probably say if we don’t see an improvement here, we’re going to take this to the Professionalism Committee or we’re going to take this to the Promotions Committee. You’re at risk of being dismissed for unprofessional behaviour if we don’t see an improvement here. (P9)

Participants mentioned an unintended effect of professionalism remediation. Some students seemed to ‘play the game’, which was described by the participants as displaying desired behaviours to satisfy their educators, without having internalised the values of professionalism:

Sometimes the student succeeds not because we have helped them reach an epiphany, but they have decided that they will play the game and they will make it right. They will follow the rules, they will cross their t’s, they will do what is necessary: “I’ll do it and then I will just get through this place.” (P12)

This type of unprofessional behaviour was described by the interviewees, yet no ideas on how to deal with the ‘gaming’ student came forward from the data.
Phase 3: Gather evidence for dismissal

The threshold between phases 2 and 3 was crossed if the problem appeared to persist despite remedial teaching, and if the student displayed dishonest or even unlawful behaviours. In these cases, patient safety was deemed to be threatened:

> When things are severe in that regard, we have concern for patients, for public safety, then we make use of that. (P17)

Sometimes participants reported a student lacking insight into the consequences of his or her behaviour for working in a medical environment. Consequently, the student was not willing or able to reach the professionalism expectations. According to PRSs this could result in repetitive professionalism lapses without improvement, despite individualised remedial teaching:

> If the student doesn’t see that what they’re doing is a problem and doesn’t change, they’re likely to repeat behaviour. That’s what gets students dismissed from medical school. (P4)

In phase 3, PRSs were of the opinion that further remediation would not be effective anymore. As one educator stated:

> I don’t have a ... I have a pessimistic feeling at the beginning, but I try to keep hope. There have been a handful of students I just felt like it would take ... The kind of work it would take to get them to have that insight or the ability wasn’t in our tool kit. (P14)

Strong evidence had to be obtained for dismissal, through very clear processes:

> We have to demonstrate that we’ve done everything ... (P14)

You have to have a committee, you have to have clear processes, before people can get dismissed. There’s only two ways you can be promoted or dismissed. It’s the Judicial Board or the Committee of Student Promotion. Those are the only two ways. (P6)

The responsibility for deciding about continuing the studies was not in the PRS’s hand, but belonged to a promotion committee. Promotion committees could be reluctant to take the tough decision to dismiss a student:

> I’ve been in four medical schools and the culture is the same in all those schools. There’s a real reluctance to dismiss students once they’re admitted to medical school. There’s a lot less reluctance to dismiss students from lots of other academic programs than there is in medical school. (P9)
In phase 3, PRSs took up a completely different role than in phases 1 and 2: They became the gatekeepers of the medical profession. Although they took this role seriously, they found it difficult to conclude that a student should not be allowed to become a doctor. PRSs had to notify the medical school promotion committee with information to justify dismissal. Going from collaborator to opponent, PRSs experienced a conflict in choosing between the interest of the student and the interest of health care and patients:

I think there's always a bit of a difference to give the student an opportunity to succeed. Sometimes the people making the decisions about whether or not a student can come in, it's a committee that's different from those who have been working with the student. It can be good that people don't get tied up in the personal relationship. It can be bad if the people making the decisions don't seek or get input from everyone who's been involved with not only getting the student's perspective, but everyone's else, and knowing what some of the problems were. (P13)

Furthermore, participants acknowledged that remediation is a demanding task that has to be shared among a group of teachers:

The sad part of what happens is — I had this position now for over 15 years — that I find that each school the people I know that are good at this ... I have to be careful not to just continually use them repeatedly. First of all, it tires them out. You also then are giving other people opportunity back when there's opportunity to learn how to do this. (P1)

The road map model

Analysing and relating the data prompted us to a road map model that describes the process of attending to professionalism lapses of medical students. Figure 6.1 depicts this road map. PRSs consider the first phase as regular teaching, and only the second phase as remediation. If, after a concerted effort to remediate unprofessional behaviour, the conclusion is drawn that the student should not be allowed to continue the medical studies, the third phase would start. In this last phase, the role of the PRS as gatekeeper of the profession competes with the role of concerned teacher and supportive coach.
The student displays an accidental professionalism lapse and is capable to prevent future professionalism lapses with help from regular teachers in the medical curriculum.

