

# DESIGNING INCENTIVES:

## The Impact of P4P on Smoking Interventions

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# Collaborators

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## Presentation summary

- > Background
- > Minnesota quitline collaboration
- > Clinic fax research questions and methodology
- > Clinic fax referral pilot findings
- > Statewide rollout



## Why this matters

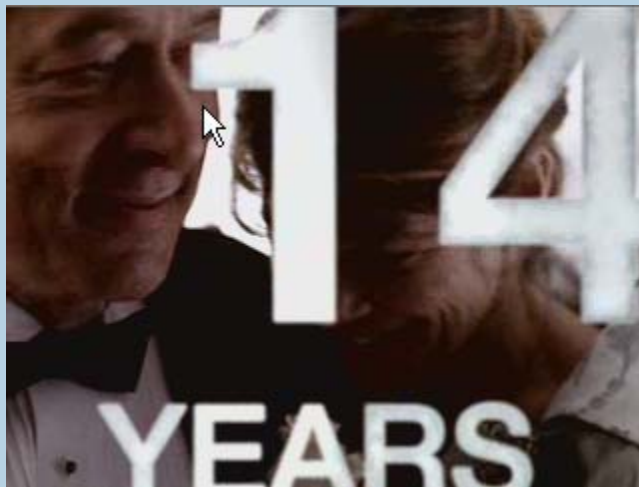
- > Tobacco use is the leading preventable cause of death
- > Tobacco use causes \$2 billion in health care costs in Minnesota each year
- > Current smokers have 16% higher health care costs

# Comprehensive approach to prevention



# The challenge

- > Use of telephone quitlines is low
- > Earlier recruitment done with media promotion
  - Advantages
  - Disadvantages



