

## Research Letter

# First experiences with patient safety initiatives in Greek rural primary care. Action research by the LINNEAUS collaboration on patient safety in primary care

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### KEY MESSAGE:

- Isolated primary care physicians can be encouraged to take part in patient safety initiatives if the focus is on accreditation to improve safety.
- Collaboration with experts using tools that have already been developed for this purpose is critical to the success of such initiatives.

### ABSTRACT

**Background:** Accreditation of primary care organizations within Greece is still in its infancy. Our task in Greece was to attempt to introduce a patient safety initiative in a local area, focusing on developing minimum standards for accreditation, assess whether a pragmatic approach would engage physicians, and provide evidence of improvement.

**Objective:** To use monitoring of clinical performance as the basis for the launch of an accreditation system for primary care in Greece and to report on the process and lessons learnt.

**Methods:** An established set of clinical indicators for patient safety was introduced in five Greek primary health centres. A web-based platform, for reporting practitioners' scores on the selected indicators, was used to record the activity of the practitioners.

**Results:** There was considerable variation in the use of clinical indicators by individual GPs. Following the intervention, the reporting on the indicators had increased while the scores on indicators only increased slightly. However, GPs engaged with the process and recognized its relevance to improving patient safety.

**Conclusion:** We successfully piloted a means of engaging with GPs to improve patient safety using established indicators even where there was limited infrastructure to support such initiatives.

**Keywords:** Patient safety indicators, quality indicators, accreditation, rural healthcare, Greece, LINNEAUS collaboration

### INTRODUCTION

One of the challenges that we encountered in extending the LINNEAUS collaboration beyond the confines of countries where primary care was already well established was in developing a mechanism to get engagement from physicians and policymakers to an agenda that explicitly addressed issues related to patient safety. Working in healthcare systems where the importance of primary care is acknowledged and is

part of the structural organization of healthcare, presents different challenges in introducing patient safety initiatives when compared to countries where this not the case. The initiatives that we reported in Poland (1) are an example of introducing patient safety initiatives spearheaded by an academic department in a country where primary care and patient safety remain largely unsupported by central government and the professional organizations.

The situation in Greece presents additional challenges in implementing patient safety initiatives. The governance of primary care (and healthcare in general) in Greece is fragmented. There is no system of gatekeeping or patient lists and the general practitioners are unevenly spread across the country. Therefore, there are problems of access, continuity, coordination and comprehensiveness of primary care. These problems are compounded by the well-publicised problems associated with austerity (2). The advent of austerity economics has placed huge cost pressures on the health system with its associated high risk for significant detrimental consequences for the health of the population. Healthcare managers are striving to rationalize costs, whilst maintaining quality. Budgetary constraints are compounded by the need to maintain the quality of services due to the requirements of the tourist industry—millions of tourists visit Greece each year seeking primary healthcare services in rural areas.

Introducing patient safety initiatives in such a climate therefore provides additional challenges. However, the ability to engage primary care physicians in implementing patient safety initiatives cannot be dependent only on a permissive environment. The generalizability of implementing improvement strategies related to patient safety needs to take account of varying contexts to avoid the accusation that improvements to patient safety are only relevant to relatively rarefied and resource-rich environments.

Greece is also important because the healthcare system has many similarities with other countries in Southern Europe, especially the underutilization and lack of investment in primary care, the over-reliance on specialists and the lack of professional organizations promoting primary care. We were keen to show that introducing patient safety initiatives could work in an environment that was averse to primary care and that demonstrating what could be achieved in such an environment would have positive lessons for other countries.

Our task in Greece was to attempt to introduce a patient safety initiative in a local area, focusing on developing minimum standards for accreditation, assess whether a pragmatic approach would engage physicians, and provide evidence of improvement. Our hope was that the lessons learnt through such a process would provide a template for extending the initiative to other parts of country and show that even in a climate of austerity and an environment that was not supportive of primary care, change was achievable. We report on the process of that initiative.