The student experiences difficulties to act professionally, and needs support and personalized remedial teaching by expert faculty to fill in deficits in competence and/or reflectiveness.

The student does not acknowledge his/her repetitive professionalism lapses, despite remedial teaching. Data has to be acquired to justify sanctions by the school’s promotion committee.

**Figure 6.1** A road map for attending to professionalism lapses in medical students
Table 6.3 shows participants' quotes delineating examples of student cases per phase: two that fit neatly into each phase, and one that does not as well.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Fit/no fit</th>
<th>Participants' quotes delineating student examples</th>
</tr>
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<tbody>
<tr>
<td>Phase 1</td>
<td>Examples that fit</td>
<td>I’ve definitely worked with quite a number of students where there’s a lot of shame and remorse and guilt. They did something they knew instantly ... and they did it for all sorts of reasons, and it’s clear both from what they say about themselves and what my instincts are in talking to them that they will never do it again. That was all the feedback they needed. (P14)</td>
</tr>
<tr>
<td></td>
<td>Example that does not fit neatly</td>
<td>We had a student who did not actually know how to use email appropriately, when we followed up on this and discussed it, it turned out that somehow she had set up an email folder where all the messages that had the exclamation point, or the high important messages, were all going to a folder that she never looked at. (P17)</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Examples that fit</td>
<td>It’s one of the first things we do, ask the student how they feel about what happened. And when you get that remorseful student that says: “I’m so sorry, I had no idea, I will not do it again. I will change,” it makes you feel so much better because that’s the one that’s easier to remediate. But then like I said you sometimes you have a student that will say that, but they’re really not saying that. Do you know what I mean? They know they have to pass you. (P11)</td>
</tr>
<tr>
<td></td>
<td>Example that does not fit neatly</td>
<td>I still remember one of my students, who is graduated now... I am afraid to look up what he's doing now because I’m just worried he's not providing great patient care. He slipped through the system and I think it’s a failure on our part, my part, for letting a guy like this graduate and I think that was the one that kind of triggered my thought .... Because I really thought he was responding to my feedback. And we do know that people smile enough, they finally get happy. We know that students fake it enough, they actually suddenly do good. So I guess I could be on the optimistic side and say maybe he's gonna come out the right end. I guess trying to be responsible about my students, almost like my children going out into the world, I would feel really bad if they did not turn out to be good, and did bad things right? And it’s almost like a parent right? And I guess you just have to realise you have only so much control. (P11)</td>
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### Table 6.3 Participants’ quotes delineating examples of student cases that fit neatly, and do not fit neatly in each of the three phases.

<table>
<thead>
<tr>
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<th>Fit/no fit</th>
<th>Participants’ quotes delineating student examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 3</td>
<td>Examples that fit</td>
<td>Obviously, mental health and substance abuse are the most challenging situations that clearly can impact a student’s performance, and they’re challenging to us because number 1, we worry about the student working in the clinical context and protecting patients. Number 2, our experience is that mental health and substance abuse are often paired with the most limited insight of the student into their homes. Maybe that’s part of the disease process. A student is really, I think in a difficult situation, where they’re obviously impaired or in denial or their illness prevents them from having the insight and they want to proceed on. Sometimes the best thing we can do for a student who is impaired or otherwise underperforming is to get them out of the curriculum before they start failing courses. (P12)</td>
</tr>
<tr>
<td>Example that does not fit neatly</td>
<td></td>
<td>And not that I ... just because it’s a common language, not because I ever made time to go see some of my learners, but they often end up being a combination of narcissistic and anti-personality disorder combination. That ends up being this profile of having no insight, remain unreliable and then unwilling to be adaptable. (P18)</td>
</tr>
<tr>
<td>Example that does not fit neatly</td>
<td></td>
<td>The student was disrespectful to his group mates. This continued for 2 years and no matter what you’ve done. He started fighting the faculty. He did not like PBL. He thought that this was the wrong place for him. He did not want to accept the process. Did not buy into it, and he fought us all the way through. I was literally involved with this. This is many years ago. Ten years ago. Then he went on to (another medical school) and haven’t had any problems. What I think happens in this kind of cases, is that they learn something after all, and when they move to a new place, and they’re less angry, and they know the rules of the game by then, they start anew. (P2)</td>
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### Discussion

