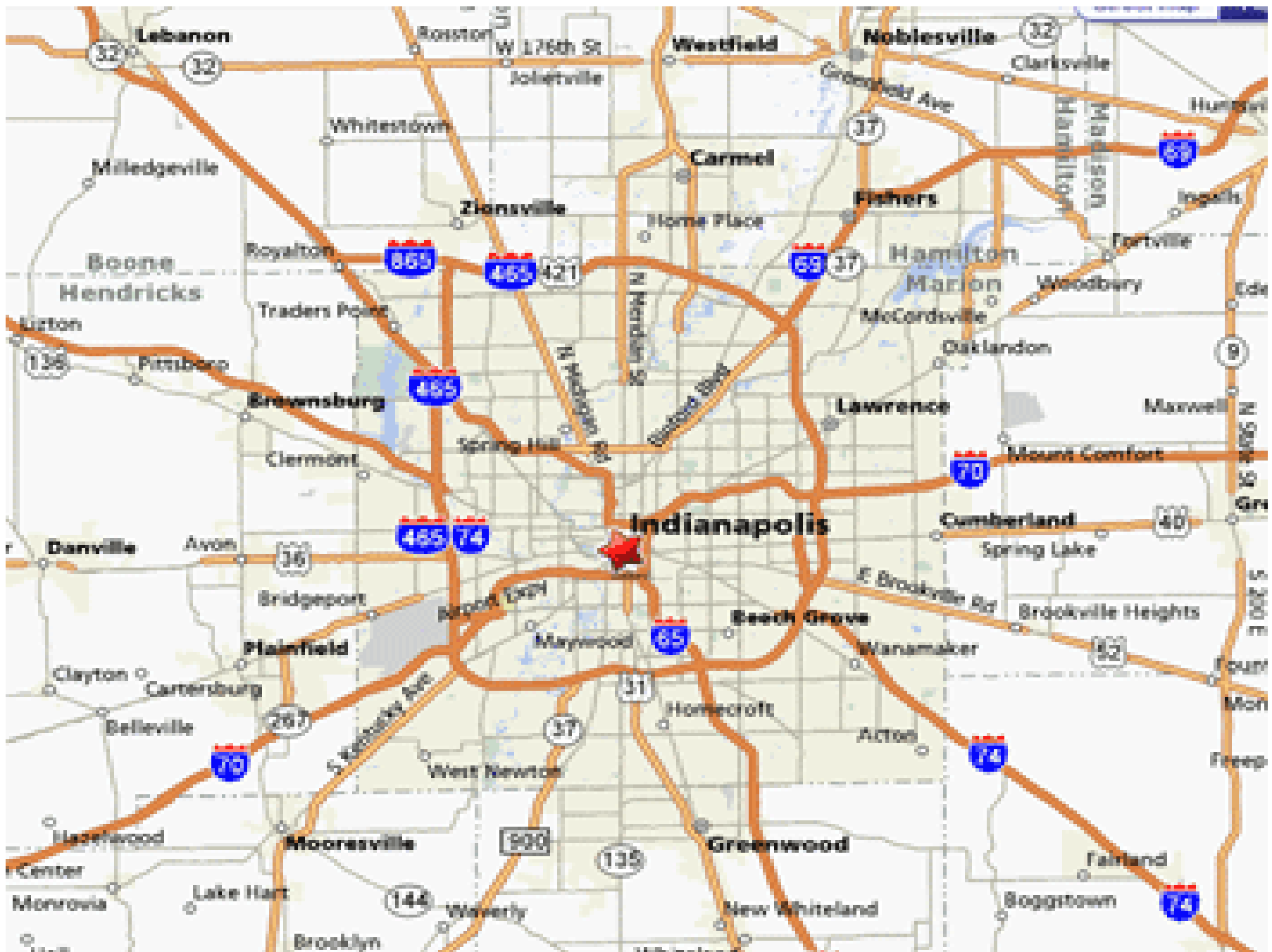


A Systematic Plan for Improving AV Fistula Rates

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PREVALENT PATIENTS, 2009

	Our Unit	Network	U.S.
# Patients	61	52	64
Average Age (years)	57	62	61
Females (%)	46	45	45
Race (%)			
Black	67	33	37
White	33	65	55
Other	0	1	1
Ethnicity (%)			
Non-Hispanic	97	96	83
Other	3	4	17
#1 Cause of ESRD	HTN	DM	DM
Nursing Home Patients (%)	16	19	14

