

Establishing an Atrial Fibrillation Clinic

From Concept to Reality

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Northwest Community Healthcare

- An integrated System of Care
- 489-bed acute care hospital serving Chicago's northwest suburbs since 1959
 - Four ICCs; 20 NCH Medical Group practice sites
 - More than 1000 physician medical staff
- NCH is a three-time designated magnet hospital
- Honored with many awards for quality, safety and best clinical outcomes



Excellence Starts Here

Vision for AFib Clinic

- ❖ Capture and manage AF lives in our community, improve access and enhance the care of the AF population at Northwest Community Healthcare
- ❖ Facilitate increasing wellness of the AF population, which has been directly correlated to reduction in readmission rates of cardiac patients along with decreased mortality
- ❖ Expedite growth of procedural volume and ancillary services: EP ablations, Sleep Lab, Cardiac Rehab, Weight Loss Clinic, Cardiac Devices, and Cardioversions.



Important Considerations

- ❖ Develop a comprehensive approach to managing patients with Afib that would provide access to appropriate and timely care (right patient, right time, right place)
- ❖ With the growth of our EP program we recognized that managing risk factors would positively impact outcomes
- ❖ Develop an AFib Clinic that would be an integral part of the Cardiac Service line and Center for Specialty Heart Care in our service area



Initial Steps

- American Heart Association Afib Boot Camp
- Site Visit with Moses Cone in Greensboro, NC
- Evaluating all aspects of establishing a clinic
 - ✓ Roles necessary for success (Physician Champion, Administrative Support, Coordinator, Quality)
 - ✓ Virtual or Brick and Mortar Clinic? Location.
- Establish business plan that included downstream revenue opportunities
- Robust communication with the executive team and cardiologists



Available Resources

- Ability to immediately access existing programs for referrals:
 - ✓ Cardiac Rehabilitation
 - ✓ Sleep Specialist and Sleep Lab for treatment of OSA
 - ✓ Weight Loss Clinic
- Existing off-site location 4 miles from main hospital
- Home to existing Heart Failure Clinic
- Offering additional resources (cardiac testing, cardiac MRI, radiology, lab, physician offices, ICC)



Marketing & Promotion



- Announcement on NCH Intranet
- Brochures developed and distributed
- Attendance at staff meetings throughout organization
- Attendance at ED Department Physician/Leadership meeting
- Meeting with discharge planners throughout NCH
- Communication with hospitalists group
- Training with Central Scheduling

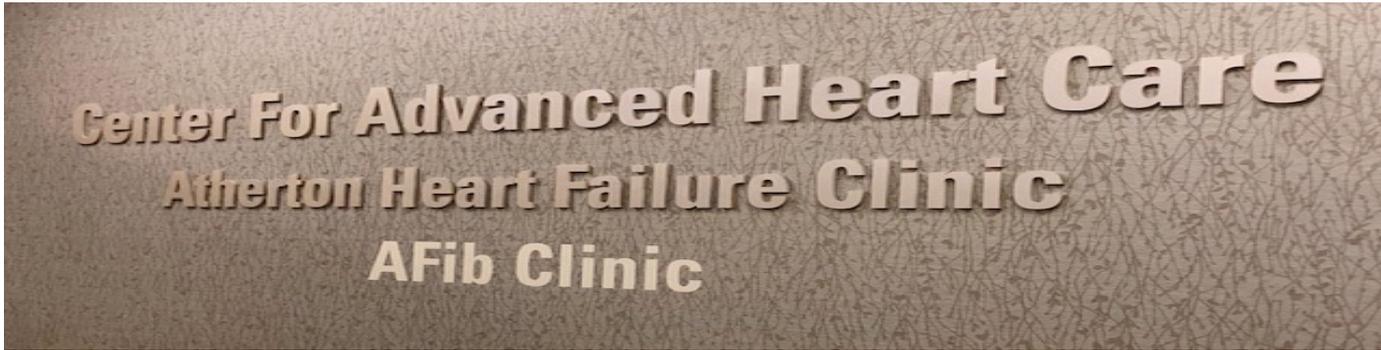


Role of the AFib Coordinator

- ❖ Serves as main contact for Afib Clinic and creates organizational processes to coordinate care of AFib patients
- ❖ Collaborates with all hospital department personnel, care coordinators, and providers who are referral sources for the clinic
- ❖ Integrates inpatient and outpatient care by coordinating seamless transition for patients in need of follow up care upon hospital or ED discharge
- ❖ Serves as liaison for cardiology office personnel in directing urgent patients to the clinic
- ❖ Oversees scheduling and staffing at the clinic
- ❖ Performs data abstraction and reporting of the GWTG-AF quality database
- ❖ Communicates performance to executive director and cardiologists
- ❖ Develops and promotes AFib quality initiatives based on performance