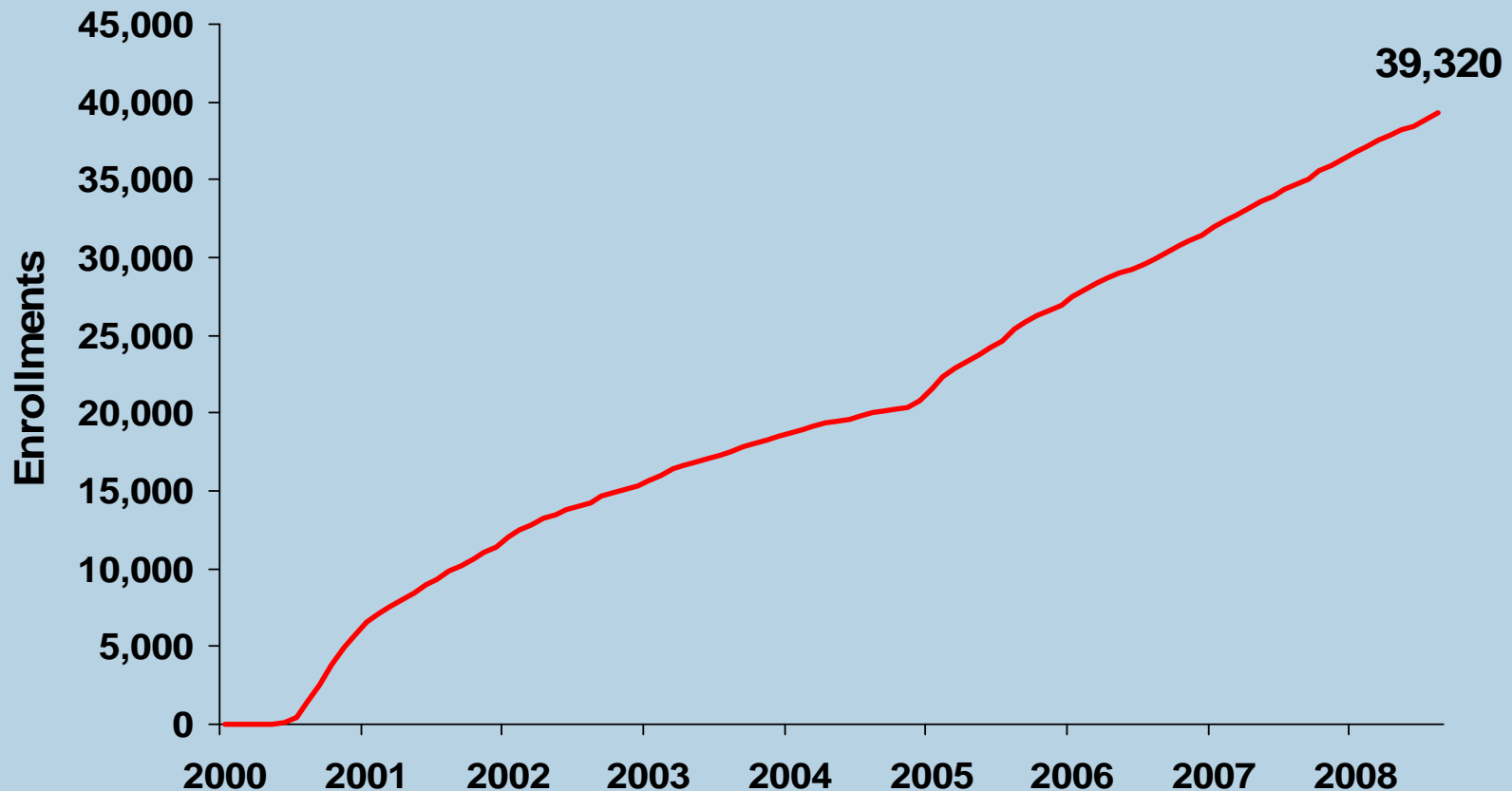
# Innovations

- > Use health plan systems to connect smokers to quit lines
  - Referrals from disease management, prenatal program, etc.
  - Pharmacy benefit management system (SCRIPS)
  - Pay for Performance (Recognizing Excellence)





# Blue Cross quit line - cumulative enrollment 2000-2008







# Clinical Background

- > Tobacco use is a chronic medical condition
- > Brief interventions are effective, but more intensive interventions are:
  - More effective
  - More cost-effective
- > Arranging follow-up after the office visit is a particular challenge
- > Referral to telephone counseling is an easy way to provide follow-up
  - Phone counseling increases the odds of successful quitting by 50-70%



# Clinics and quitlines

- > Fewer than 2% of tobacco users in the U.S. use quit line services
  - Media promotion is needed to encourage calling
  - Many states offer fax-referral programs, but they are often underutilized by health care providers
- > Multi-faceted interventions improve performance
  - Systems changes
  - Leadership
  - Outreach
  - Feedback
  - Incentives



# Clinical practices

Evidence-based practice	Current practice	Making it EASY
Identify users	Easy	Easy
Advice to quit	Easy	Easy
Interest in quitting	Easy	Easy
Prescribe meds	Easy	Easy
Counseling	Hard	Easy Fax Referral
Follow-up	Hard	



# The Clinic Fax program

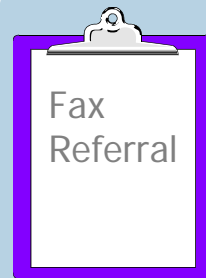
- > Builds on a successful collaboration with Minnesota's Health Plans and ClearWay Minnesota
  - Successful coordination since 2002
  - Direct to provider education and mailings
- > **Minnesota Clinic Fax Program - Centralized Triage System**
  - Clinical referral mechanism for **ALL** Minnesotans
  - Led and designed by Blue Cross
  - Jointly created materials, forms and information

# Clinic Fax referral process

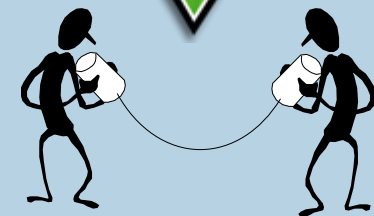
Tobacco status assessed and asked if interested in quitting