NEW PATIENTS, 2009

	Our Unit	Network	U.S.
Pre-ESRD Nephrology Care (%)			
No	27	27	31
Yes, <6 months	27	21	13
Yes, 6-12 months	24	14	20
Yes, >12 months	20	21	24
Unknown	13	17	12
Average # of comorbid conditions	3.1	3.3	3.1
Access used at first outpatient dialysis (%)			
AV Fistula	14	14	14
AV Graft	0	3	3
Catheter	79	79	82
Other	7	5	1
AV Fistulae in place (%)	21	28	30

ACCESS INFORMATION ON PREVALENT PATIENTS, 2009

	Our Unit	Network	U.S.
Vascular Access Type <i>in Use</i> (%)			
AV Fistula	41	49	53
AV Graft	27	22	21
Catheter	32	29	25
AV Fistulae <i>in Place</i> (%)	43	58	61
Catheter Only >90 Days (%)	22	12	10

Challenges

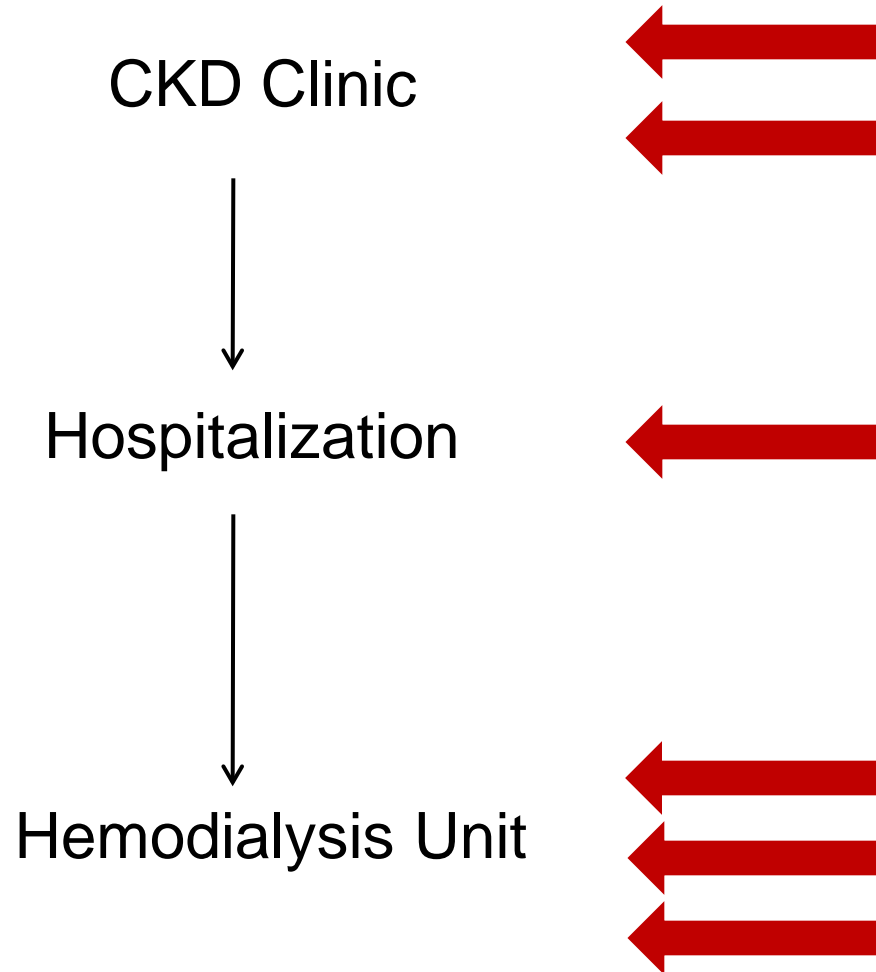
- Low rate of AV fistulas in new patients
- Low rate of AV fistula placement and use in patients over the long term
- High rate of catheters in patients over the long term

Vascular Access Fistula Improvement Initiative

- 5 Whys
- Quality Improvement Plan

1. **Why** is the facility AV Fistula rate low? Because most of our new patients are presenting with dialysis catheters.
2. **Why** are most patients presenting with dialysis catheters? Because most patients are presenting to the hospital in fulminant kidney failure and are being discharged without an AV fistula.
3. **Why** are patients being discharged without an AV fistula? Because AV fistulas are not being placed by surgeons during the hospitalizations
4. **Why** are the surgeons not placing AV fistulas during the hospitalization? Because AV fistula placement has not been made an urgent issue.
5. **Why** is AV fistula placement not considered urgent? Because nephrologists have not communicated the urgency of this issue to the vascular surgeons.

