

# **USING PROCESS AND FORMATIVE EVALUATION TO GUIDE IMPLEMENTATION**

**Presenter:** Anju Sahay, PhD

**Co-Presenters:** Laura Damschroder, MS, MPH  
and Alexander S. Young, MD, MSHS

**Department of Veterans Affairs**

# **FUNDING**

**Veterans Affairs (VA)**

**Health Services Research & Development**

**Quality Enhancement Research Initiative**

**(QUERI) Program**

**Washington, DC**

# BACKGROUND

- ❑ In 1998 the VA started the QUERI Program
- ❑ There are 9 QUERI Centers for different health conditions
- ❑ Focus is to improve the quality of healthcare for veterans by implementing EBP into routine clinical practice
- ❑ Formative evaluation has been integrated into implementation to better understand how to improve quality of care

# Purpose of This Talk

- ❑ Discuss 3 implementation studies with focus on formative and process evaluations
- ❑ Each is an independent study being conducted by different QUERI Centers

# STUDY A

## **A Network of Providers: An Innovative Strategy for Implementation**

Anju Sahay, Paul Heidenreich  
And Cheryl Stetler

Chronic Heart Failure (CHF) QUERI

# Heart Failure (HF) Network

- In July 2006 CHF QUERI formed a social informal network called the **Heart Failure (HF) Network**
- Purpose to form an informal social network of VA providers interested in improving quality of care for HF patients
- Identified all TYPES of providers from ALL VA facilities and invited them to join HF Network
- Strong support from VA's Office of Patient Care Services

# Current Membership

- ❑ 510 VA Providers (members)
- ❑ 150 Facilities
- ❑ 1-13 Members per facility

# Major Network Activities

- Bi-monthly live meetings & conference calls
- Annual in-person meetings at a major Heart Failure conference
- Announcements about new VA and non-VA initiatives and updates
- Members present HF programs at their facilities focusing on barriers and facilitators
- Announcements about solicitations for funding for implementation related projects
- E-mail/web-based surveys

# Formative Evaluation

Multi-method approach:

- Web-based surveys completed by 115 members (32% response rate)
- Conducted phone interviews with 21 members belonging to:
  1. Non-Participating facilities
  2. Low-Participating facilities
  3. High-Participating facilities

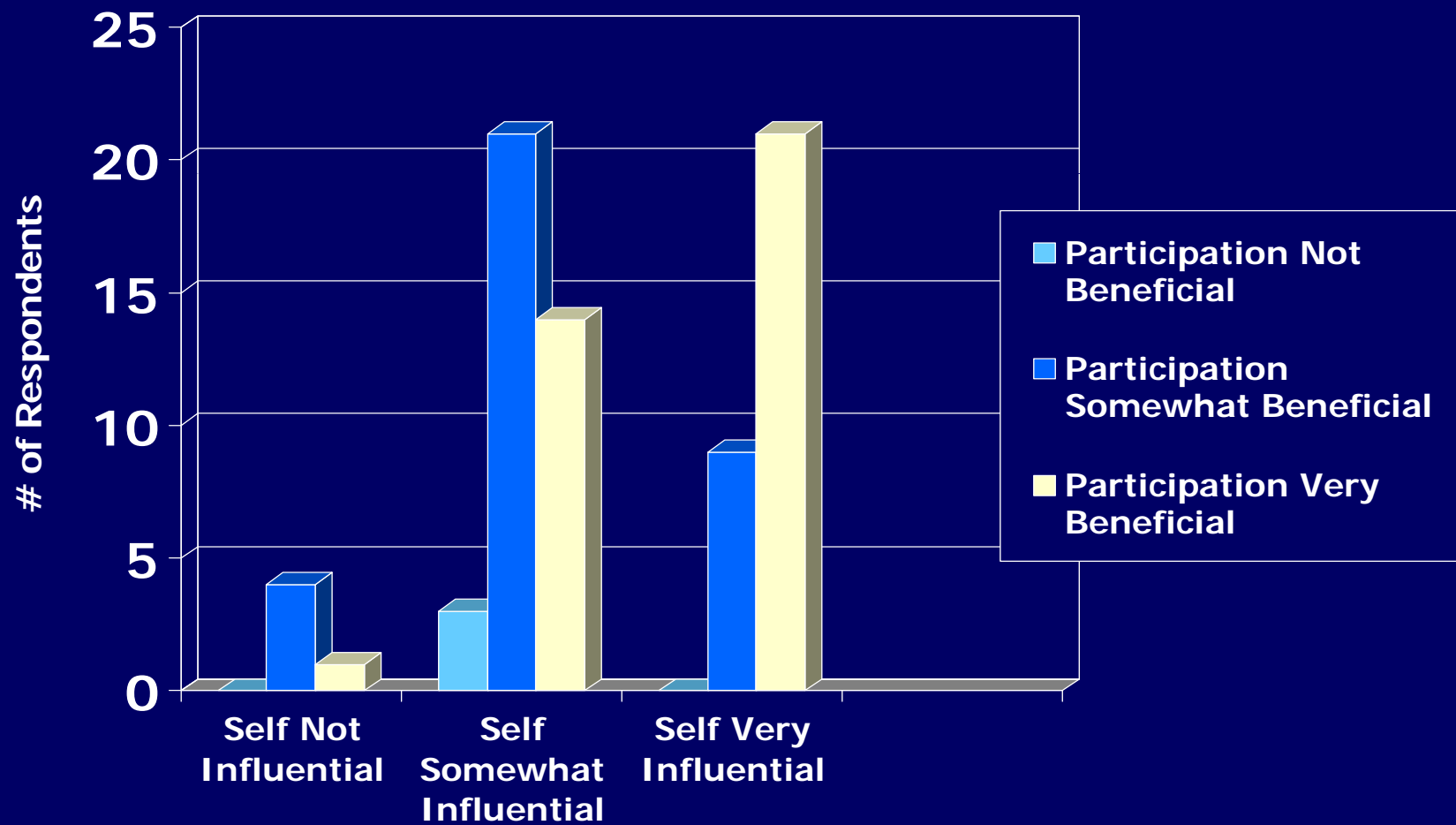
## Network Activities Helpful to Members

