

EP News: Quality Improvement and Outcomes

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AF center of excellence success: The importance of building a strong electronic foundation

Atrial fibrillation (AF) is increasing in age-adjusted incidence and global prevalence, and it is associated with a number of adverse clinical and fiscal outcomes (Chugh et al, *Circulation* 2014;129:837, PMID 24345399). While treatment advances have improved clinical outcomes, existing AF care delivery processes typically are fragmented and disconnected. This lack of coordination frequently limits the achievement of high-quality, guideline-directed clinical outcomes (Deshmukh et al, *Circulation* 2013;128:2104, PMID 24061087).

Aiming to address prevailing care delivery gaps, the Heart Rhythm Society initiated processes to provide input to clinicians and institutions on how to design an AF center of excellence (CoE) as a tool to advance quality AF care delivery. The premise underlying the motivation for creating an AF CoE is the belief that patient-centric, multidisciplinary, integrated teams providing coordinated, systems-based, guideline-directed AF care have the potential to generate a salutary effect on AF outcomes. The rationale for, and information on, the steps needed to establish an AF CoE were outlined in a recent Heart Rhythm Society document (Piccini et al, *Heart Rhythm* 2020;17:1804, PMID 32387248).

Developing effective AF CoEs requires a foundation of integrated clinical, administrative, electronic health record (EHR) and information technology (IT) teams. In this article, we focus on the requisite introductory steps necessary to link EHR capabilities to COE initiatives in order to track data and improve current outcomes using as our acronym “VAULT TO TOP.”

1. **Vision:** To ensure programmatic alignment, the clinical, administrative, and EHR teams should strongly consider creating a vision statement to guide future endeavors.
2. **Appropriate scale—prioritization:** While there are many important clinical needs (eg, risk modification and thromboembolic risk reduction), one cannot “boil the ocean.” When introducing new programs, organizations should select 1 or a very limited number of initiatives to ensure focus and avoid spreading limited resources too thin. New opportunities can be added subsequently after the implementation of the initial choice(s).
3. **Understand EHR technical roles:** Most EHR/IT technical teams characteristically include multiple participants—IT en-

gineers, who build and connect hardware and software; data resource analysts, who input and extract data; and business intelligence experts, who analyze the information. All must be included and roles defined to ensure that clinicians and administrative leaders have access to relevant results.

4. **List components tracked:** When choosing quality outcomes to be tracked, clinician and administrative leaders should collaborate and assess both clinical and economic results. Positive financial sequelae will often result in the provision of additional resources to advance clinical initiatives.
5. **Tag champions:** When possible, hire a dedicated AF CoE coordinator, who can regularly interface with the chosen clinical (physician, allied professional, and nurse), EHR, and administration leads, to ensure alignment and address operational and clinical concerns as they manifest.
6. **Tracking outcomes:** Using agreed-upon documentation methods (eg, EHR “smart phrases” and discrete data fields) and positioning data in a consistent location in the EHR is mandatory to facilitate easy access to accurate information and inform decision making. Electronic “dashboards” with relevant clinical and, in some cases, financial information tracked over time and by facility and provider can be useful.
7. **Outside comparison—metric generation:** When selecting a prioritized initiative, the baseline performance level must be analyzed to ensure the existence of a clinical deficiency. After confirmation of the deficiency, the team must select the level of achievement desired and the timeline over which it can be reached. In most circumstances, organizations should emulate a “best-in-class” group (eg, registry participant high end performers and best outcome performers determined by a literature review). The selected and recommended goals must be agreed upon by all the participant stakeholders.
8. **Take score:** Since most health care systems include many institutions, ultimately all relevant parties should be included. Outcomes must therefore be assessed at several levels (ie, system, institution, division, and individual) so that broad-based excellence is achieved.
9. **Open book:** Electronically based educational programs readily available to patients, caregivers, staff, and referring clinicians are important to ensure universal access and facilitate shared decision-making processes.
10. **Progress:** After initial successes, a larger net can be cast, extending EHR, administrative, and clinical capabilities in order to continuously innovate and seek excellence in a variety of clinical initiatives.

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“By failing to prepare, you are preparing to fail.” Benjamin Franklin