Patient fills out fax referral, staff create EMR order for smoking cessation and obtain verbal consent



Designated staff fax referral/EMR to Central Triage



Quit line contacts patient

Feedback to clinic on result of patient contact





# Clinic Fax referral form (Paper/EMR)

## > Clinic information

- Pre-populated clinic address and contact
- Health care provider

## > Patient information

- Minimum necessary contact information
- Health plan check boxes
- Release authorization
- Patient signature

## > Clinic Feedback

- Contact date
- Outcome (enrolled, declined, not reached)



# Compliance and confidentiality

- > HIPAA Approved Referral Form
  - Minimum necessary
  - Collaborator approved
  - Cover letters
- > Aggregate Data Only
  - By clinic
- > De-identified Referrals
  - Health plan identity removed from reports



# Research questions

- > What is the feasibility of establishing an integrated clinic fax referral system in Minnesota?
  
- > What is the effect of financial incentives on the rates of physician referral to a state tobacco quitline?





## Other research questions

- Which clinics respond the most to the incentive?
- Does the offer of financial incentives influence the appropriateness of the referrals?
- What is the cost per additional referral or enrollee?



# Methodology

- > Setting: Fairview Physician Associates (FPA)
  - Large multi-specialty group providing both primary care and specialty care in Minnesota
  - A total of 49 clinics provide adult primary care services and record tobacco use as a vital sign
  
- > Dates: September 1, 2005 – June 31, 2006



# Methodology

- > **Design: Two-group randomized design**
  - Usual care (feasibility) n=25 clinics
    - > Information and materials mailed to clinics
    - > EMR modified to allow electronic "fax" referral
  - Intervention (n=24 clinics)
    - > Launch meeting
    - > Monthly feedback
    - > Financial incentives
      - \$5000 bonus for clinics referring at least 50 patients during the study period
      - \$25 for each referral past 50



# Methodology

## > **Measures**

- Primary outcome: percentage of smokers referred to phone counseling
- Clinic characteristics
- Costs

## > **Analysis**

- Unit of analysis: clinic ( $n = 49$ )
- Primary comparison: 2-sided t-test
- Secondary analysis (clinic characteristics): 1- and 2-way ANOVA

