



A Systems Approach to Improving Evidence-Based Care in PCP Practices

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UNYNET



PCP'S are Overburdened and Guidelines are Cumbersome

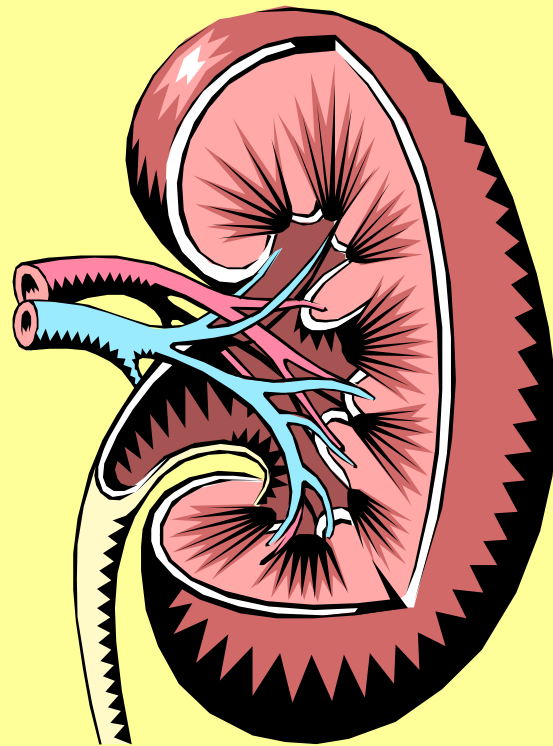
- There are hundreds of guidelines (guidelines. Gov)
- Most are over 1,000 pages
- **AND HAVE COMPETING DEMANDS**
 - 7.4 hours for screening
 - 3.5 hours chronic disease management



