training, specific care processes, EMR prompts for tests and treatments, regularly reviewed process metrics and group financial incentives. Practice variance was reduced and outcomes markedly improved.

Implications for Guideline Developers Guideline recommendations are more likely to be adopted in a uniform manner if they include specific recommendation, suggestions for implementation use in organised settings, and process and outcome metrics to track improvements.

Background While information technology (IT) has the potential to improve the quality and safety of patient care, solutions such as computerised physician order entry (CPOE) are often designed and executed without end-user involvement and lack performance measures for monitoring quality and impact. To address this gap, an evidence based guideline for systemic treatment (ST) CPOE was developed incorporating both clinical and technological best practices. Performance measures for monitoring clinical impacts and system functionality were also developed.

Context The ST CPOE guideline was developed by a panel of physicians, nurses, pharmacists, IT specialists and human factors experts. Two Expert Panels (i.e. Clinical and Technology) were convened, to review and provide feedback on guideline content.

Description of Best Practice The guideline contains two distinct yet interconnected parts: clinical practice (e.g. error prevention, utilisation, clinical decision support), and technology requirements (e.g. usability, system integration, effective alerts). Also included are evidence based indicators to support the evaluation of ST CPOE systems and indicators reflecting clinician practice and patient outcomes. Quality monitoring of ST CPOE utilisation reveal that 75.5% of all chemotherapy visits are being supported by an ST CPOE system. A provincial evaluation of existing ST CPOE systems against the technology best practices is currently underway.

Lessons for Guideline Developers, Adaptors, Implementers, and/or Users Centralised guideline development, coupled with coordinated implementation and performance monitoring, can reduce unnecessary screening and invasive procedures, focus resources on appropriate routine screening in underscreened populations, improve patient access and reduce costs.

Background Too-frequent screening for cervical cancer can increase costs, lead to unnecessary invasive procedures associated with overtreatment, and shift resources away from the one in five women who do not receive recommended routine screening.

Context A large, US-based integrated healthcare system with centralised evidence services and eight independent regions developed and implemented an evidence-based guideline for cervical cancer screening. Novel implementation strategies and performance monitoring in one region in Southern California led to significant improvements and are described below.

Description of Best Practice Graded evidence summaries were conducted by a centralised analytic unit, and recommendations developed by a guideline team with representation from each region. In one large region with more than 3 million patients, interventions aimed at the practitioner, patient and systems levels were implemented for routine Pap and HPV co-testing. Practitioner interventions included electronic distribution of guidelines, point-of-care electronic prompts, and workflow support. Patient-level interventions included point-of-care education, and in-reach/outreach activities. System-level interventions focused on centralised patient outreach letters and reminder calls, computerised decision support, and unscreened cancer lists for panel management. Monthly performance monitoring on a measure of “overpopulation” was reported at medical centre, department and provider levels. In a five-year period, over 100,000 fewer unnecessary Pap tests were performed, while screening rates increased by 7%.

Lessons for Guideline Developers, Adaptors, Implementers, and/or Users Centralised guideline development, coupled with coordinated implementation and performance monitoring, can reduce unnecessary screening and invasive procedures, focus resources on appropriate routine screening in underscreened populations, improve patient access and reduce costs.