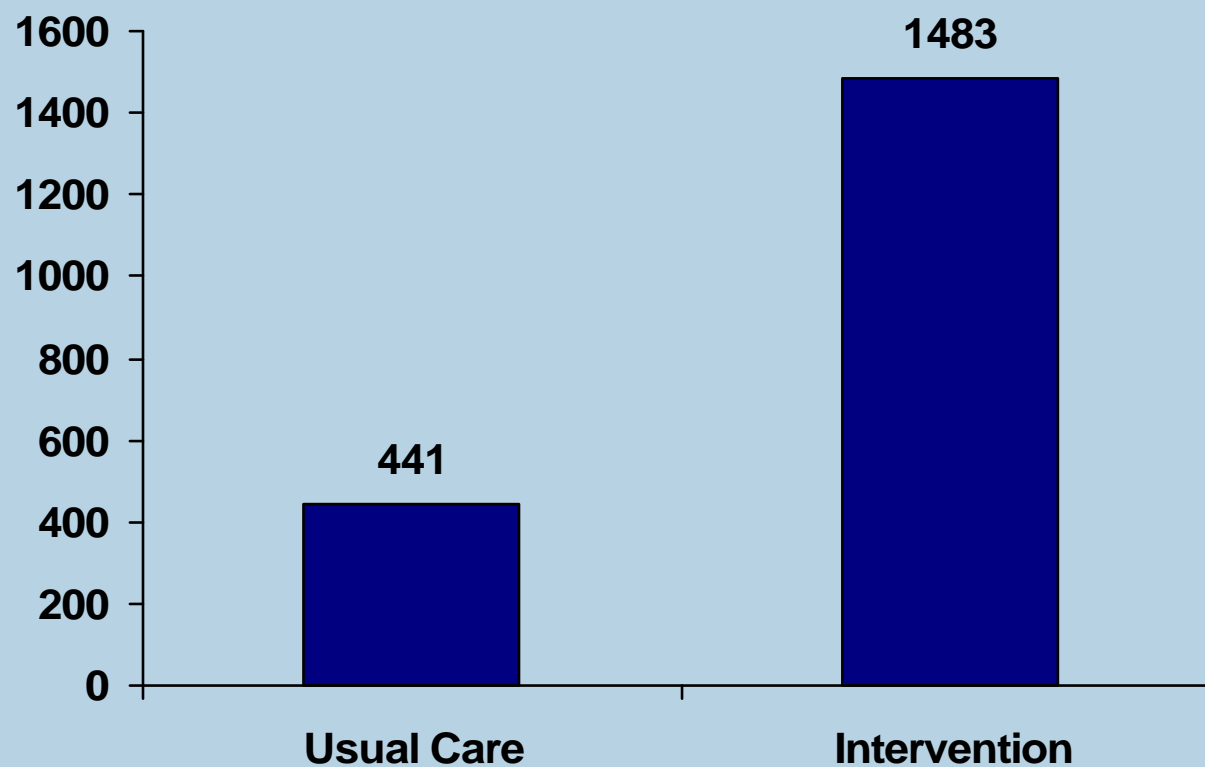


## Results - clinic characteristics

	Usual Care (n=25)	Enhanced (n=24)
Family Practice	11	13
Internal Medicine	2	2
Ob-Gyn	6	4
Multi-specialty	6	5
1-3 MD	9	6
4-6 MD	8	10
7-18 MD	8	8
No EMR	9	8
EMR	16	16
Very Engaged QI	4	5
Engaged QI	11	11
Less Engaged QI	10	8