NCH Atrial Fibrillation Clinic, Established October 1, 2017



- 4 Exam Rooms, fully equipped
- Integrated EMR, EKG systems
- Staff work room with computers
- Conference Room within Clinic
- Central Registration Area
- Nearby Resources



AFib Clinic Details

Staffing

- 1 APP for each clinic (PA or NP)
- Daily staffing with 2 RNs and 1 MA for both clinics
- Clinical Dietician available daily
- All registration done by Central Registration

Scheduling

- Scheduled in Epic, Emmi Afib education also applied
- Scheduled by Central Scheduling, 30 minute appointments
- RNs in hospital call for appointments prior to DC
- Recently expanded to 3 full days per week (M, W, Fr)
- No order/referral required – self referrals accepted

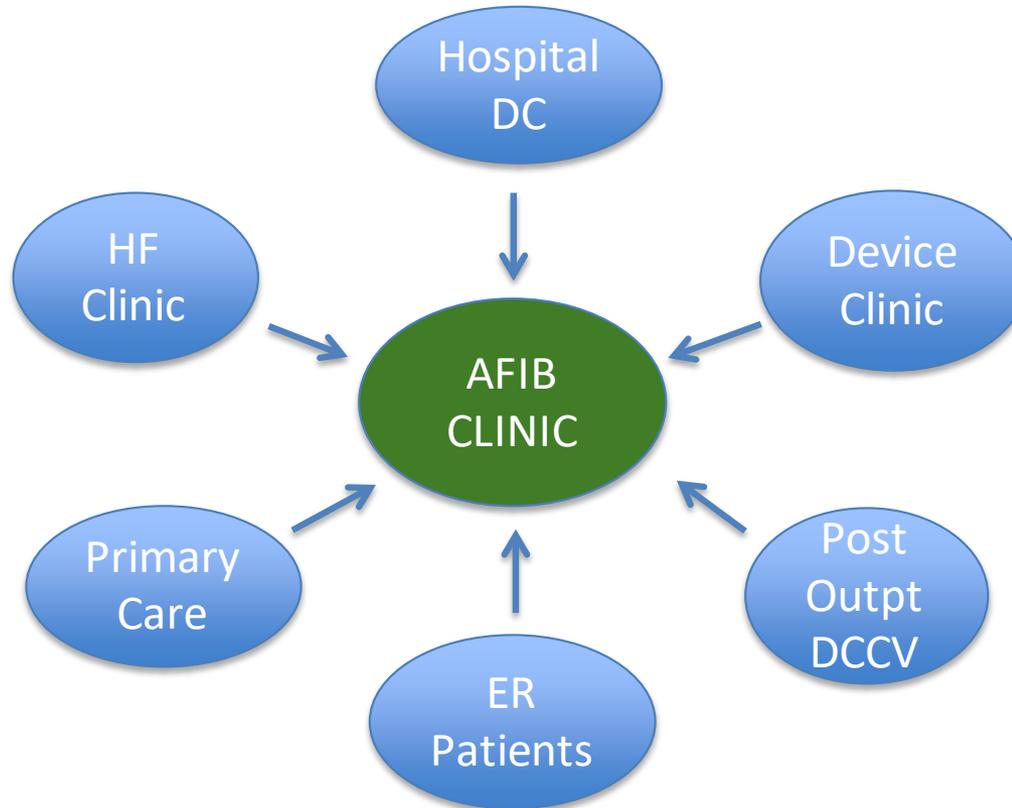


Other Services Offered



- IVP medications for stable patients requiring rate control, diuresis
- EKGs
- Lab draws
- Clinical dietician
- Educational seminars 6 times/yr
- Close follow-up appts available

Incoming Patient Stream



*Self Referrals also accepted

Clinical Practice Model

Goal: Use medically proven interventions to improve patient outcomes

Rate Control vs Rhythm Control

Blood Pressure Control

Heart Failure Identification and Treatment

ETOH Reduction Counseling

Initiate/Titrate Appropriate Medications:

