

# Meeting the unmet needs to improve management and outcomes of patients with atrial fibrillation: fitting global solutions to local settings

Tatjana S. Potpara<sup>1,2</sup>, Nebojsa Mujovic<sup>1,2</sup>, Gregory Y.H. Lip<sup>1,3</sup>

<sup>1</sup> School of Medicine, Belgrade University, Belgrade, Serbia

<sup>2</sup> Cardiology Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>3</sup> Liverpool Centre for Cardiovascular Science, Liverpool Heart and Chest Hospital, University of Liverpool, Liverpool, United Kingdom

Owing to its complexity, atrial fibrillation (AF) poses significant burden to patients, physicians, and health-care systems, and many international and local guidelines for AF management are issued to facilitate optimal management of patients with AF in clinical practice.<sup>1</sup> Guideline-adherent AF treatment has been associated with better outcomes in comparison with guideline nonadherent strategies,<sup>2</sup> but adherence to AF guidelines is often suboptimal<sup>3-5</sup> for a variety of reasons that can be broadly categorized to patient-, physician-, and health-care system-related factors. In addition, since evidence-based clinical practice guidelines pertaining to a specific disease (or condition) are as good as the evidence supporting them, guidelines are regularly updated to include advances from the respective field.

Knowledge about the disease and available therapies as well as understanding of the treatment goals are important determinants of successful treatment and improved patient outcomes. Certain knowledge gaps have been identified among patients with AF,<sup>6</sup> physicians, and caregivers,<sup>7</sup> thus highlighting the opportunities for improvement using targeted educational interventions to increase adherence to medication and facilitate the implementation of AF guidelines in clinical practice and shared informed treatment decision-making.

A well-educated, competent physician is the essential link in the chain of integrated AF management. Recent European Society of Cardiology (ESC) / European Heart Rhythm Association (EHRA) international educational needs assessment, which was conducted among actively practicing cardiologists, general / family practitioners, and neurologists with at least 5% of patients with

AF in their caseload, provided important insights into major knowledge gaps and system barriers to guideline implementation among physicians treating patients with AF in 6 European countries (France, Germany, Italy, Poland, Spain, and the United Kingdom).<sup>8</sup> Not surprisingly, the gaps in knowledge regarding AF diagnosis and classification, as well as the choice between rate and rhythm control strategies (especially AF ablation) were more prevalent among noncardiologists, as compared with cardiologists.<sup>8</sup> The former were also less skilled in the assessment of stroke risk using the CHA<sub>2</sub>DS<sub>2</sub>-VASc score, whereas the bleeding risk assessment was challenging for as many as 32% of cardiologists, 60% of neurologists, and 74% of general / family practitioners.

In this issue of the *Polish Archives of Internal Medicine* (*Pol Arch Intern Med*), Farkowski et al<sup>9</sup> analyzed country-specific knowledge gaps and system barriers to AF guideline implementation among Polish cardiologists, family practitioners, and neurologists (n = 90) comprising 16% of the sample included in the ESC / EHRA assessment study. Whereas the prevalence of knowledge gaps among Polish physicians was broadly similar to that among their colleagues from other countries, this study revealed that important system-related barriers to AF guideline implementation in terms of suboptimal collaboration between specialists and general / family practitioners, as well as suboptimal quality of referrals or reports observed in the main study were even more pronounced in Poland. In addition, Polish physicians reported a great need for better access to long-term heart rhythm monitoring including insertable cardiac monitors. Altogether, these findings provide a solid background for the development

## Correspondence to:

Tatjana S. Potpara, MD, PhD,  
School of Medicine, Belgrade  
University, dr Subotica 13,  
11 000 Belgrade, Serbia,  
phone: +381 11 3616319,  
email: tatjana.potpara@med.bg.ac.rs