The purpose of this study was to create a model for attending to professionalism lapses by unraveling how faculty responsible for professionalism decide about interventions for students who display lapses. Our findings can be grouped in three phases: (1) **Explore and understand**, (2) **Remediate**, (3) **Gather evidence for dismissal**. In addition, results suggest that clear thresholds exist between these phases. The threshold between phases 1 and 2 is determined by the mutual understanding of PRS and student that remedial teaching is necessary, based on the perceived contributing factors of the lapse. A lack of reflectiveness and adaptability, as evidenced by an ongoing pattern of lapses despite remedial teaching, is seen as a reason to proceed to phase 3, and thus forms the threshold between phases 2 and 3. Participants expressed that a lack of reflectiveness and adaptability can lead to potential compromises of patient safety. PRSs have different roles in the three phases, which can create conflicts of interest. The road map delineating the three phases provides a guideline to faculty for attending to professionalism lapses of undergraduate medical students.
What this study adds to existing models

Our findings provide empirical support to earlier proposed models more generally describing phases in the process of attending to professionalism lapses [6, 8, 27-30]. What we designate as phase 1 resembles the first phase in all previous models: the ‘cup of coffee’ conversation as proposed by Hickson and colleagues [27]. Our findings indicate that in phases 1 and 2, the approach to remediation is guided by the contributing factors for the behaviour, and how the student responds to feedback. This finding contrasts with existing models in which the phases are based upon the perceived severity of the professionalism lapse [6, 8, 27-30]. Also, according to previous research, severity of the behaviour is most often cited as the reason for dismissal from school for professionalism deficits [24]. We do confirm that remediation is scaled up if the student does not show improvement of performance, despite remedial interventions: recurrent professionalism lapses, regardless of the cause, point to phase 3. In contrast, according to the findings in our study, in the last phase of the process neither the severity of the behaviour, nor causal factors seem to be important. We found that a student’s lack of insight and improvement determines the threshold to the last phase. This is in line with Krzyaniak and colleagues’ findings among residents [12]. If a student does not show progress in reflectiveness and adaptability she or he will no longer be absorbed into the culture of the community of practice. This can lead to dismissal. These findings add to existing models [6, 8, 27-30].

Kalet and colleagues advocate that remediation should be a part of the curriculum, which is supported by the findings of our study [37]. Remedial strategies, as applied in phase 2, do not in essence differ from normal teaching methods. The difference is that the remedial teacher needs to have ‘above average’ skills. PRS participants in this study confirmed that remediation is a demanding task for which they need to ‘handpick’ remedial teachers, and give support to these individuals because their work can be energy consuming [1]. Clearly, faculty could benefit from working together to share their experiences and improve expertise in the medical school [2].

Congruent to the normal curriculum, participants sometimes noticed ‘gaming-the-system behaviour’ of their students, meaning that students show desired behaviours without having incorporated the professional values. Possibly, the focus on behaviours and professional development diminishes the attention for traditional virtues [26]. This finding confirms that the knowledge base of professionalism values is foundational, and that skills training has to be combined with activities to improve the student’s professionalism values to prevent such behaviour [5, 6].

