student remained *of concern*, 13 had moved from being *of concern* to *at risk* and 21 were no longer under-performing.

The register has greatly enhanced the identification and management of academically weak students across different programmes and year levels. Effective student support initiatives have been shared between programmes and there has been a documented decrease in the numbers of students meeting both *at risk* and *of concern* criteria after one semester of operation. In addition, there is better documentary support for faculty processes, information on student engagement with remediation, and the capacity to evaluate the long-term effectiveness of academic support programmes.

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Using positive deviance to improve student performance

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Context and setting At our medical college in Pakistan, many students achieve lower clinical performance ratings than would be expected based on their performance in written examinations. However, some students among the group have good clinical skills.

Why the idea was necessary The usual problem-solving approach would focus on identifying reasons for low achievement among the group. However, efforts to rectify problems frequently result in 'best-practice' solutions put forward by experts and are often followed by resistance to the ideas imposed. We sought to use a novel approach that involved partnering with the student community to drive change in study practices. The six-step positive deviance (PD) conceptual framework was used to identify and disseminate the strategies employed by the successful students.

What was done Fifty Year 3 students (on a 5-year MBBS programme) rotating through internal medicine were assessed mid-rotation using a mini-clinical examination (mini-CEX) and 360-degree evaluations (raters included faculty staff, postgraduate trainees, self, peers and patients, who evaluated attitudes, communication skills and teamwork). Twenty students (40%) who performed well were invited for individual in-depth interviews and were asked how they learned clinical skills. Seven students (14%) reported unique behaviours, some of which were: consulting multiple resources for every case; reading chart histories of patients with common problems clerked by others; standing by when senior students were taking histories; returning to basic science books to understand patient presentations; hypothesising and eliminating explanations while studying; returning to the hospital in their free time, and 'chasing' teachers if they were not available at scheduled times. A faculty-facilitated discussion was held with the seven students in which they decided to work in small groups with their peers to disseminate their PD behaviour. During the small-group sessions the students practised taking histories and examining patients together.

Group performance and modification of study behaviour were assessed at the end of the rotation, using a mini-CEX and 360-degree evaluation, and outcomes were compared with those of a second group of students in the same year who had not worked in PD peer-learning groups. A focus group discussion was held with a carefully chosen sample of the student PD groups to explore learning experiences during the rotation.

Evaluation of results and impact A statistically significant difference ($P \leq 0.05$) in improvement in medical interviewing skills and clinical judgement was seen on the mini-CEX in the PD group. The 360-degree evaluation also revealed statistically significant differences ($P < 0.0001$) in improvement along all dimensions in the PD group. The PD approach therefore significantly improved clinical skills and attitudes in the students. The students who had collaborated with the PD students considered that working with the PD students had helped them to understand how using simple learning techniques could enhance their performance. Influenced by the PD students, they reported that they put in extra hours in the ward, consulted Internet resources and saw all patients admitted with clinical findings.

This project helps highlight behaviours among medical students which contribute to success but which may go unnoted. These can be 'discovered' through a process of in-depth interviews and further disseminated using the PD approach to improve student group performance.

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