

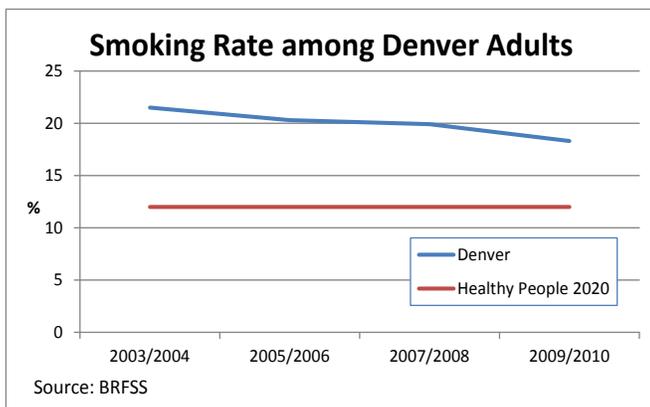
Health Department Name: Denver Public Health  
 Clinic Name: Denver Metro Health Clinic  
 Address: 605 Bannock St., Denver CO 80204  
 Phone: 303-602-3686  
 Denver population size: 619,968  
 Clinic population size: 9,568  
 Project population served: Metro-Denver residents (adult and youth) seeking family planning and sexual health care  
 Project title: Implement a brief tobacco cessation intervention (Ask, Advise, Refer) to all clients seeking services in the Denver Metro Health Clinic.



**PLAN**  
Where is there opportunity for improvement?

**Background**

Despite a 20 cent tax increase on a pack of cigarettes in 2004 and passage of the Colorado Clean Indoor Act in 2006, smoking rates among adults in Denver are declining slowly and remain far above the Healthy People 2020 goal of 12%.



Denver Public Health clinics provide health care to Denver’s vulnerable populations including the young, poor, uninsured and those who identify as gay, lesbian, bisexual or transgender. These populations also experience high rates of tobacco use. The Denver Metro Health Clinic provides family planning and sexual health care services to many at-risk individuals (of which 36% report using tobacco) and thus is an ideal venue for counseling and tobacco cessation services. In addition, the DMHC uses an easily modifiable electronic medical record (EMR) and staff is accustomed to process change.

**The Approach**

In March, 2012, Denver Public Health was awarded a small grant through the National Network of Public Health Institutes. The grant provided personalized technical assistance, training in quality improvement (QI) techniques and access to valuable on-line resources and an on-line QI community. The team decided to use the PDSA (Plan/Do/Study/Act) framework to guide the process and the project was launched in April, 2012.

**Aim Statement**

By November 30, 2012, standardize and implement a documented process to assess tobacco use, advise current users to quit and refer those who are ready to quit to cessation programs (2A’s + R) for all clients seen at the Denver Metro Health Clinic.

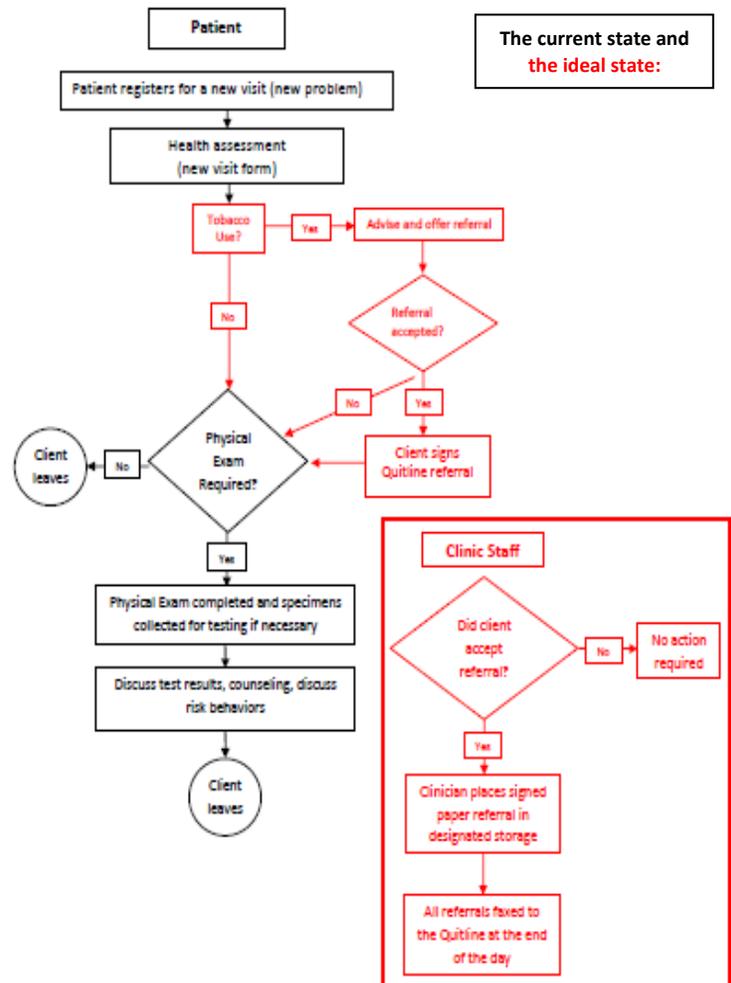
**The QI Team**

Clinic leadership is essential but not sufficient: the team must include members that can speak for all clinic staff. All members of this team volunteered and included:

- Nurse manager,
- Administrative manager,
- Nurses (RN & LPN),
- Informatics expert,
- QI coordinator.