- ✓ Anticoagulation
- ✓ Rate control

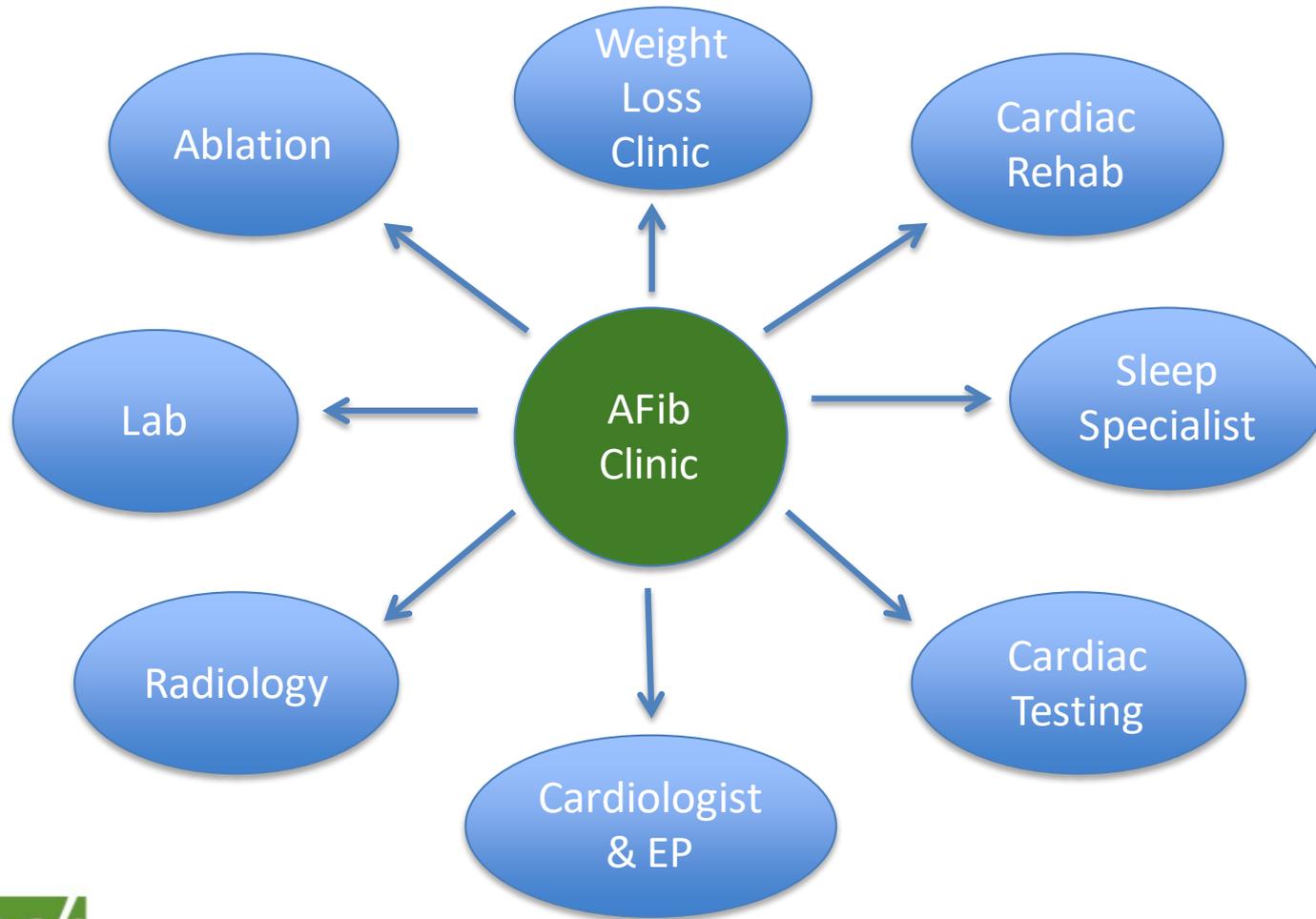
Appropriate Referrals:

- ✓ Cardiac Rehab
- ✓ Weight Loss
- ✓ Sleep Apnea

Clinical oversight by Dr. Onufer



Downstream Referrals



Impact on Patients

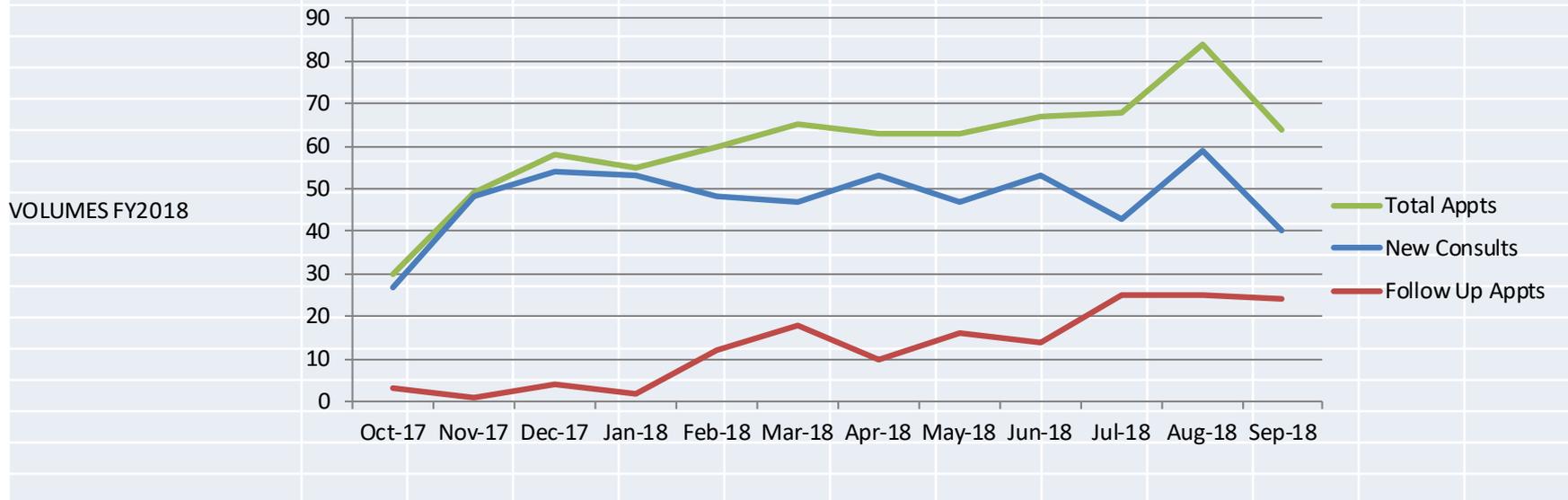
Quantitative and Qualitative



First Year Volumes

Month	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
AF Clinic Appointments	27	48	54	53	48	47	53	47	53	43	59	40
FollowUp Appointments	3	1	4	2	12	18	10	16	14	25	25	24
Total	30	49	58	55	60	65	63	63	67	68	84	64