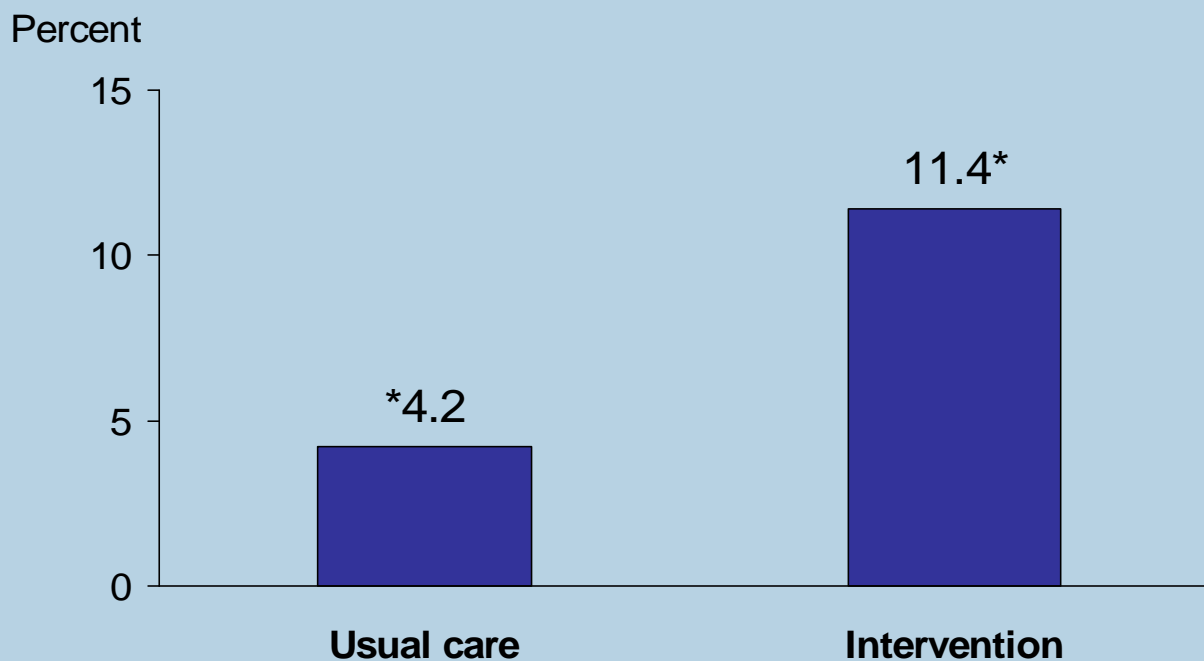


# Results – total number of referrals



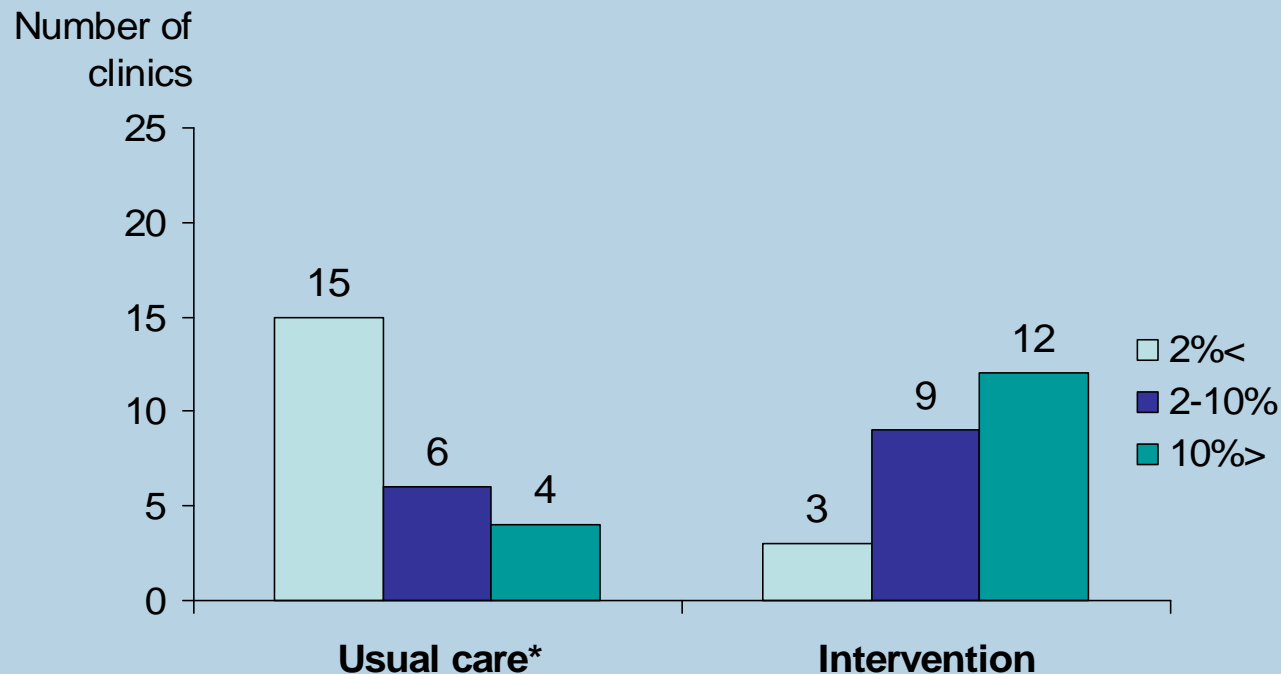


# Results - referral rates



\* Statistically significant difference ( $p < 0.001$ )