**Flowchart**

Clinic flow was documented in a flowchart by the QI Team. The current state, which included only the ‘Ask’ portion of the process, was charted and compared to the future **ideal state** with 2A’s+R integrated into clinic workflow.

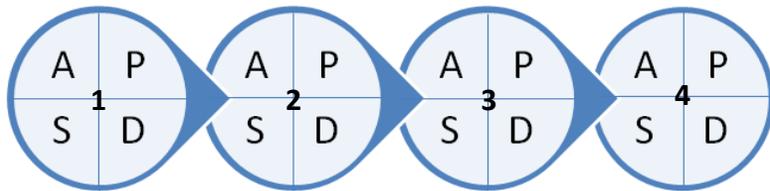


## DO

### Test what it takes to achieve the ideal state

A series of rapid experiments (Do, Study) were conducted in the clinic and results were studied after each cycle:

1. The 2A's+R documentation was collected on paper. This pilot phase allowed:
  - Clinic staff test drive the process,
  - Clinic staff to ask questions and provide suggestions,
  - QI team to observe the process,
  - QI team to immediately debrief with staff,
  - QI team to conduct one-on-one interviews with clinicians to gather feedback.
2. Adapted process - Changes to process based on staff feedback: beta version of clinic process and EMR launched.
3. Adapted process - Clinic huddles were implemented to help coach staff on using 2A's+R.
4. Adopted process - Final changes to the EMR to include the 2A's+R. Standardized process used for all staff.



Paper pilot  
2A's+R in clinic

Process amended  
per staff feedback

Clinic huddles  
initiated

Finalized  
changes to EMR

## STUDY

### Translating data to action

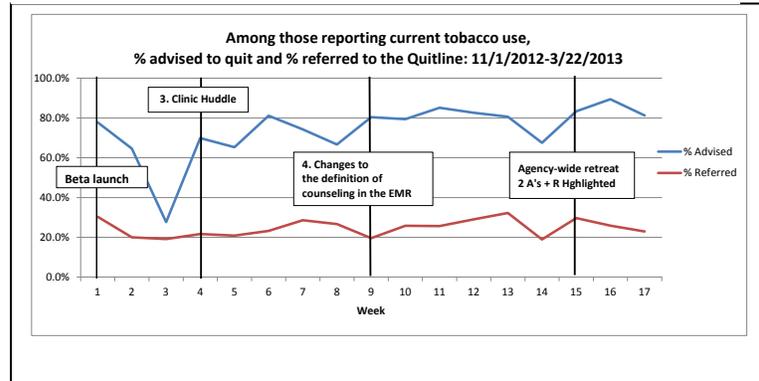
Results from each experiment were used to improve the process:

1. Paper documentation of the 2A's+R intervention indicate that the process can be easily integrated into a clinic visit:
  - 23 clients (100%) were assessed for tobacco use.
  - 9 clients (100% of tobacco users) advised to quit.
  - 5 clients accepted a Colorado Quitline referral.
2. Feedback from staff regarding the process revealed a need for:
  - Clarity regarding the 'strength' of advising. Motivational interviewing techniques needed to help staff,
  - Cessation materials that resonate with clinic clientele,
  - Definition of social smoker (i.e. one who smokes only in social situations, often infrequently).
3. After implementation of the beta version of the clinic process and EMR, one-on-one interviews with clinic staff revealed a need for:
  - Regular huddles to support clinic staff,
  - A change to the EMR. Documentation of the 'Advise' section was originally designed to facilitate eventual billing (advised/counseled 3 to 10 minutes) and did not include an option for clinicians to document counseling less than 3 minutes.
4. Clinic process and EMR amendments standardized for all patient visits in the Denver Health Metro Clinic.

## ACT

### Implement 2As+R in the clinic

- Implementation was considered complete when a standardized clinic process and EMR modifications were finalized.
- The QI team and clinic staff celebrated this success by presenting the results at an agency-wide retreat.
- Clinic staff created a visual management board of their work which is updated quarterly and displayed prominently.



### Future Plans

- Create a reporting system to monitor performance.
- Implement 2A's+R in all Denver Public Health Clinics including Tuberculosis, Infectious Disease and Immunization.
- Collaborate with Electronic Health Services and Denver Health Community clinics to implement 2A's+R in 4 Community Health Clinics.
- Develop/implement an automated, electronic referral system from the DPH EMR to the Colorado Quitline.

### Lessons Learned

- SLOW DOWN! It is important that the QI team resist the urge to move directly to the solution.
- Clinic staff must be involved at every step of the process.
- An EMR requiring documentation is critical but...
- Staff coaching is critical also: in the first 2 months, only 68% of tobacco users were advised to quit.
- Clinic clients are at risk for tobacco use and may be less amenable to enrolling into the Quitline program.

### QI Team:

Dr. Judy Shlay: Associate Director  
Theresa Mickiewicz: Program Evaluator  
Melissa Edel: Clinic Nurse Manager  
Jeff Eggert: Clinic Administrative Manager  
Kari Ehmann: Clinic Nurse  
Berlissa Abel: Clinic Nurse  
Dean McEwen: Informatics Supervisor  
Deryk Standring: Health Educator

**Thanks to Anthony Abeyta and all clinic staff**