YTD = 726



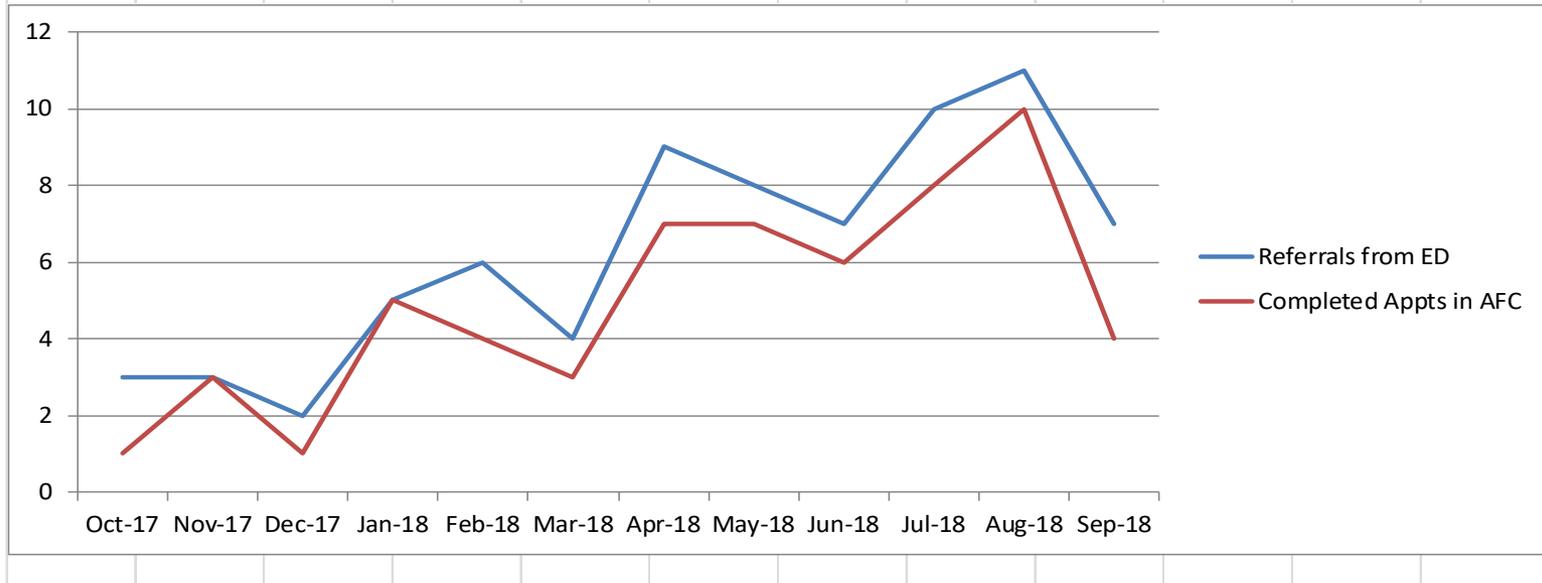
726 completed appointments in FY2018

426 completed appointments first 6 months FY2019



ED Referrals

Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
3	3	2	5	6	4	9	8	7	10	11	7
1	3	1	5	4	3	7	7	6	8	10	4
33%	100%	50%	100%	67%	75%	78%	88%	86%	80%	91%	57%
											YTD= 75%



75 patients from the ED referred to the AFib Clinic, avoiding admission to the hospital

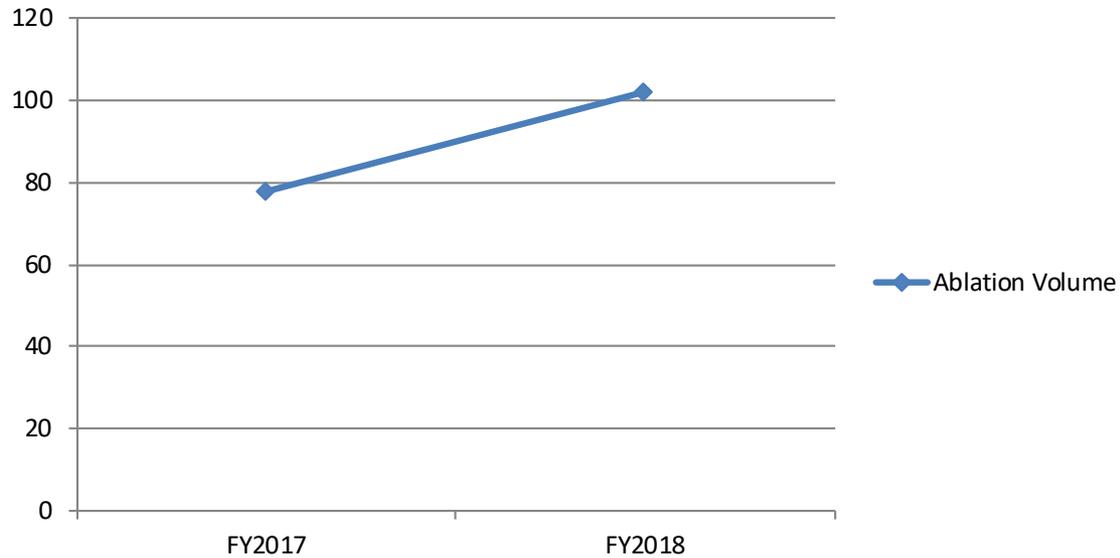
59 of 75 patients referred had completed visits at the AFib Clinic

48 referrals in the first 6 months of FY2019, average 80% completed appts



Ablation Trends

Ablation Volume



FY 2017 = 78

FY 2018 = 102

First 6 mo. FY 2019 = 73



Success Stories



58 y/o M, new onset AF w/ RVR, HTN, severe anxiety, difficult rate control. Seen at AFib Clinic, IVP Metoprolol given, referred on for cardiac testing, EP and OSA eval. Successful direct current cardioversion (DCCV) and antiarrhythmic drug therapy. Regular contact with EP MD via MyChart, using Kardia* App, actively losing weight and using CPAP for OSA. Afib free for over one month and reducing BB dosage. Report dramatic reduction in anxiety as well.



48 y/o M referred from ED with new AF (asymptomatic), EF 25%, started on AC, BB, ARB. DCCV with NSR but back in AF 8 days later. Multiple cardiac diagnostic tests. Afib ablation performed with 6 month follow up EF 50 – 55%. Pt. now running 3.5 miles several times per week.



