

“Meaningful Use of Data” Improving Clinical Indicators



**NATIONAL MEDICAL PROVIDERS’
BEST PRACTICES AND GPRA MEASURES
CONFERENCE
SACRAMENTO, CALIFORNIA
MAY 24, 2011**

**COLLEEN A. HAYES, MHS, RN
IPC NATIONAL TEAM**

Objectives

2

- Review of available sources of data in the Clinical Information System
- Using iCare and other system reports to identify areas for improvement in screening and outcome indicators
- Discuss the importance of data integrity
- Review how to use the available information system in improving patient and population health
- Review methods of translating data into usable information

Using Clinical Information Systems to Improve Care

3

- Identification of need for data to manage patient and population health
- Identify sources of data
- Continually improving and maintaining data quality
- Translating data into information
- Setting targets and benchmarking
- Communication and sharing of information
- Continually tracking trends and progress

Examples of the Types of Clinical Information System Tools



- **iCare**
- **PCC Management Reports**
- **VGEN**
- **QMAN**
- **Scheduling Package**
- **Clinical Reporting System (CRS)**
- **Electronic Health Record Reminders, Decision Support Tools**

Improving and Maintaining Data Quality

5

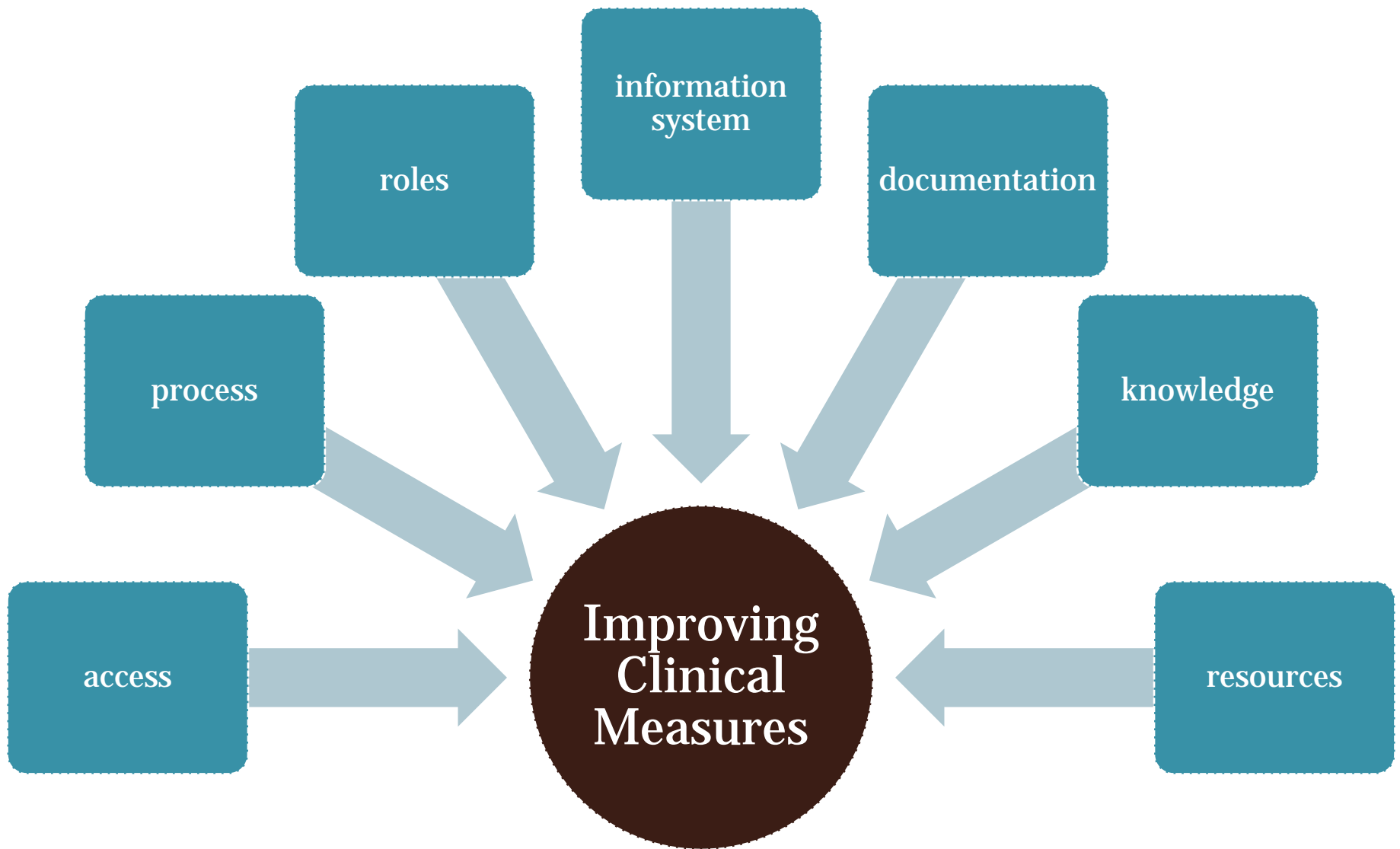
Providers, staff, and leadership need to trust and have confidence in the data and information, or efforts to use the Clinical Information Systems to measure progress and improvements will be met with resistance or indifference.