# Results - distribution of clinic by patient referral rates

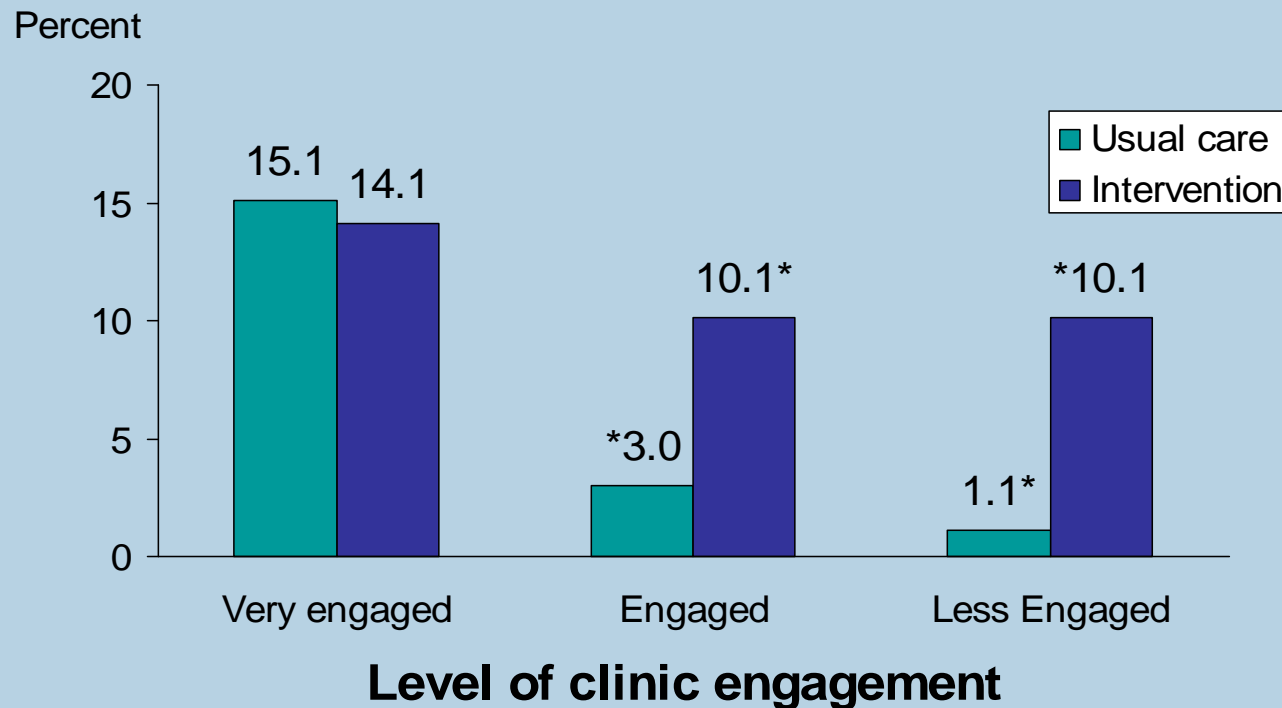


\* Statistically significant difference ( $p = 0.002$ )