72 y/o F, non-ischemic dilated cardiomyopathy with increasing episodes of symptomatic AF. Multiple visits to AF Clinic for AA adjustments & CHF treatment. Referred for cardioversion and subsequent AF ablation. Now has BiV ICD and with treatment and continued follow up with EP has significant improvement of chronic DOE. Has stated multiple times that she feels the program has “saved her life.”



Quality Initiatives

- GWTG-AF

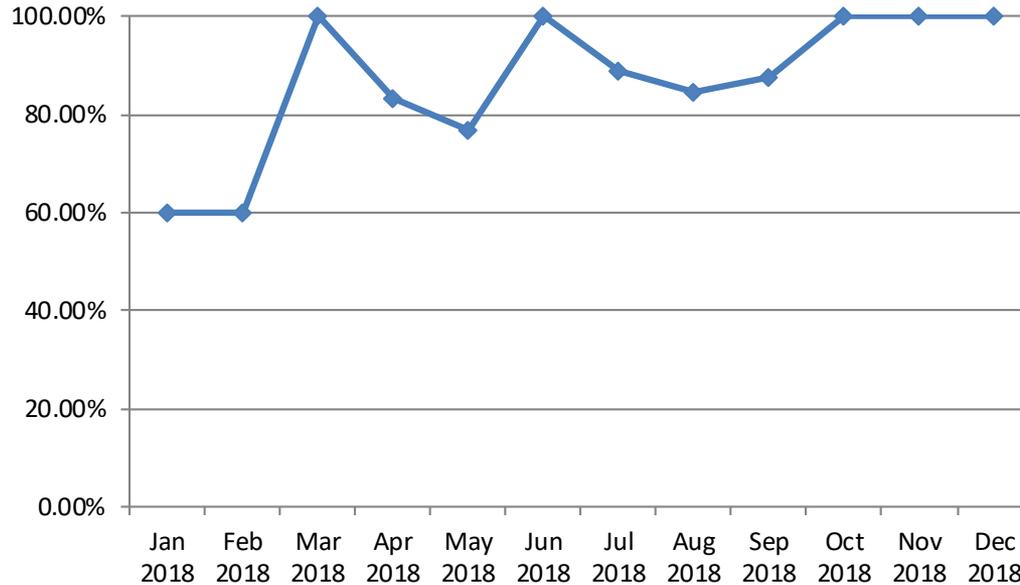


AHA GWTG - AF

- Initiated January 1, 2018
- 4 qualifiers to be entered in the database:
 - ✓ Primary diagnosis is AFib
 - ✓ New onset Afib
 - ✓ Afib with RVR
 - ✓ Afib ablation patients
- 675 patients with 710 encounters entered into GWTG AF first year
- 664 of these patients were seen by cardiology while in hospital