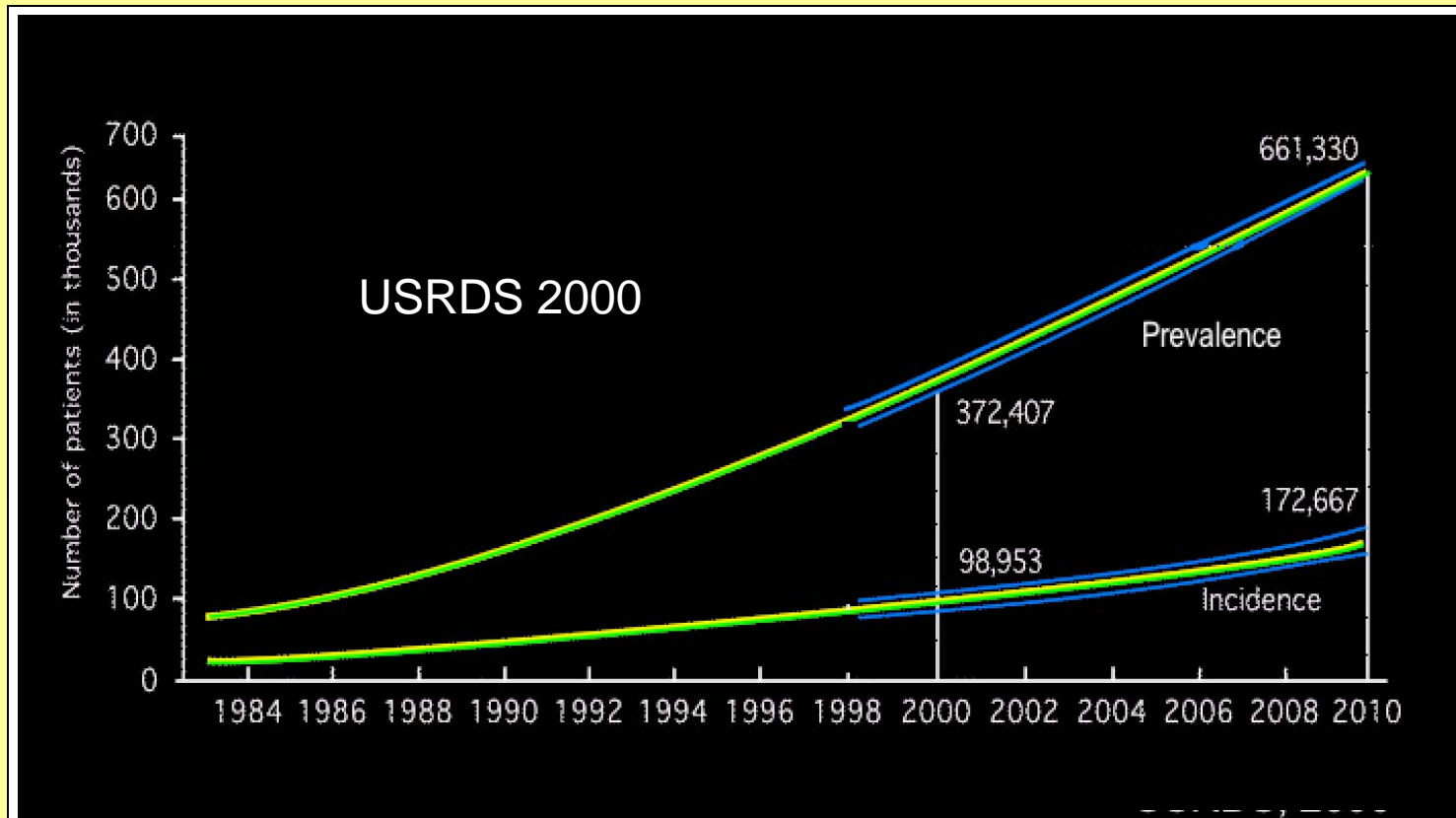
Testing a model to help PCP

- Multi-modality translational intervention including:
 - Academic Detailing (CKD Project only)
 - Practice Enhancement Assistants (PEA) to work with office staff on QI
 - Evidence Based Computer Decision Support
 - Telephonic Nurse Case Management (Asthma project only)

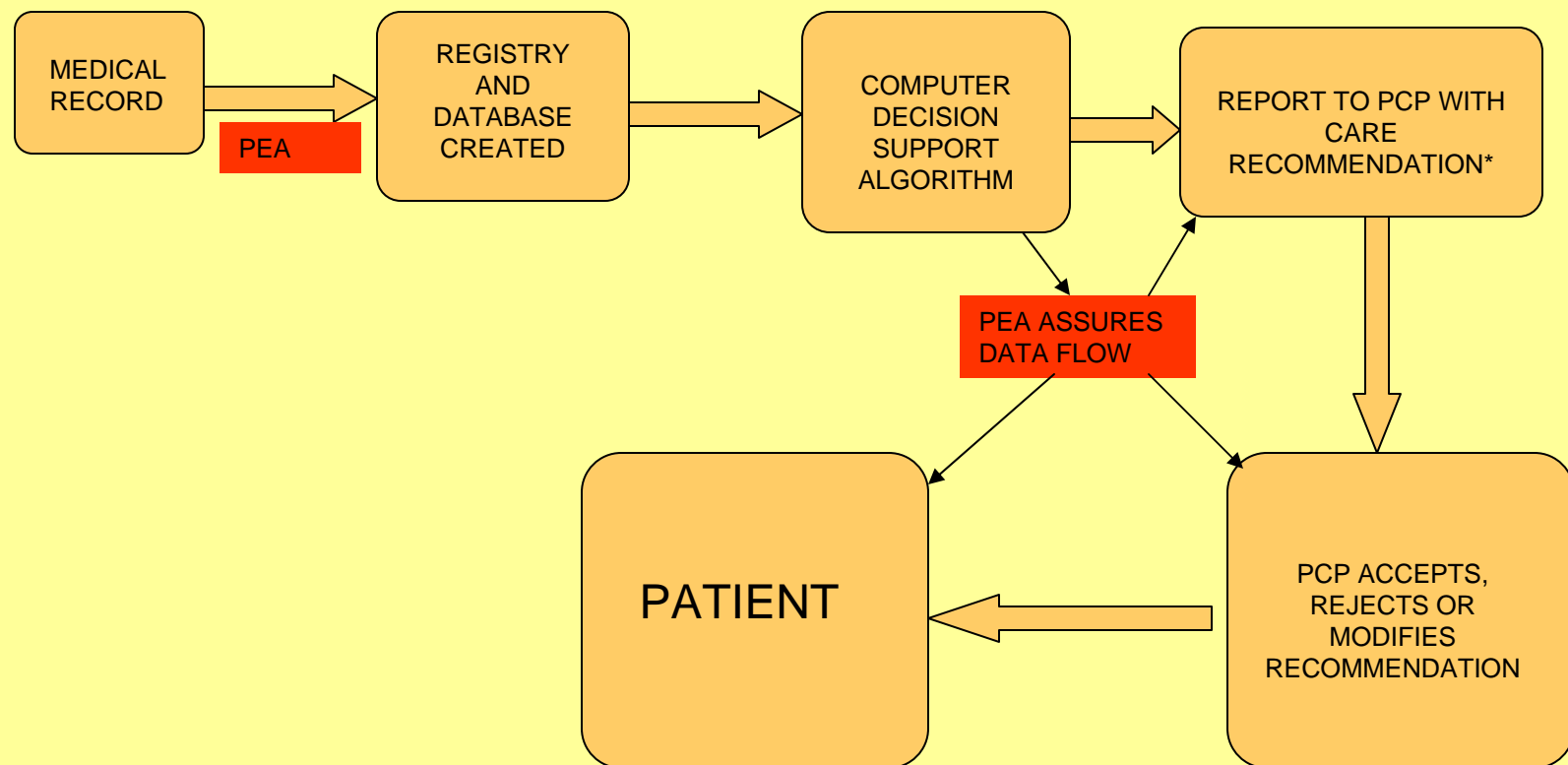
Chronic Kidney Disease (CKD)