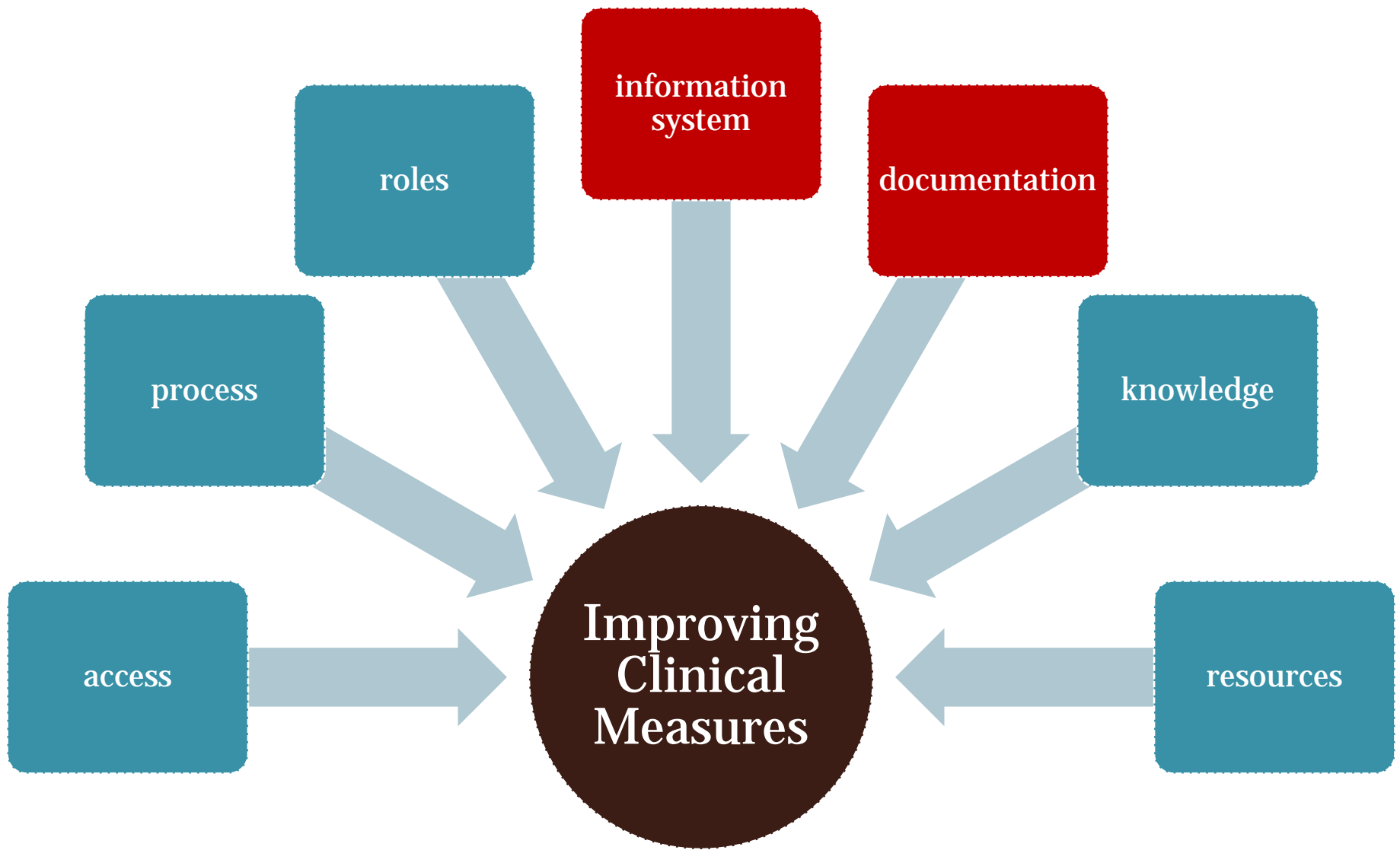
Improving and Maintaining Data Quality

6

- Listen to Staff
- Correlation to clinical practice
- Follow up on any questionable results
- Review any unusual patterns (large increases or decreases in numbers or rates)
- Run reports in more than one venue if possible
- Close relationship between clinical staff, quality improvement, IT and IM (coding and medical records) staff

- Some possible reasons for unexpected data results or changes in data
- inconsistent RPMS search
 - coding changes – or not up to date
 - RPMS “patches” that change definitions or may effect data
 - New GPRA patches/updates – changes in definitions or effect other programs





Information Systems



- Are we using iCare panels to identify patients not meeting targets?
- Are we using iCare and other tools to “drill down” and identify what is effecting bundle or comprehensive measures?
- Are we using reminders to staff in E.H.R. – or in a paper system?

Documentation



- Are screenings and interventions being documented and captured in RPMS?
- Are taxonomies for lab results up to date?
- Are outside tests/procedures being entered into RPMS – so they can be “counted” for the measures (ie, mammograms, colonoscopies)
- Is data entry up to date? How long between visit and data entry? How does this effect your measures?

iCare: Whole Patient and Population Care

11

Whole Patient Care

- Use in daily clinical practice to identify individual patient needs
