

1.79,  $P = .70$ ) and hematoma (OR = 1.52, 95 percent CI .29 to 7.99,  $P = .62$ ).

### CONCLUSIONS:

No differences were found between knotless barbed sutures and conventional sutures generally, but the cohort studies suggested barbed sutures resulted in fewer adverse events with longer follow-up. Thus barbed sutures are considered a safe surgical technique in CS. More evidence with larger sample sizes and longer follow up are needed to confirm the advantages of this technique in the future.

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## VP172 Clinical Effectiveness Of A Predictive Risk Model In Primary Care

### AUTHORS:

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### INTRODUCTION:

New approaches are needed to safely reduce emergency admissions to hospital by targeting interventions effectively in primary care. A predictive risk stratification tool (PRISM) identifies each registered patient's risk of an emergency admission in the following year, allowing practitioners to identify and manage those at higher risk. We evaluated the introduction of PRISM in primary care in one area of the United Kingdom, assessing its impact on emergency admissions and other service use.

### METHODS:

We conducted a randomized stepped wedge trial with cluster-defined control and intervention phases, and participant-level anonymized linked outcomes. PRISM

was implemented in eleven primary care practice clusters (total thirty-two practices) over a year from March 2013. We analyzed routine linked data outcomes for 18 months.

### RESULTS:

We included outcomes for 230,099 registered patients, assigned to ranked risk groups.

Overall, the rate of emergency admissions was higher in the intervention phase than in the control phase: adjusted difference in number of emergency admissions per participant per year at risk,  $\delta = .011$  (95 percent Confidence Interval, CI .010, .013). Patients in the intervention phase spent more days in hospital per year: adjusted  $\delta = .029$  (95 percent CI .026, .031). Both effects were consistent across risk groups.

Primary care activity increased in the intervention phase overall  $\delta = .011$  (95 percent CI .007, .014), except for the two highest risk groups which showed a decrease in the number of days with recorded activity.

### CONCLUSIONS:

Introduction of a predictive risk model in primary care was associated with increased emergency episodes across the general practice population and at each risk level, in contrast to the intended purpose of the model. Future evaluation work could assess the impact of targeting of different services to patients across different levels of risk, rather than the current policy focus on those at highest risk.

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## VP173 Determinants Of Behavioral Health System Efficiency In Organisation For Economic Co-operation And Development (OECD) Countries

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## INTRODUCTION:

This study examined the technical efficiency determinants of each Organisation for Economic Co-operation and Development (OECD) country's behavioral health system (BHS).

## METHODS:

The technical efficiency of each OECD country's BHS was analyzed through data envelopment analysis with model combinations ranging from 1–11 models, with each model constructed with different BHS input and output variable combinations. A decision tree was generated from the efficiency scores of the model with the highest mean technical efficiency score as a predictor variable. Data was obtained from 2013 OECD and Eurostat statistics.

## RESULTS:

Different model combinations indicated that the model with the highest mean technical efficiency score (.9214) for OECD countries included (i) input variables for smoking, alcohol consumption, daily fruit consumption, the number of psychiatrists, the percentage of live births of young mothers first children, and the time devoted to leisure and personal care and (ii) output variables for death rate by mental and behavioral disorders, diabetes hospital admissions in adults, and suicide rates. Among all model combinations, >45 percent of OECD countries have an efficient BHS. The decision tree graph shows that daily fruit consumption, smoking, and suicide rates are predictor variables of the technical efficiency of an OECD country's BHS.

## CONCLUSIONS:

The study results offer important insights regarding the development of BHS in OECD countries. Health policymakers must develop collaborative activities and implement comprehensive policies promoting internationally-oriented BHS in order to improve the health status of people worldwide and reduce health inequality.

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## VP174 Atlases of Quality: Assessing Integrated Care In Chronic Diseases

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### INTRODUCTION:

The Comprehensive Public Healthcare System of Catalonia (SISCAT) Atlases of Quality aim to evaluate the quality of care in relation to specific diseases or procedures in the Catalan territory with a focus on outcomes of care in order to promote best practices. The first Atlas of Quality aimed to assess the quality of integrated care for chronic patients.

### METHODS:

Methodology was articulated in four stages:(i) Establishment of a conceptual framework of reference specific for each intervention/technology being assessed, (ii) Definition and consensus of the assessment indicators, and (iii) Implementation of indicators using the Basic Health Areas (ABS) of Catalonia as a unit of analysis, comparing ABS with vs without the intervention (such as integrated care for chronicity). Indicators were obtained from the SISCAT databases and implemented through risk adjustment models. For performance assessment, we calculated the observed and expected indicator rates for each ABS, and for the benchmarking analysis, these ratios were represented in funnel plots (Confidence Interval, CI 95 percent and 99.8 percent for exclusion zones). (iv) Evaluation of the intervention and identification of specific success factors.

### RESULTS:

For the assessment of integrated care interventions for chronicity, the defined framework in stage 1 was based on the Kaiser Pyramid (population distribution), and the Porter and the Donabedian's approaches (structure, processes, outcomes) (1). In stage 2 more than 500 experts, using several qualitative techniques, considered 18 indicators as relevant and feasible for