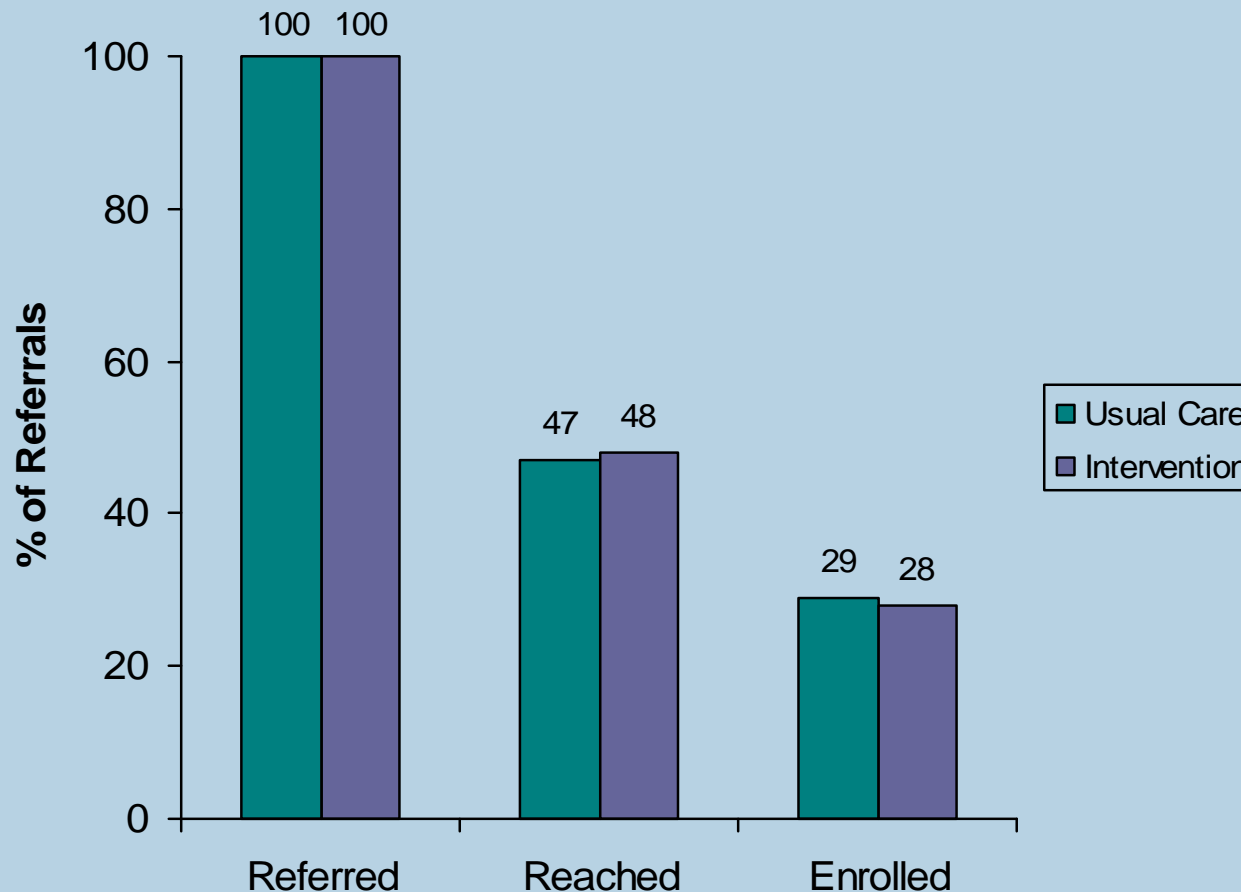
# Results - Average clinic referral rates by quality improvement history



•Statistically significant difference between usual care and intervention clinics



# Results - referral conversion per 100 referrals for intervention vs. usual care clinics





## Cost per referral

	Usual Care	Intervention
Incentive Costs	N/A	\$70,475
Total Costs	\$8,937	\$95,733
Number Referred	441	1483
Cost per referral	\$20	\$65
Number enrolled	124	413
Cost per enrolled	\$72	\$232



## Conclusions

- > A fax referral system is feasible (4.2% of smokers referred in usual care clinics)
- > Incentives increased referral rates (11.4% vs. 4.2%)
- > Incentives appear to be the most beneficial for the majority of clinics with less QI engagement
- > No evidence of “gaming the system”
- > Cost per caller comparable to media promotion of tobacco quit lines