Quality Improvement Plan



CKD Clinic

AVF Referral

- Increased staff awareness
- Dedicated access nurse
 - assists with appointments
 - prospective database
- Early referrals for poorly maturing AVFs

CKD Clinic

CQI Project: Identifying Surgery Success Rates

- Retrospective study of all current patients
- Determine rates of successful AVF placement by surgeon
- Qualitative, not quantitative

Hospitalization

Educating Surgeons

- One-on-one meetings
- Communicating urgency
- Ensuring that AVF workup begins during hospitalization

Hemodialysis Unit

Tracking Dialysis Access Status

- Dedicated nurse
- Improved physician-nurse communication
- Monthly updates

Hemodialysis Unit

Expert Cannulation

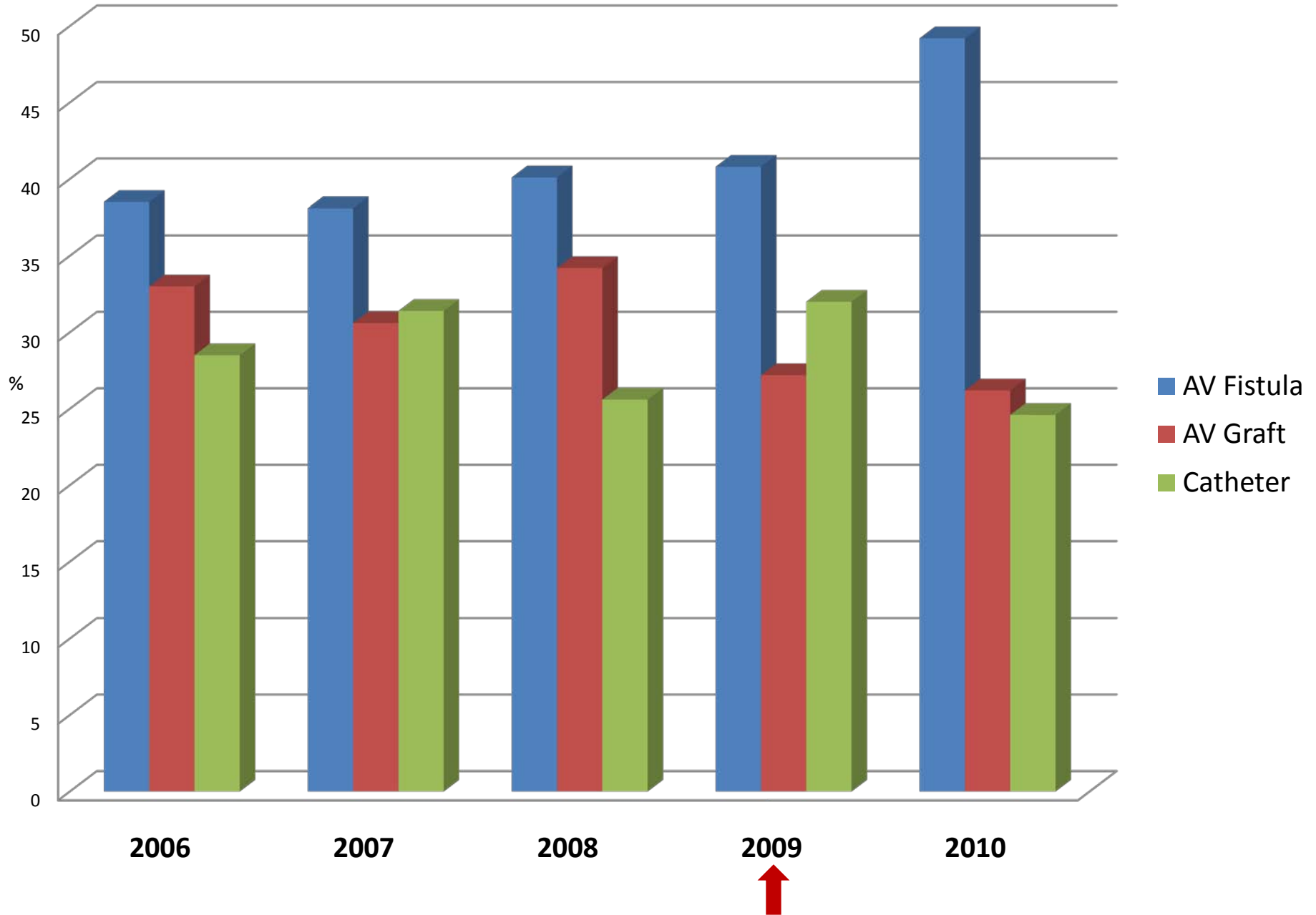
- Pre-identified cannulators
- Heightened awareness
- Communication on weekly basis
- Early referrals

Hemodialysis Unit

Physician Education

- Early Assessment
- Need for early referral

Trend in Access Types:2006-2010



Participants

- Matthew Dollins, MD
- Anupama Mohanram, MD
- Martin Anderson, MD
- Marie Stransky, RD