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The authors listed below have made substantial contributions to the intellectual content of the paper in the various sections described below.

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RE: Low Adherence to Guidelines in Nonmuscle-invasive Disease

van Rhijn BWG, Burger M

Nat Rev Urol 2016;13:570–1

Experts' summary:

The authors address the thorny issue of the lack of adherence to Clinical Practice Guidelines highlighting high-quality evidence based nonmuscle-invasive bladder cancer (NMIBC) guideline recommendations from the American Urological Association/Society of Urologic Oncology, and the European Association of Urology as exemplars [1]. In particular, they emphasise three strong practice recommendations underpinned by high-quality evidence: immediate intravesical installation of chemotherapy in patients with presumed low-risk or intermediate-risk NMIBC, the performance of a second transurethral resection for high-risk NMIBC, and the administration of adjuvant intravesical Bacillus Calmette–Guérin immunotherapy in high-risk NMIBC. Data from North America, Europe, and Australia are cited illustrating variability and general lack of adherence (ranging from 0.5% to 65%) to these recommendations.

Interestingly, they propose that if young urologists, even from the best institutions, are not trained within environments whereby strong evidence-based practice recommendations are adhered to, they are unlikely to implement such practices as they embark on their independent careers. The obvious risks are that patients are not receiving the best care, care is not standardised, and patient outcomes are likely to be compromised. The excellent parting conclusion from the authors is that the reasons for the lack of adherence need to be investigated in future research and additionally they propose some strategies: (1) national adoption of international guidelines, (2) attendance at guideline update courses, and (3) increasing social media traffic [1].

Experts' comments:

This is an excellent article drawing attention to the current and pressing issue of suboptimal guideline adherence in the face of high-quality evidence and strong recommendations. Discordant adherence is apparent in other urological areas such the overuse of androgen deprivation therapy for low-risk prostate cancers [2] and the decreasing use of androgen deprivation therapy with radiotherapy for intermediate- and high-risk prostate cancer [3].

Now that we know there are evidence-practice gaps, we must address them; fortunately there is a significant body of implementation research across conditions from which we can learn [4]. The European Association of Urology Guidelines Office's increasingly transparent and robust ways of systematically reviewing the evidence, and linking the quality of evidence to the strength of recommendations is an important first step in the *knowledge-to-action* cycle [5]. Now we should turn attention to: who needs to do what, differently? Which barriers and enablers need to be addressed? Which intervention components could overcome the modifiable barriers and enhance the enablers? How can behaviour change be measured and understood [6]?

Addressing evidence-practice gaps depends on individuals changing their clinical behaviours within complex systems [7]. Potential barriers to adherence include a lack of knowledge/awareness, scepticism about key recommendations or the credibility of the source, a lack of resources or skills to

perform the optimal treatments, organisational/group commitment to a particular course of action which may limit autonomy or sanction deviance, a lack of belief in the beneficial consequences of the recommendations, disincentives to performing the treatments—among many other social, psychological, organisational, and environmental factors [7,8]. If we are to understand the problems and effect desired behaviour change, a theory-informed approach is necessary.

The urological community must all march to the same beat adhering to strong recommendations. At least we stand a chance of finding out sooner whether the treatment/care being provided is right for patients or not; and if not, we change together. With the current alternative, we can be sure that at any one time, a significant proportion of patients are probably receiving suboptimal care and in some cases, harmful care.

Conflicts of interest: The authors have nothing to disclose.

References

- [1] van Rhijn BWG, Burger M. Low adherence to guidelines in nonmuscle-invasive disease. *Nat Rev Urol* 2016;13:570–1.
- [2] Morgia G, Russo GI, Tubaro A, et al. Patterns of prescription and adherence to European Association of Urology guidelines on androgen deprivation therapy in prostate cancer: an Italian multicentre cross-sectional analysis from the Choosing Treatment for Prostate Cancer (CHOICE) study. *BJU Int* 2016;117:867-73.
- [3] Dell'Oglio P, Abou-Haidar H, Leyh-Bannurah SR, et al. Assessment of the rate of adherence to international guidelines for androgen deprivation therapy with external-beam radiation therapy: a population-based study. *Eur Urol* 2016;70:429–35.
- [4] Grimshaw JM, Eccles MP, Lavis JN, Hill SJ, Squires JE. Knowledge translation of research findings. *Implement Sci* 2012;7:50.
- [5] Graham ID, Logan J, Harrison MB, et al. Lost in knowledge translation: time for a map? *J Contin Educ Health Prof* 2006;26:13–24.
- [6] French SD, Green SE, O'Connor DA, et al. Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. *Implement Sci* 2012;7:38.
- [7] Michie S, Johnston M, Abraham C et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. *Qual Saf Health Care* 2005;14:26–33.
- [8] Michie S, van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implement Sci* 2011;6:42.

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