<b>Which of the following activities have been helpful to YOU?</b>	<b>PERCENT</b>
HF programs presented during the sessions	37
Learning about barriers and facilitators in setting up or running HF program	36
Announcements about funding opportunities	24
Discussion about implementing changes based on IHI's 5 Million Lives Campaign	37
Opportunity to collaborate with CHF QUERI	44
Opportunity to collaborate with other providers within the HF Network	39
Dissemination of effective interventions, including implementation of QI projects	35

## Influence of Participation in Network

<b>Overall, did participation in the sessions influence YOU in terms of the following-</b>	<b>Percent</b>
Help understand facilitators and barriers in setting up or running HF clinic/program	92
Help solve implementation-related problem at your facility	66
Validated your current practice in taking care of HF patients	91
Provide names of contacts from HF Network for networking and potential problem solving	91

# Benefit of Participation for Influential Members



## Conclusion: Value of Process and Formative Evaluation

- ❑ Input from HF Network members allows researchers to modify the intervention to make it successful
- ❑ Multi-method approach allows good understanding of data
- ❑ Help plan future quality improvement initiatives involving members as local opinion leaders

# STUDY B

## Diagnostic and Real-Time Evaluation in an Implementation Trial

Laura J. Damschroder, Jane Forman, Claire  
Robinson, Michele Heisler and Eve Kerr