- Case Management and Event Tracking (CMET)
- Identify patients who are delinquent for screenings
- Review screening status for today's appointments
- Individual patient summary of GPRA/CRS indicators

Population Care

- Note trends in patient screening or outcomes by provider, clinic, site
- National Aggregate Reports
- National Measures reports/patient lists

MU Core Measures

Percentage of pts ages 18 and older w/calculated **BMI** w/in the past 6 months or during current visit; if BMI outside of parameters, follow up plan is documented

Percentage of pt visits ages 18 and older w/dx of HTN, with 2 office visits, with **BP** recorded

Percentage of pts ages 18 and older w/2 office visits who were queried about **tobacco use** 1 or more times w/in 24 months

Percentage of pts ages 18 and older, identified as tobacco users w/in past 24 months, have had at least 2 office visits, **tobacco cessation** documented

Tobacco Counseling

Meaningful Use (MU) Definition

Percentage of patients 18 years and older who have had at least 2 office visits who were queried about tobacco use one or more times within 24 months,

Percentage of patients 18 years or older identified as tobacco users within the past 24 months and have been seen for at least 2 office visits, who received cessation intervention

GPRA (iCare) Definition

Patients identified as current tobacco users at least a year ago – who received counseling to quit or prescribed a cessation aid in the past year