The phases and the community of practice

A surprising insight was that the different remediation phases could be interpreted using the framework of communities of practice to add further insights to attending to professionalism lapses [38]. As Cruess and colleagues state, this framework can serve as the foundational
theory for medical practice, as it “does not in any way affect the validity or usefulness of other theories”, yet can provide a useful background for most other theories [39]. If we view medical practice as a community of practice, the student journey at the medical school progresses from legitimate peripheral activities to full participation and membership, coming closer and closer to the core of the community. Professional behaviour can be seen as a common value of the community, practiced by those in the core — competent physicians. Unprofessional behaviour, however, is not the standard in the community, and can be a signal that a student needs help in her or his journey into the community.

Taking this a step further, we can look at the relationship between our 3-phase model of attending to professionalism lapses, and the communities of practice framework. (See Figure 6.2)

In our 3-phase model, the first phase assumes that the student is still in the process of joining the community. There has been a lapse in professionalism, yet the approach to the student is friendly, open, and helping. The individuals involved in remediation make a concerted effort into including students into the community, and their role is one of a concerned teacher or colleague. In the second phase, the intention seems to slowly shift, as in this phase the student needs to prove that he or she is willing and able to develop the skills to stay in the community. To steer the student back onto the journey into the community of practice, participants mentioned forms of mentoring and matching the student to role models. Our road map shows that indeed, while the goal is to approach the student as still
being eligible for staying in the community, conditions are being laid out, and it is made clear that the student needs to meet the requirements. In phase 3, however, the student no longer moves from the periphery to the center, but in the other direction, by not adhering to the expected practices. In this phase, core values of the medical community are threatened. This is where we see the initiation of a reverse process: effort is put into guiding the student out of the community of practice.

Implications
The results of this study may offer medical educators a theoretical base for attending to students who display professionalism lapses. According to the concept of communities of practice, social relationships are important to bring an individual into the core of a community [38]. When remediation takes place outside the regular educational context, it can lead to isolation of the student. This can make it even more difficult for the student to enter the community. This implies that, during remediation trajectories, attention should be given to the need for connection with other learners and educators.

Context influences behaviour, which is confirmed again in this study [15-17]. PRSs are informed about contextual contributing factors for professionalism lapses, and they can use that information to make changes in the institutional culture to prevent medical students’ future lapses.

Limitations
The interviews were guided by findings from our earlier research, which theoretically could have limited the discussions or biased the participants. We deliberately chose this approach as we are of the opinion that it was an advantage to build further on earlier research findings.

The reality of attending to professionalism lapses is complex, as many serious professionalism problems involve uncertainty and differences of opinion, which can be difficult to sort out. Our paper is the result of an attempt to extract useful information from experts in the field to develop a model for handling professionalism lapses. This extraction might not be 100% correct, but yet useful for people who have to attend to professionalism lapses in medical students.

Furthermore, where judicial and financial aspects of studying medicine in the United States differ from those in other countries, the findings are specific for the United States and need to be tested in other contexts to make them generalisable to other countries.

Future investigations
It was beyond the scope of this study to examine the effect of remediating strategies; future research should focus on the effectiveness and efficiency of specific remediation activities as those applied in phase 2.
The threshold between phases 1 and 2 is constituted by behaviours and their causes, and is thus highly context dependent. Future research should reveal the contextual influence on this threshold. Such research could also further refine the description of the threshold between phases 2 and 3, and thus underscore the evidence to dismiss (or not dismiss) a student from the medical school.

This study might stimulate the medical education community to consider the way medical students are guided or sent out of the community of practice. Whereas we found substantial prior research about entering such a community, we were not able to find literature about exiting a community of practice, whether it be voluntary or forced.

Conclusion

The findings of this study prompted the development of a 3-phase explanatory model for attending to medical students’ professionalism lapses that fits well in the overarching framework of communities of practice. Whereas phases 1 and 2 are aimed at keeping students in the community of practice, phase 3 is aimed at guiding students out. These results provide empirical support to earlier proposed models describing the phases in the process of handling professionalism lapses, and may offer medical educators a theoretical, now empirically founded, base for approaching students who display such lapses.
REFERENCES


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