Diabetes Mellitus (DM) QUERI

# Adherence & Intensification of Medications for Diabetes Patients with Hypertension (AIM Program)

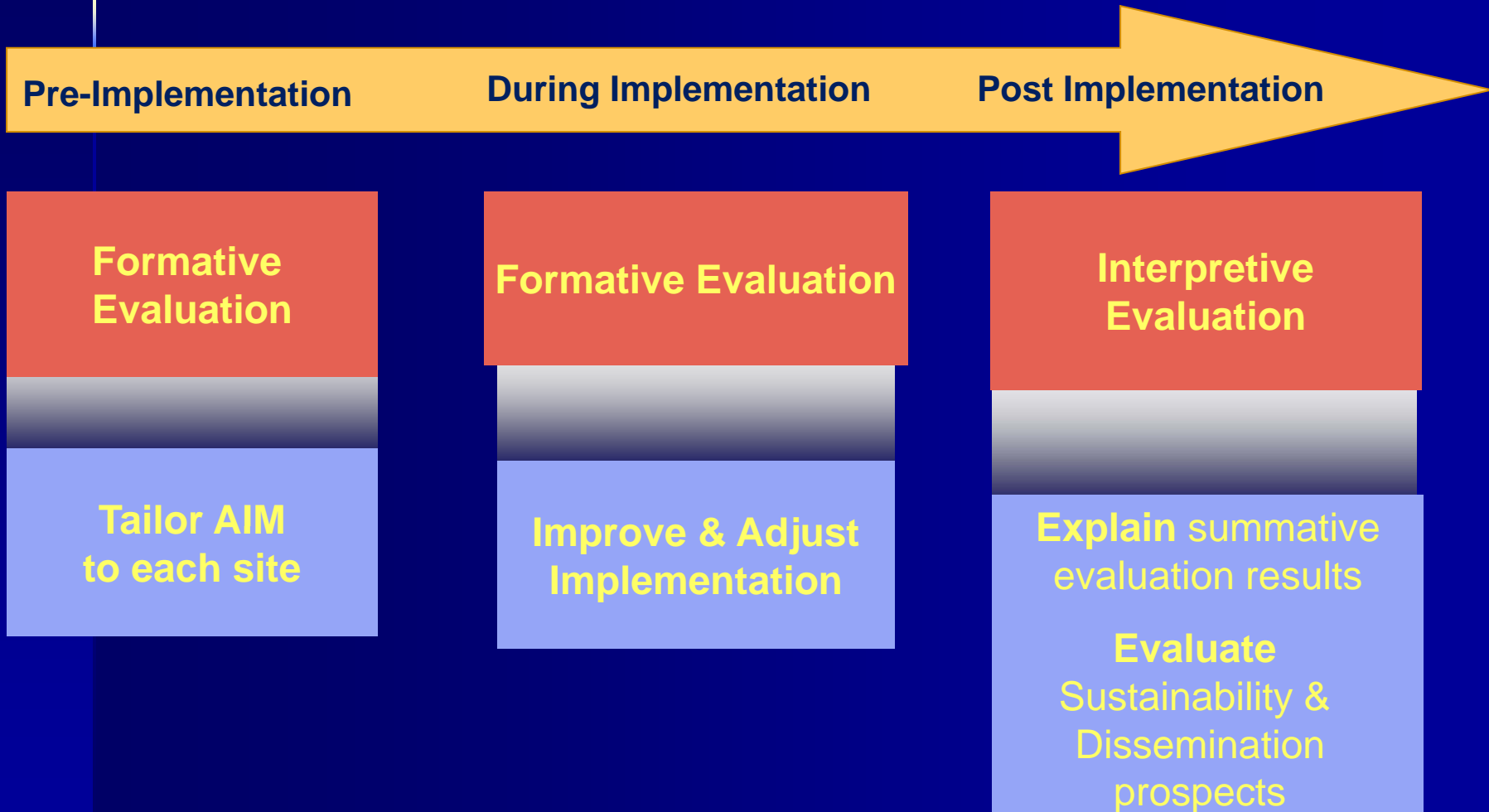
## ■ Objective

- Cost-effectively improve blood pressure treatment and control for hypertensive patients with diabetes

## ■ One year program

- Cluster randomized design
  - Provider teams and corresponding panels of patients were randomized to AIM or “usual care”
- Regional leadership funded 2 clinical pharmacists

# Formative Evaluation in this RCT



# Components of AIM

## ■ Essential Core Components

- Proactive outreach to eligible patients
- Use of motivational interviewing techniques with patients
- Authorized for BP medication management & adjustment
- Address barriers to adherence
- Computerized support tool

## ■ Adaptable Components

- Clinical or phone-based encounters
- Degree of integration into primary care teams
- Lipid and glycemic medication management

# Site Assessments were Systematic

- Systematically assess factors that influence implementation (e.g., leadership engagement, available resources)
- Identify potential barriers
- Tailored implementation strategies
- Tailor AIM adaptable components

# Data Sources

- Semi-structured interviews:

	Before	During	After Implementation
Clinical leaders	8	3	4
Providers	10	4	3
Case managers	8	3	4
Pharmacists	8	4	3

- Site visits

- Field notes
- Observation

- Weekly/Bi-weekly training/Q&A Webinars with AIM pharmacists

# Pre-Implementation: Assess Sites & Tailor AIM

Potential Barrier	→	Tailor AIM
Rules for obtaining blood pressure cuffs varied	→	Design a protocol unique for each site
Case managers concerned about overlap between patients being case managed and those targeted by AIM	→	<ul style="list-style-type: none"><li>• Pre-implementation meeting with case managers to address concerns</li><li>• Promote close on-going communications between AIM pharmacist and case managers</li></ul>
Providers not used to working with clinical pharmacists	→	<ul style="list-style-type: none"><li>• Pharmacist introduced to each provider</li><li>• Pharm participated in monthly staff meetings</li><li>• Co-sign providers on all med changes within the EMR</li></ul>