Example of Using iCare to Target Improvement



**MEANINGFUL USE
TOBACCO
COUNSELING MEASURE**

*Panel Name: MU Measure.Tobacco Counseli
Panel Description:

- Population Search Options
- New Panel...
- No Predefined Population Search - Add Patients manually
- My Patients
- Patients Assigned to
- Scheduled Appts
- QMan Template
- RPMS Register
- EHR Personal List
- Ad Hoc Search

Parameters - n/a

Filters

Age: greater than or equal to 18 YRS Beneficiary:

Sex:

Category

Living Deceased Both Date of Death: (none) to (none)

Community

By Taxonomy Selected Taxonomy Includes:

By Name With At Least One Patient

Diagnostic Tag

Tag	Accepted	Not Accepted	Proposed	No Longer Valid	Superseded
Tobacco Users (Smokers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Use AND

Allergies (None)

Visit

Visit Range

By Date (none) to (none) # of Visits in Range: greater than or equal to 2

By Timeframe Last Year Visit Clinic:



Template: Natl Measures Default
 Customize This Panel
 System Default

Available Columns:

- Date/Time Added
- Manually Added
- Perf Met
- Preferred Language
- Sex
- [-] **Other Patient Data**
 - Allergies
 - [-] **Specialty Providers**
- [-] **Visit Related**
 - Last Visit Clinic
 - Last Visit Date
 - Last Visit Date/Time
 - Last Visit POV Narrative
 - Last Visit Provider
 - Last Visit Provider Narrative

Display Columns:

Italicized columns are required

- DOB*
- HAN*
- Patient Name*
- Active DX Tags
- Designated PCP
- Tobacco Cessation: Counseling or RX
- Tobacco Use 5+: Smokers
- Tobacco Use 5+: Smokeless
- Tobacco Use 5+: ETS
- Next Appt Date/Time
- Next Appt Provider

Available Sorts:

- [-] **Demographics**
 - *HAN*
 - *Patient Name*
- [-] **Other Patient Data**
 - Active DX Tags
 - **Designated PCP**
- [-] **Visit Related**
 - Next Appt Date/Time
 - Next Appt Provider
- [-] **Performance**
 - [-] **National GPRA**
 - [-] **Cancer-Related**

Sort Columns:

- DOB ASC*

Aggregated

Natl Measures

Natl Aggregated

CMET

Care Mgmt

Diagnostic Tags

Flags



from CRS 2011 current as of: May 07, 2011 12:37 AM

HRN	Active DX Tags	Tobacco Cessation: Counseling or RX	Tobacco Use 5+: Smokers	Tobacco Use 5+: Smokeless	Tobacco Use 5+: ETS	Next Appt Date/Time	Next Appt Provider
6517-CI 6517-CH 6517-URA	CVD ASR (P); HTN (P); Smoker (P)	(All) (Custom) (Blanks) (NonBlanks) N/A NO YES					
13409-CI *13409-CH 13409-URA	Asthma (P); COPD (P); CVD ASR (P); HTN (P); Smoker (P)						
691-CI 691-CH 691-URA	CVD Kn (P); DM (A); HTN (P); Smoker (P)					30 AM	PAYNE,WINSTON
1351-CI 1351-CH 1351-URA	CVD Kn (P); Smoker (P)	NO	YES	NO	NO		
6163-CI 6163-CH 6163-URA	CVD Kn (P); HTN (P); Smoker (P)	NO	YES	NO	NO	Jul 21, 2011 03:00 PM	
2647-CI 2647-CH 2647-URA	COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	May 23, 2011 10:30 AM	
794-CI 794-CH 794-URA	COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	May 16, 2011 10:00 AM	
3951-CI 3951-CH 3951-URA	Asthma (P); CVD AHR (P); DM (P); HTN (P); Smoker (P)	N/A	YES	NO	NO	May 18, 2011 03:30 PM	LEDFORD,AMANC
2174-CI 2174-CH 2174-URA	COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	Jun 13, 2011 09:30 AM	
21666-CI 21666-CH 21666-URA	COPD (P); CVD ASR (P); HTN (P); Smoker (P)	YES	YES	NO	NO	Jun 14, 2011 10:00 AM	PAYNE,WINSTON
3890-CI 3890-CH 3890-URA	COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO		