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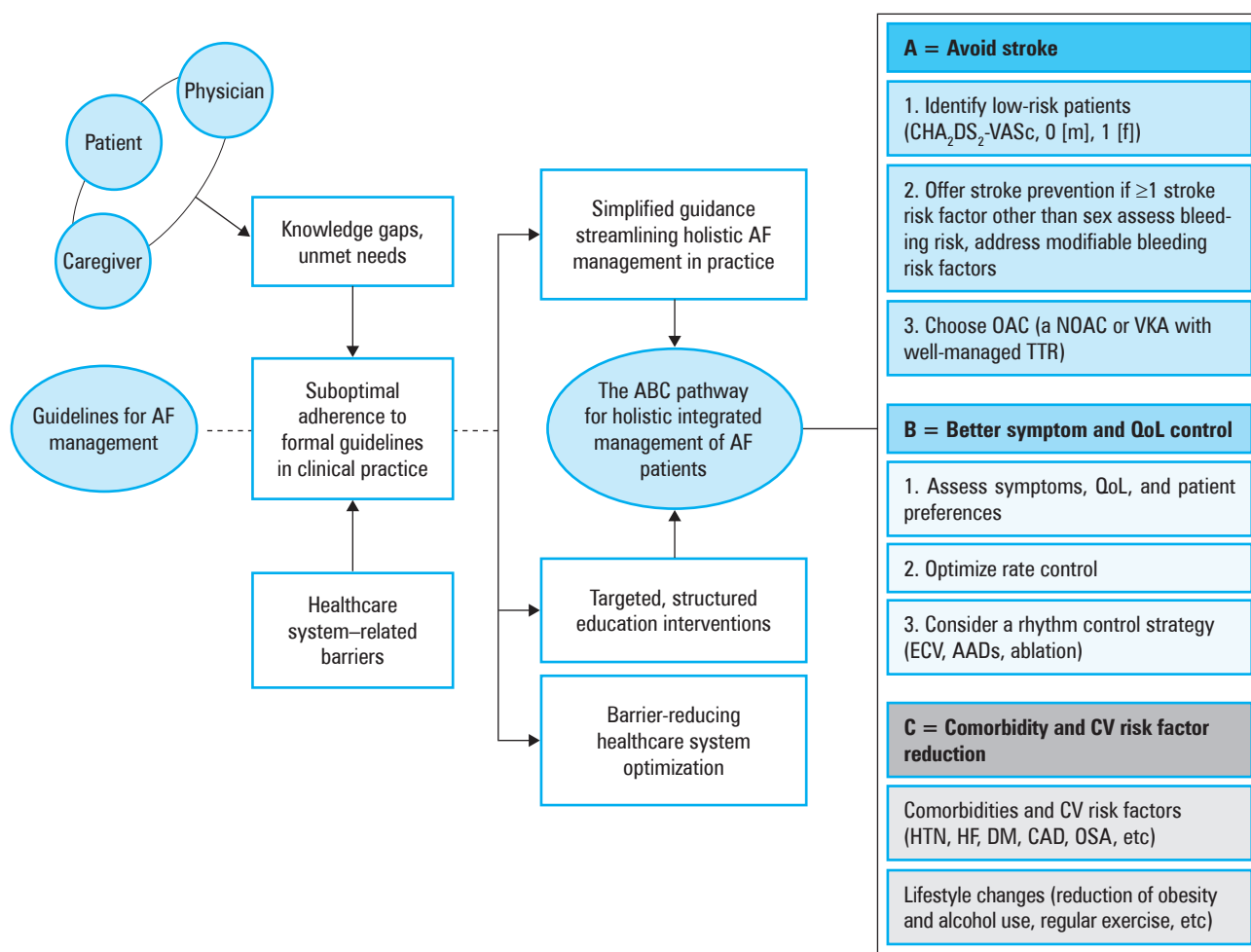
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**FIGURE 1** Holistic management of patients with atrial fibrillation in clinical practice

Abbreviations: AADs, antiarrhythmic drugs; AF, atrial fibrillation; CAD, coronary artery disease; CV, cardiovascular; DM, diabetes mellitus; ECV, electrical cardioversion; f, female; HF, heart failure; HTN, hypertension; m, male; OAC, oral anticoagulant; OSA, obstructive sleep apnea; QoL, quality of life; TTR, time in therapeutic range

of structured educational programs and advocacy efforts that would facilitate optimal management of patients with AF.

An important aspect of the management of patients with AF, namely, the assessment of the bleeding risk, requires particular attention, since it may profoundly affect decisions regarding stroke prevention, and was identified as a major knowledge gap. The HAS-BLED score (Hypertension, Abnormal renal/liver function, Stroke, Bleeding history or predisposition, Labile International Normalized Ratio, Elderly [ $>65$  years of age], Drugs/alcohol concomitantly) is validated as a formal bleeding risk assessment tool in patients on oral anticoagulant (OAC) therapy.<sup>10</sup> The score combines modifiable and nonmodifiable bleeding risk factors, and patients with a HAS-BLED score of at least 3 are at an increased risk of bleeding. However, no HAS-BLED score value itself should prohibit the use of OAC in patients with AF at an increased risk of stroke. Instead, the attention to modifiable bleeding risk factors should be made at every patient visit, whereas the appreciation of important interaction(s) between modifiable

and nonmodifiable risk factors would properly flag-up patients who should be scheduled for an earlier follow-up visit and/or more frequently reviewed.<sup>11</sup>

To prevent inappropriate nonuse of OAC therapy in patients with AF at risk of stroke potentially resulting from the misuse of the HAS-BLED or other bleeding risk scores, the 2016 ESC guidelines on AF management recommended a modifiable bleeding risk factors-based approach in preference to the formal bleeding risk assessment using, for example, the HAS-BLED score.<sup>12</sup> However, bleeding risk assessment based solely on the modifiable bleeding risk factors has been subsequently shown to be inferior to the formal bleeding risk assessment using a bleeding risk score (likely because the latter approach also encountered the interaction between modifiable and nonmodifiable bleeding risk factors),<sup>13</sup> and a systematic review commissioned by the Patient-Centered Outcomes Research Institute (PCORI) on the comparative diagnostic accuracy and impact of available clinical and imaging stroke and bleeding risk assessment

tools on clinical decision making (38 studies addressing bleeding risk prediction) concluded that the HAS-BLED score had the best evidence for predicting bleeding risk (with a moderate strength of evidence).<sup>14</sup> Importantly, bleeding risk of an individual patient with AF is not static and should be regularly reassessed.<sup>13</sup>

Recently, the holistic approach to management of patients with AF has been elegantly summarized into the simple ABC pathway (FIGURE 1) which has been associated with improved patient outcomes in multiple cohorts.<sup>15,16</sup> Streamlining the essential aspects of integrated management of patients with AF into a simple pathway as easy as the ABC can facilitate guidelines implementation and optimal care for patients with AF at different health-care levels. Although large parts of Europe (eg, east and north Europe, Balkan countries) were not covered by the ESC/EHRA needs assessment study, the concept of identifying major knowledge gaps and system barriers that should be then addressed by targeted educational and advocacy efforts based on this kind of an evidence-based holistic AF management pathway should be embraced globally and applied locally, fitting a particular health-care system and community.

## ARTICLE INFORMATION

**DISCLAIMER** The opinions expressed by the author are not necessarily those of the journal editors, Polish Society of Internal Medicine, or publisher.

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