# During Implementation: Refinement & Progress

Barrier	→	Adjustment
Extremely slow software at one site	→	Developed alternative method to interface with the software
Inadequate space required pharmacist to negotiate for space on a daily basis	→	Unable to resolve. May help explain process or summative outcomes.
Motivational interviewing techniques were challenging to apply	→	Continued webinars where pharmacists shared their experiences and problem-solved with an MI expert

# Conclusions

- Systematic site assessments pre-implementation enabled appropriate tailoring of AIM
- Continued assessments allowed monitoring of implementation progress
  - And continued adjustments
- Post-implementation, the depth of available data available will provide valuable explanations of summative outcomes

# STUDY C

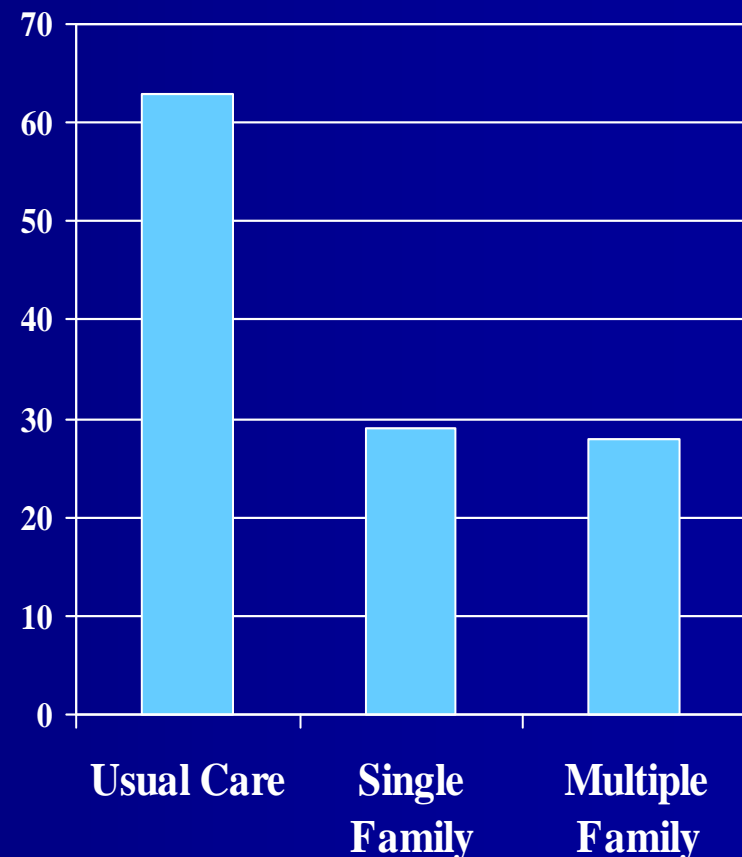
## **EQUIP: Implementing Family Services at Mental Health Clinics**

Alexander S. Young, Amy N. Cohen,  
Shirley Glynn, and Alison Hamilton

Mental Health QUERI  
VA HSR&D Research  
UCLA

# Evidence-Based Practice: Family Psychoeducation

- Average relapse rates across 11 RCTs (N = 895)
- Reduces relapse in schizophrenia & bipolar disorder
- Rarely used
  - offered at 0% of clinics in one survey



# EQUIP: Enhancing Quality of Care in Psychosis

- Randomized, controlled trial
  - 2001 - 2005
  - 2 specialty mental health clinics
  - MDs randomized to care model or usual care
  - 173 patients with schizophrenia
    - 70% had supportive family
    - 32% lived with family
- Care Model
  - assertive, coordinated care
  - improve medication management
  - improve family services