Tobacco Cessation: Counseling or RX

Cancer Screening: Tobacco Cessation: Patients who are identified as current tobacco users by tobacco-related health factors or diagnosis codes at least a year ago who have received counseling to quit (refusals to receive counseling are not included) or were prescribed with cessation aid in the past year. See Glossary for detailed definitions.

1 current as of: May 07, 2011 12:37 AM

Active DX Tags	Tobacco Cessation: Counseling or RX	Tobacco Use 5+: Smokers	Tobacco Use 5+: Smokeless	Tobacco Use 5+: ETS	Next Appt Date/Time	Next Appt Provider
Asthma (P); COPD (P); CVD ASR (P); HTN (P); Smoker (P)	NO	YES	NO	NO		
CVD Kn (P); Smoker (P)	NO	YES	NO	NO		
CVD Kn (P); HTN (P); Smoker (P)	NO	YES	NO	NO	Jul 21, 2011 03:00 PM	
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	May 23, 2011 10:30 AM	
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	May 16, 2011 10:00 AM	
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	Jun 13, 2011 09:30 AM	
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO		
CVD Kn (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO		
COPD (P); CVD ASR (P); HTN (P); Smoker (P)	NO	N/A	N/A	NO	May 13, 2011 01:00 PM	LAMBERT, JUDY
COPD (P); CVD Kn (P); DM (P); HTN (P); Smoker (P)	NO	YES	NO	NO	May 23, 2011 10:00 AM	WOODS, ANNE M
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)	NO	YES	NO	NO	Jun 16, 2011 03:30 PM	FARRELL, MARY A



2011 current as of: May 07, 2011 12:37 AM

Active DX Tags	Designated PCP	Tobacco Cessation: Counseling or RX	Tobacco Use 5+: Smokers	Tobacco Use 5+: Smokeless	Tobacco Use 5+: ETS
Asthma (P); COPD (P); CVD ASR (P); HTN (P); Smoker (P)	[All] [Custom] [Blanks] [NonBlanks]	NO	YES	NO	NO
CVD Kn (P); HTN (P); Smoker (P)	BUBB, LORI C	NO	YES	NO	NO
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	BULLOCK, ANN KATHLEEN	NO	YES	NO	NO
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	BONNO, RICHARD	NO	YES	NO	NO
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	CABE, MARISA S FNP	NO	YES	NO	NO
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	DENZER, LISA ANN FNP	NO	YES	NO	NO
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)	SHELL, PETER MATHES	NO	YES	NO	NO
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)	WINCHESTER, BLYTHE S	NO	YES	NO	NO
CVD Kn (P); DM (A); HTN (P); Smoker (P)	WISEMAN, MICHAEL B FNP	NO	YES	NO	NO
COPD (P); CVD ASR (P); HTN (P); Smoker (P)	SHELL, PETER MATHES	NO	N/A	N/A	NO
COPD (P); CVD Kn (P); DM (P); HTN (P); Smoker (P)	ROSS, ROBERT E	NO	YES	NO	NO
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)	FARRELL, MARY ANNE	NO	YES	NO	NO
COPD (P); CVD Kn (P); HTN (P); Smoker (P)	FARRELL, MARY ANNE	NO	YES	NO	NO