CKD is Increasing



Plan (CKD)



*CONTAINS LAB RESULTS; OTHER DATA; AND RESPONSE REQUEST

PCP OFFICE



Sample

- 2 Intervention and 2 control sites
- All Family Medicine
- All predominantly African American
- 1 intervention and 1 control site has EMR
- 100% of patients with CKD in all practices are assessed for outcomes (Total 181 intervention and 198 controls)



Outcome measures

- Dx of CKD (GFR < 60)
- Dx of anemia
- Metabolic control (BP, lipids and glucose)
- Recognition and treatment of anemia
- Dx disorders of bone metabolism
- Starting helpful meds (ACE/ARB and ASA)
- Stopping harmful meds
 - Metformin, NSAIDS,



PEA WORK TOOL

PEA Work tool II

PTID:	PCP:	First Name	Last Name
6541684	Dr. *** *****	*****	****

	Recommendation	Accept	Reject	Date Completed	
GFR:	52	<input type="checkbox"/>	<input type="checkbox"/>		
Potemia	Urine Micro	Urine Micro/Creatinine Ratio test recommended	<input type="checkbox"/>	<input type="checkbox"/>	
Anemia	Hgb:	10 See Quick Reference Guide	<input type="checkbox"/>	<input type="checkbox"/>	
	Date of CBC	11/21/2007	<input type="checkbox"/>	<input type="checkbox"/>	
Bone Labs	PTH	PTH Bone Lab Test recommended	<input type="checkbox"/>	<input type="checkbox"/>	
	Phos	Phos Bone Lab Test recommended	<input type="checkbox"/>	<input type="checkbox"/>	
	VitD	Vitamin D Bone Lab Test recommended	<input type="checkbox"/>	<input type="checkbox"/>	
Lipids	HDL	43	<input type="checkbox"/>	<input type="checkbox"/>	
	LDL	103 Start Statin	<input type="checkbox"/>	<input type="checkbox"/>	
	Trig	121	<input type="checkbox"/>	<input type="checkbox"/>	
Diabetes	HbA1c	6.8	<input type="checkbox"/>	<input type="checkbox"/>	
	Aspirin	<input type="checkbox"/> Start ASA 81 mg unless contraindicated.	<input type="checkbox"/>	<input type="checkbox"/>	
Modifications					
Comments					
Signature:			Date:		