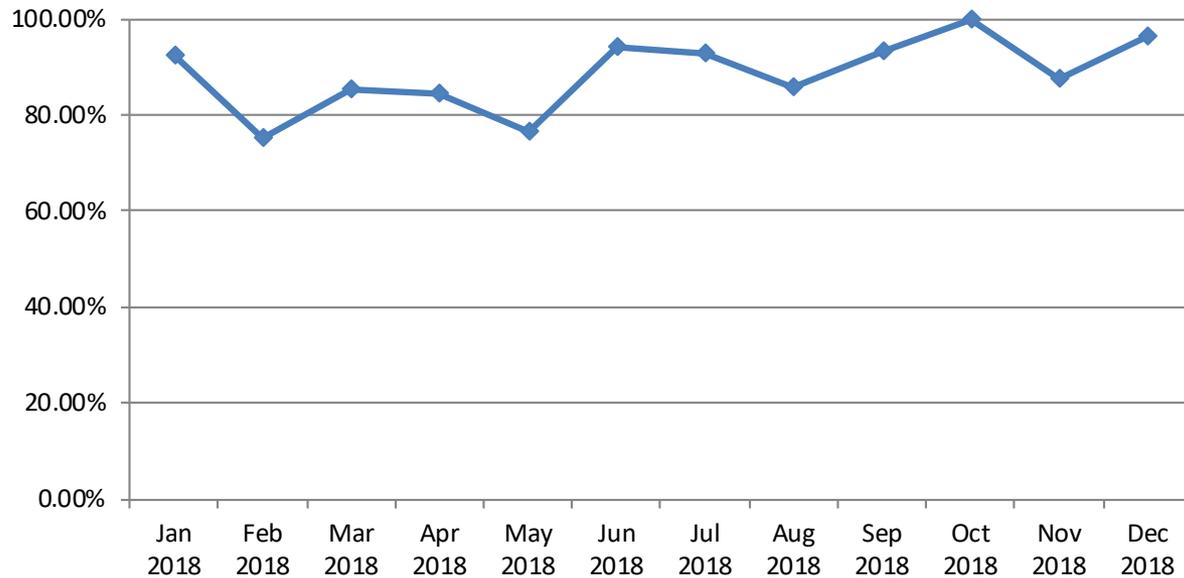
Improvement Through Data



PT/INR planned follow up documented prior to DC for Pts on warfarin



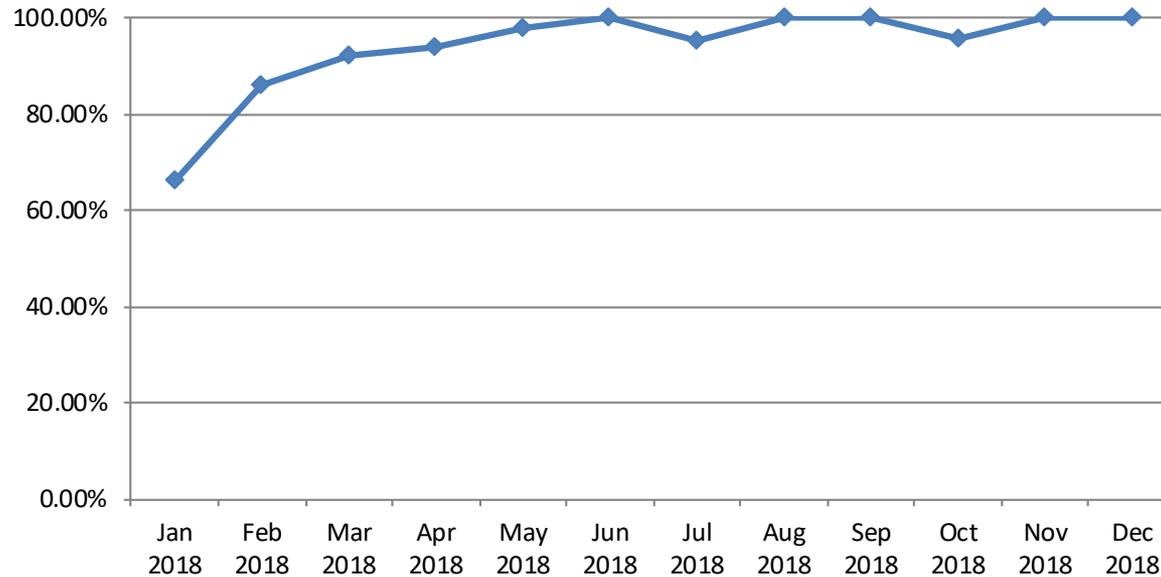
Improvement Through Data



Statin at DC in AF Pts with CAD, CVA/TIA, PVD, or Diabetes



Improvement Through Data



CHA2DS2-VASC risk score documented prior to discharge



Quality Initiatives

- CHA2DS2-VASc calculator created in EPIC with ability to document reasons for no AC
- Entry of CHADS score into Medical History for easy viewing for all providers

Complex Assessment Intake/Output IV Assessment Daily Cares/Safety CHADS-VASc Screenings

Accordian Expanded View All

ED to Hosp-Ad...
1/29/19
0800

CHADS-VASc	
Age	2
Gender	0
History of CHF	0
History of Hypertension	1
Previous Symptoms of TIA/ Stroke / Thromboembolism	0
History of Vascular Disease	0
History of Diabetes	0
CHADS-VASc Score	3

Medications/Contraindications/Exclusions

Medications Not Applicable

Contraindications/Exclusions Frequent falls/f...

Shortness of breath

Patient unable to walk 150 feet

Encounter for pre-operative cardiovascular clearance

CHF (congestive heart failure) (HCC)