1 current as of: May 07, 2011 12:37 AM

Active DX Tags	Smoking Status: unselin or RX	Tobacco Use 5+: Smokers	Tobacco Use 5+: Smokeless	Tobacco Use 5+: ETS	Next Appt Date/Time	Next Appt Provider
CVD Kn (P); HTN (P); Smoker (P)		YES	NO	NO	(All) (Custom) (Blanks) (NonBlanks) May 11, 2011 01:00 PM May 11, 2011 01:30 PM May 11, 2011 02:00 PM May 11, 2011 02:30 PM	
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)		YES	NO	NO		
COPD (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)		YES	NO	NO		
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)		YES	NO	NO	Jun 13, 2011 09:30 AM	
COPD (P); CVD ASR (P); HTN (P); Smoker (P)		N/A	N/A	NO	May 13, 2011 01:00 PM	LAMBERT,JUDY
COPD (P); CVD Kn (P); DM (P); HTN (P); Smoker (P)		YES	NO	NO	May 23, 2011 10:00 AM	WOODS,ANNE M MD
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)		YES	NO	NO	Jun 16, 2011 03:30 PM	FARRELL,MARY ANNE
CVD Kn (P); HTN (P); PreDM (P); Smoker (P)		N/A	N/A	NO	Jun 13, 2011 03:30 PM	FARRELL,MARY ANNE
COPD (P); CVD Kn (P); DM (A); HTN (P); Smoker (P)		N/A	N/A	NO	May 12, 2011 09:30 AM	VISSER,MARTIN
Asthma (P); CVD AHR (P); DM (A); HTN (P); Smoker (P)		YES	NO	NO	May 20, 2011 03:00 PM	FARRELL,MARY ANNE
CVD AHR (P); DM (A); HTN (P); Smoker (P)		YES	NO	NO	Jun 14, 2011 09:00 AM	FARRELL,MARY ANNE

So – What Did We Learn?



- The number of tobacco users ages 18+, with at least two office visits in the past year = 1177
- 657 (56%) tobacco users did not have tobacco counseling or an rx for tobacco cessation
- 634 (96%) pts that did not have tobacco counseling - already have a designated primary care provider (DPCP)
- 291(44%) of pts with a DPCP, and have not had tobacco counseling, have an appt scheduled

Using Data for Performance Improvement



What additional data would be useful for this MU measure?

What is effecting the data found in this iCare report?

What changes/action plans could we consider based on this data?

What tests of change might we consider?

How can we use the data to continually measure improvement?

Improvement Planning Form



Summary of change idea: (Describe the change and what you are trying to accomplish: i.e.; optimization of the care team)

What will be our measure(s) of success? (How might you measure the impact of the change?)

	Describe the sequence of tasks, test cycles, and implementation cycles that you are planning.	T= Test I= Implement X=Task/Activity	Person Responsible	Date(s)
1				
2				
3				

Plan, Do, Study, Act



MODEL FOR IMPROVEMENT

PLAN: *to answer questions (test the change or evaluate the idea) What, Who, When, Where*

Plan for collection of data *needed to answer questions: What, Who, When, Where*

Predictions *(For each question listed above, what will happen when plan is carried out? Discuss theories):*

DO: *Carry out the plan; document problems and unexpected observations; collect data and begin analysis.*