The QI Cycle

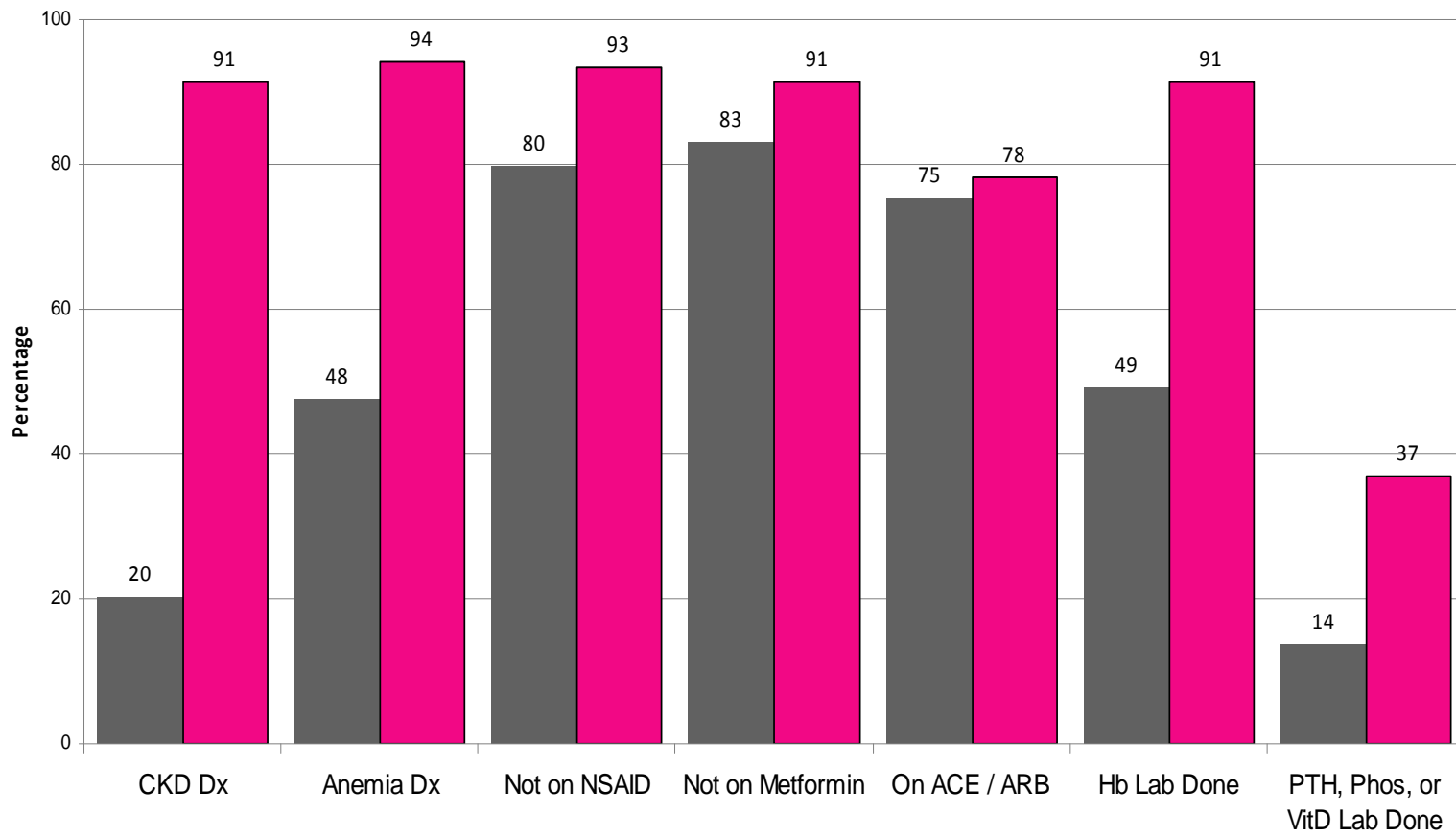
Data is aggregated

- PI has academic detailing visit and presents data and change over time to MD and office staff
- PEA also shares insights from other practices working on the same project
- Discussion of what worked and what didn't is done and appropriate modifications are made