# Methods

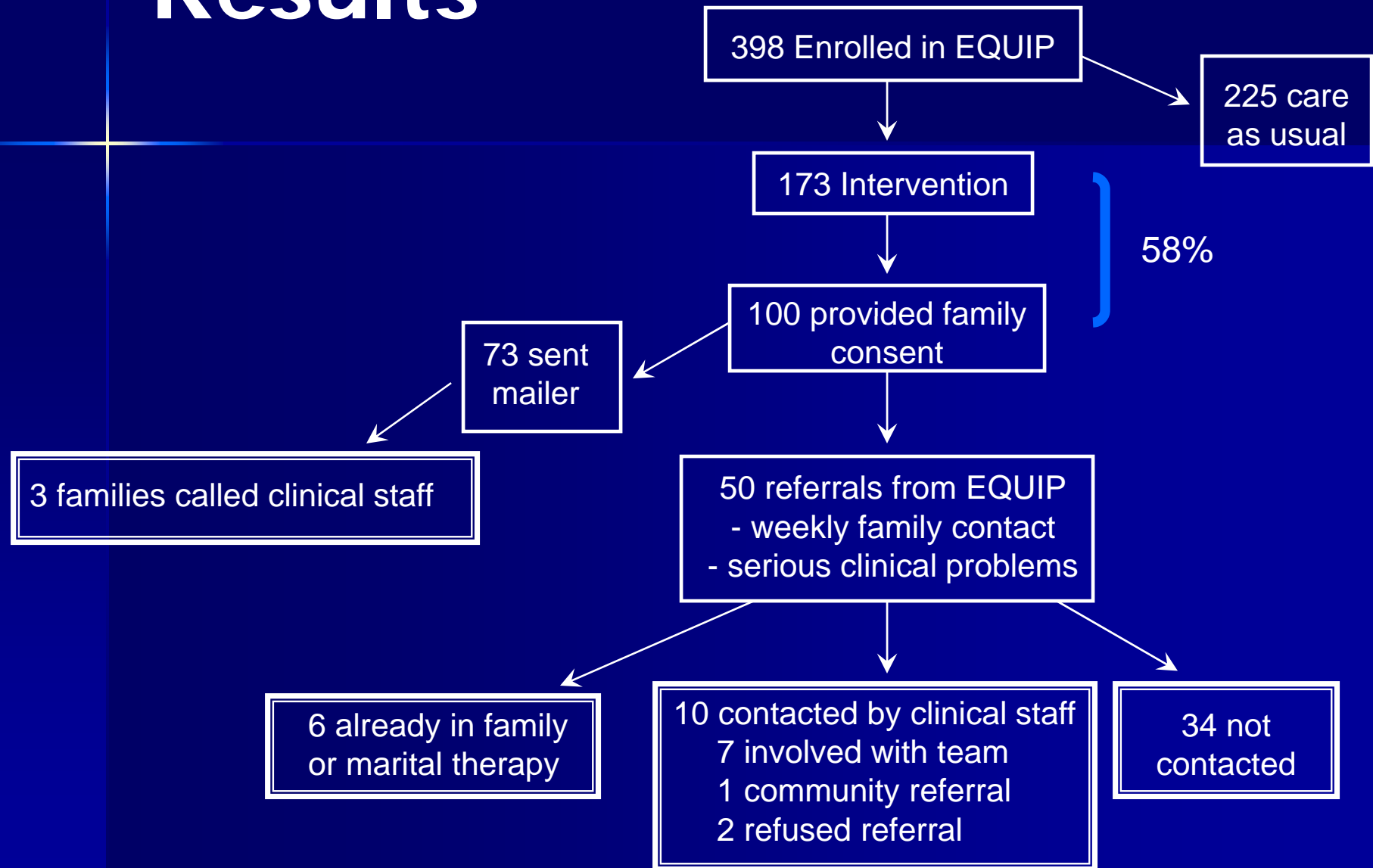
## ■ Intervention

- nurse asked patients for consent for family contact
- families were sent personalized mailer
- 4 nurses trained in family psychoeducation
- clinicians prompted to contact eligible families

## ■ Evaluation

- tracking logs by nurse
- surveys & semi-structured interviews of clinicians
  - Competency Assessment Instrument
  - Maslach Burnout Inventory
- surveys with patients

# Results



# Patient Barriers

“Would you like your family involved with care team in the future?”

Those who said “no” (n=113):

27% Privacy concerns

19% Family already over-burdened

16% Limited family contact

Those who said “yes” (n=14):

21% VA never offered

21% Need evening appointments

# Clinician Barriers

- Incorrect belief that most patients do not have family contact
- Concerns that family would be negative influence on patients
- Rarely use treatment guidelines
- 1/4 had high burnout
- 3/4 had low sense of personal accomplishment

# Conclusions

- **Families** did not respond to letter
  - responded better to calls
- **Patients** were concerned about privacy and burdening family
- **Clinicians** had misperception about family-patient contact and value of this evidence-based practice
- **Next Steps**
  - promote patients' control of care
  - educate patients regarding benefits of family involvement
  - reorganize services to be family-friendly

# CONTACTS

Study A: [anju.sahay@va.gov](mailto:anju.sahay@va.gov)

Study B: [laura.damschroder@va.gov](mailto:laura.damschroder@va.gov)

Study C: [alexander.young@va.gov](mailto:alexander.young@va.gov)

# Questions and Answers