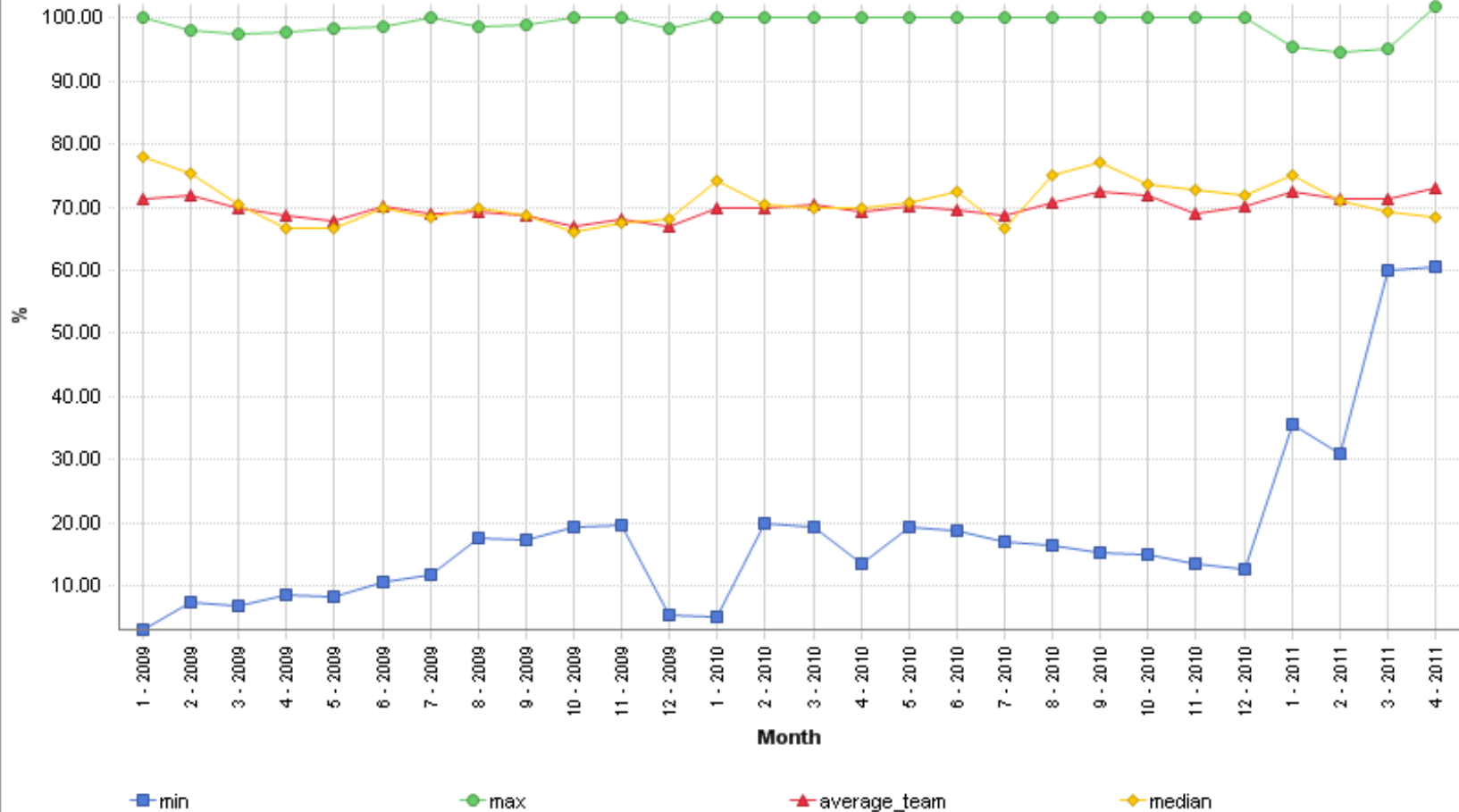
STUDY: *Complete analysis of data; what were the answers to the questions in the plan (compare to predictions)? Summarize what was learned.*

ACT: *What changes are to be made? Plan for the next cycle.*

Translating Data into Information

25

IPC-II: Tobacco Use and Exposure Assessment



Graphs and charts for benchmarking and tracking trends

Communication and Sharing of Information

26

- **Provider Scorecards**
- **Team Reports**
- **Monthly Trend Reports**
- **Dashboards**
- **Quarterly Summaries**
- **Annual Reports**

Summary



- The Clinical Information System (CIS) provides tools and resources to use in improving patient and population outcomes
- CIS reports and tools can be used to identify processes and outcomes related to improving care
- Communication of results to patients, staff, leadership and the community important in facilitating and maintaining improvements