## METHODS

For the purposes of this pilot study, we focused on the accreditation of five primary care centres in Northern

Greece. They were chosen based on the willingness of the practitioners to become involved. A total of 18 general practitioners from these health centres participated in the pilot study. Using an action research methodology, all the participants were introduced to and used the Manchester patient safety framework (MaPSaF) culture tool so that they were able to identify the key cultural constraints related to patient safety in their organizations (3,4). We then asked the participating clinicians to agree on the use of a set of clinical indicators which had already been developed (5) and were broadly related to patient safety and to apply these to their daily practice (6,7). To enable recording of the information, we developed a web-based platform based on the LINNEAUS reporting tool to facilitate data entry and monitoring (8).

The selected indicators were: (a) no warfarin prescribing without a documented international normalized ratio (INR) result within the last 12 weeks; (b) all people over 50 who are prescribed an anti-inflammatory drug, should be also prescribed a proton pump inhibitor (PPI); (c) documented urea and electrolyte (U&E) results in any patients prescribed angiotensin converting enzyme inhibitors (ACE inhibitors) at initiation of treatment and four weeks later; (d) the prescribing of clarithromycin or erythromycin to a patient who is also receiving simvastatin, with no evidence that the patient has been advised to stop the simvastatin while taking the antibiotic; (e) measurement of glycosylated haemoglobin (HbA1c) levels every three months, for each diabetic patient.

We asked the physicians to report and record their compliance with these indicators for a one-week period in each month for a total of six months. Physicians recorded information on all the patients they saw during this period and whether their documented care fulfilled the criteria set out in the clinical indicators. To encourage compliance, we provided each health centre with a monthly report, which allowed the participating clinicians to view and assess their performance and the average anonymized rates of their health centre, as well as the average rates of all participating health centres.

## RESULTS

Over the six-month period of the pilot study, the number of patients reported by GPs using the web-based reporting system increased by 77%. There was less variation in the absolute value for the individual clinical indicators (range: 61–86%), which stayed the same during the reporting period. All the physicians maintained their reporting for the six-month period. The limited time for this evaluation meant that we could not provide adequate quantifiable data for statistical analysis and link it to the accreditation process. The results are, therefore, related to the process of implementation and our reflections on that process.

## DISCUSSION

### Main findings

Our small pilot study showed that even where there is no supporting infrastructure for accreditation or safety, it is possible to engage physicians to start assessing and improving the quality and safety of primary care.

### Strengths and limitations

There is a clear bias in this study because the choice of participants who were willing to undertake the study may have influenced the results. The lack of quantifiable data also limits the lessons that we can take away from the study. However, the lessons that we learnt from the process that we undertook do have currency and wider applicability.

The results were based on self-reports and we had no information on denominators. No one dropped out, enthusiasm was maintained throughout the study, and the physicians were committed to change.

### Reflection

It is not unusual for innovations to be started by enthusiasts and we believe that the process we developed for the engagement of physicians in rural areas who are professionally isolated can be used in other countries. It is our view that linking potential accreditation standards with patient safety encouraged reporting. We found that physicians who had no previous experience with quality improvement needed to go through a preparatory phase, during which they were exposed to and became familiar with the concepts, methodologies and especially, the culture of safety. Breaking silos, being transparent and communicating results of their work, learning on the job, collaborating with peers, making improvements and assimilating the safety culture were simple but robust achievements of our effort. We think that it is crucial that GPs feel confident and satisfied in developing, owning, monitoring and evaluating the assessment of their clinical practice.

The lessons learnt from this process in Greece have the potential to affect the development of accreditation of clinical services in primary care in other similar health jurisdictions, where primary care is underdeveloped—for example, Romania, Bulgaria, Poland (1) and Lithuania which have similar organizational structures in relation to primary care.

We also showed that with the support of networks such as the LINNEAUS collaboration, it is possible to embark on a process which uses and shares the expertise of established researchers and clinicians, using tools already developed to kick-start a process whereby clinicians working in relative isolation and in rural areas can make progress in monitoring their own practice, learning from feedback and

begin the process of externally validating their performance in relation to quality and safety (9).

### Conclusion

Isolated primary care physicians can be encouraged to take part in patient safety initiatives if the focus is on accreditation to improve safety. Moreover, collaboration with experts using tools that have already been developed for this purpose is critical to the success of such initiatives.

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