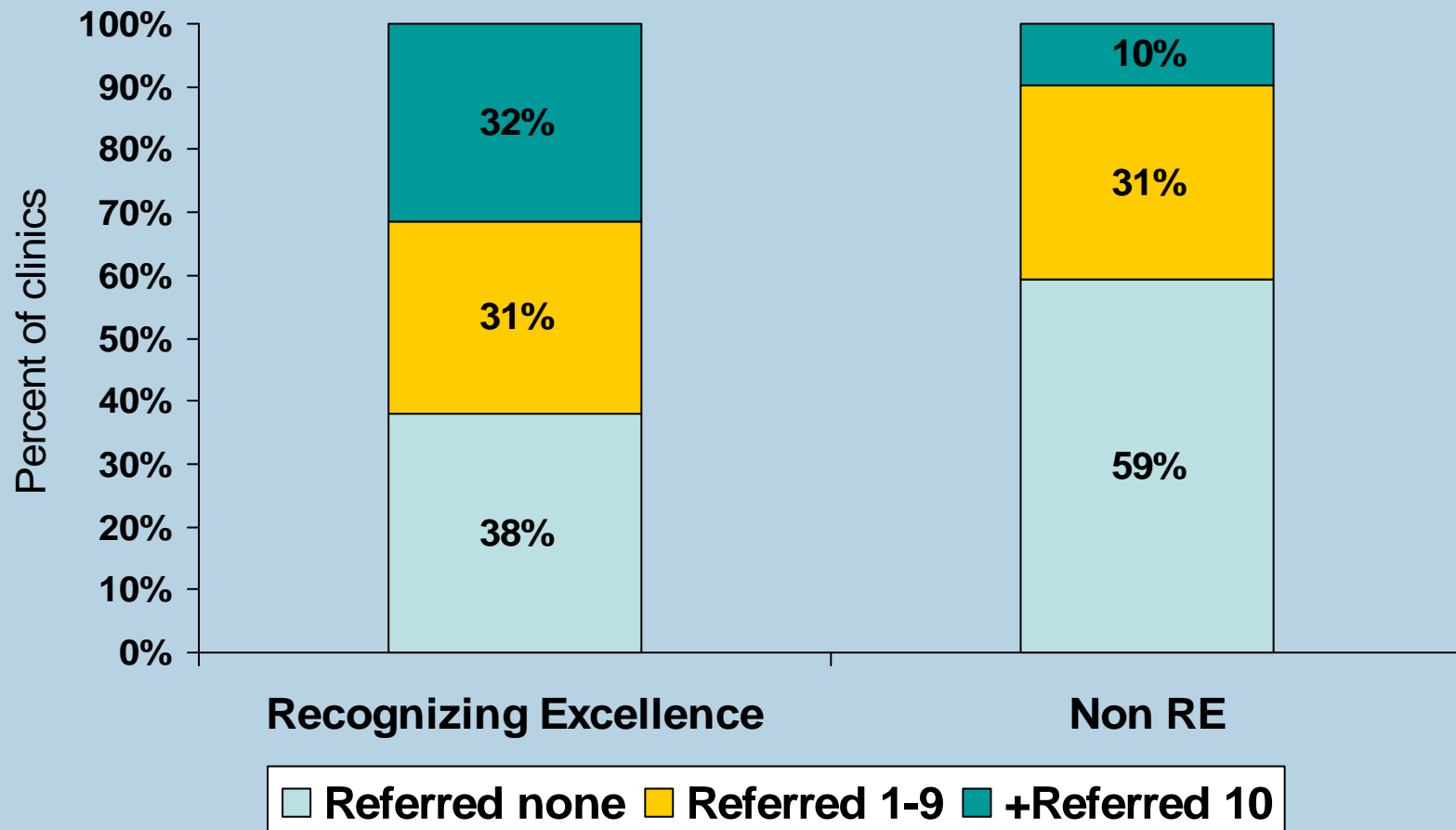


## Statewide rollout

- October 1, 2007 program launched statewide
- Incentive based on enrollment thresholds
- 610 clinics registered as of December 2008
- 260 (42%) of sites are participating in Recognizing Excellence
- Average of 310 referrals a month



# Referrals by participation in Recognizing Excellence





# BlueCross BlueShield of Minnesota

An independent licensee of the Blue Cross and Blue Shield Association