KEY TAKEAWAYS

The ACC’s Heart House Roundtable, Ongoing Dilemmas With Surveillance and Diagnosis of Atrial Fibrillation (AFib) identified the following 11 key takeaways:

1. There is a need for clinician advocacy efforts regarding compensation for reading and analyzing monitoring outputs. The yield from consumer grade monitoring devices still requires expert over-reading to allow the highest specificity in detection, and clinicians are currently not reimbursed for this service. Clinicians are still responsible for the burden of final interpretation and initiation of medical therapy from the ever-growing number of monitoring outputs. New reimbursement models may need to be considered such as “subscription services” that provide oversight of monitoring output. Disparities in patient access to monitoring and follow-on care need to be limited as much as possible.

2. Improved artificial intelligence (AI) algorithms for monitoring are needed given the explosion of monitoring oversight and subsequent “inbox fatigue.”

3. There is a need for clinician advocacy efforts regarding compensation for reading and analyzing monitoring outputs. The yield from consumer grade monitoring devices still requires expert over-reading to allow the highest specificity in detection, and clinicians are currently not reimbursed for this service. Clinicians are still responsible for the burden of final interpretation and initiation of medical therapy from the ever-growing number of monitoring outputs. New reimbursement models may need to be considered such as “subscription services” that provide oversight of monitoring output. Disparities in patient access to monitoring and follow-on care need to be limited as much as possible.

4. Improved artificial intelligence (AI) algorithms for monitoring are needed given the explosion of monitoring oversight and subsequent “inbox fatigue.”

5. Laws helping to clarify and define the liability to clinicians who recommend improved patient surveillance through monitoring need to be established.

STANDARDIZATION OF POST-STROKE MONITORING

An evidence- and consensus-driven standardized “clinical decision pathway” approach is needed for AFib monitoring of patients following cryptogenic stroke. Currently there exists wide variability in practice among institutions and clinicians in cardiac monitoring after stroke. Guidance based on the best available evidence is needed to provide specific recommendations where possible. Algorithms should be developed that tailor monitoring for patient’s underlying risk of identifying a clinically important cardiac issue and likelihood of informing the management and prognosis for recurrent stroke. Clarification should be given regarding the treatment of AFib detected after a stroke (AFDAS) vs. AFib detected prior to a neurologic insult.

REGULATION, OVERSIGHT, AND EDUCATION OF MONITORING TECHNOLOGIES AND OUTPUTS

Specific guidance or “scripting” for clinicians to their patients is needed on the best way to integrate consumer grade monitoring devices into standard medical practice. This guidance should include recommendation both for and against which patients this technology would be beneficial. Further clarification should also be available regarding patients that would benefit from continuous consumer monitoring (watches) vs. point-in-time monitors (i.e. Kardia). Case vignettes could be utilized to communicate this information and could include clinical scenarios such as:

- Patients with history of AFib with vague symptoms
- Patients post-ablation off anticoagulation or considering stopping anticoagulation who would benefit from long term monitoring
- Patients who benefit from reassurance regarding their heart rhythm as means of reducing anxiety
- Patients with high co-pays or deductibles
- Patients with reduced access to medical care (economic or geographic barriers)
- Patients whose anxiety is amplified by continuous monitoring
- Patient who already are anticoagulated and have AFib
- Patients with frequent episodes of AFib
There needs to be a Cardiology-led public education campaign on the best way to wear and utilize consumer grade monitors. This could include a video that patients can watch discussing the best way to utilize their watch, smartphone, or Kardia for monitoring. It should also include how to access data, how to understand outputs from the device (i.e. “possible AFib”), and how to act on the results.

Improved guidance is needed on the best way to integrate medical grade monitoring devices into standard medical practice. Guidance would include identifying patients who should go straight to implantable monitors (e.g. dementia, post-stroke), understanding what outputs from consumer monitors require verification, which patients should be switched from a consumer monitor to a medical grade monitor, and when implantable monitors should be employed.

Clinical monitoring experts who see patients with heart rhythm disorders should be included and assist in the development of future monitoring technologies, including consumer grade devices in order to allow the greatest yield and utility from the output.

Current anticoagulation guidelines need to be updated to address new nuances and risks that have entered standard practice. This could include the use of a survey regarding actual anticoagulation practice patterns as a preliminary step. Guidelines should include a discussion regarding the risk of systemic embolism is driven more by an “atria-opathy” such that anticoagulation should be continued indefinitely in all AFib ablation patients with CHA$_2$DS$_2$-VASc score ≥ 2. Additionally, clarification is needed regarding subclinical AFib and if there is a similar threshold for anticoagulation and treatment in these patients compared to clinical AFib.

Consumer grade monitors may help improve patient engagement and entry into the medical system especially in those with reduced cardiovascular awareness. These technologies can be used as a bridge to developing patient-clinician relationships, or to reinforce clinical concerns to patients.

Outputs from consumer grade monitoring devices need to be better integrated into the medical system (i.e. standardized output from devices for integration into electronic medical record) as clinical decisions are made based on data from these devices. These outputs need to be tailored both for user-friendly patient reporting and for reporting into monitored clinical dashboards that may require clinic and physician action.

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