Arrhythmia a-fib

A-fib (HCC) 1/2019 CHADS2 VASc = 3 (age, HTN) not on AC due to high falls risk

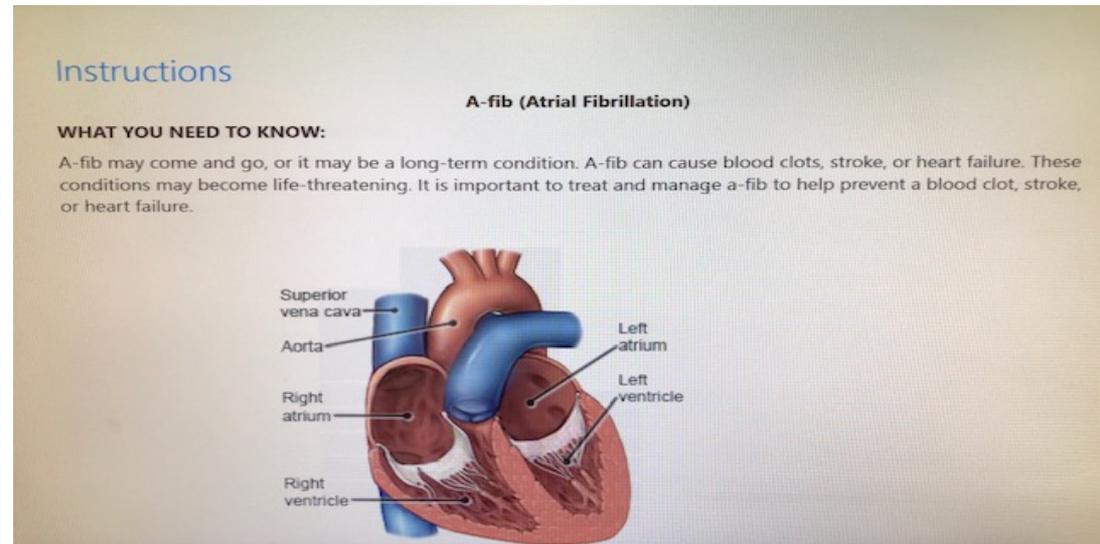
history

COLON SURGERY

THORACENTESIS US THORACENTESIS 4/12/2018 NCH ULTRASOUND

Quality Initiatives, cont...

- Best Practice Alerts (BPAs) alerting providers to order post DC INR for warfarin patients prior to closing record
- AFib education auto-embedded in after visit summary for every bedded patient. Printed and reviewed prior to DC.
- Issues addressed at monthly Cardiology Department meeting



Challenges

- Data
- Indigent Patients



Data Abstraction in the Age of EMRs

- ❖ It's best to consider what data you will need to abstract prior to the EMR build but this is rarely done or realized after it has been built
- ❖ Data can only be abstracted from discrete data fields and not from physician notes, making it difficult to serve both purposes of compliance and communication
- ❖ Some of the initiatives put in place require extra computer input, which slows down the provider and can cause increased frustration. This is especially true if no usable reports are generated.



Indigent Patients

- Although numbers are relatively small there are limited resources for this population
- AFib Clinic cannot serve as their primary source of care
- Difficulty in establishing an adequate transition to available county resources due to lengthy wait times to see cardiology providers
- Some fraction of this population may have issues with compliance, transportation, residency fears, etc... making situation more challenging



Future Endeavors

- Stroke Reduction
- QOL surveys
- Prepared for Wearables



Reducing AF Related Strokes

Benchmark Group	Time Period	Atrial Fib/Flutter	Total
My Hospital: Ischemic Stroke	2016	85 (23.4%)	363
My Hospital: Ischemic Stroke	2017	101 (27.7%)	364
My Hospital: Ischemic Stroke	2018	86 (23.1%)	372

May be too early to tell how these initiatives will impact stroke rates
NCH also participates in AHA GWTG-Stroke



Quality of Life Survey

- AF Effect on QualiTy of Life* survey from St. Jude Medical/Abbott
- Licensure required for use of AFEQT survey and will be given to all AFib ablation patients
- Will embed scores pre and 6 months post procedure into GWTG optional fields to enable reporting

Easy to use format with 20 questions on a seven point Likert scale

Takes about five minutes to complete

Evaluates Health Related Quality of Life (HRQoL) across three domains

Symptoms - Four questions specifically targeted to assess AF related symptoms

Daily Activities - Eight questions that evaluate daily function in AF patients

Treatment Concerns - Six questions that assess AF treatment concerns in patients



Prepared for Wearables!



- Millions of mobile devices already in use
- Patients now coming to us knowing they are in AFib
- Impact on providers is yet to be fully evaluated but the sheer scale may be very large
- Will having an AFib Clinic in place be part of the solution?



Key Takeaways

- ❖ A well organized plan is critical for success.
- ❖ Initial steps require involvement of multiple personnel and departments. Include everyone who may touch the initiative.
- ❖ Physician champion and administrative support are key ingredients. The project would not move forward without these elements.
- ❖ Data abstraction is required to understand where your strengths and weaknesses are and how to plan quality initiatives.
- ❖ Continuous communication with providers and departments is required to maintain volumes.



Questions