Jericho Phase I Results

■ Baseline ■ Dec. Preliminary

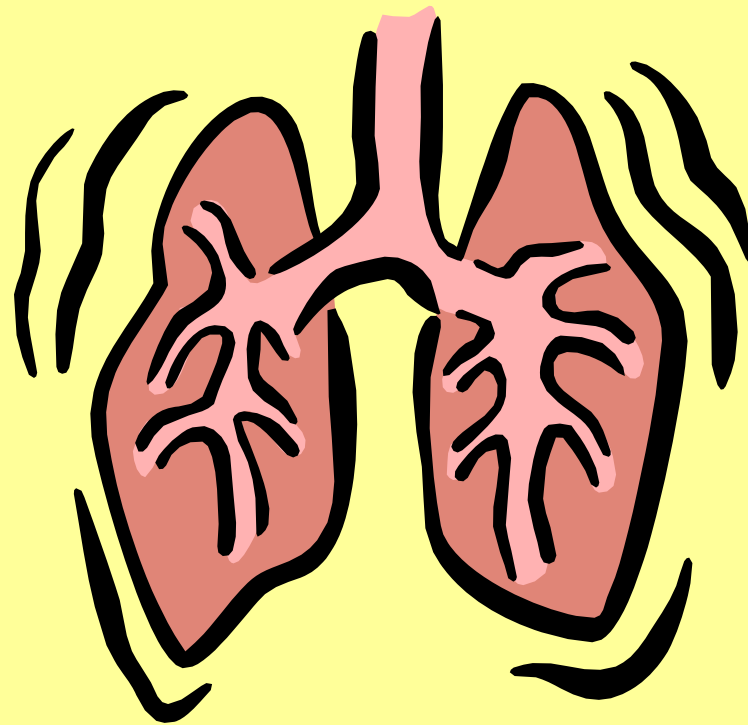




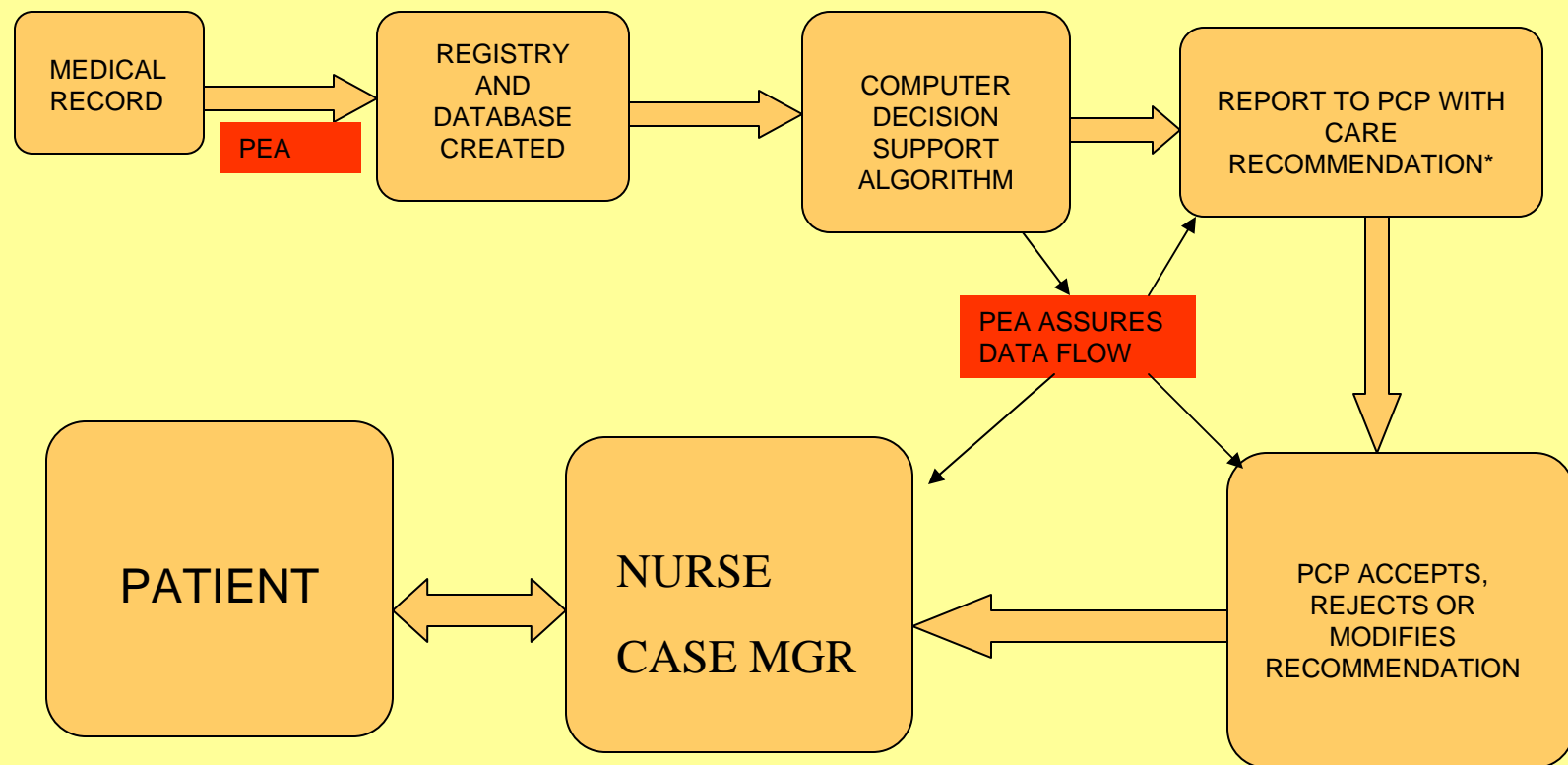
Results

	<u>Baseline (N/%)</u>	<u>Post- Intervention (N/%)</u>	<u>Significance</u>
CKD Diagnosis	30/21%	114/79%	P<.001
Anemia Diagnosis	26/33%	53/67%	P<.001
Aspirin Use	41/30%	48/35%	P=.233
Metformin Use	17/12%	8/6%	P<.001
NSAID Use	23/17%	14/10%	P<.001
ACE/ARB Use	84/62%	79/58%	P=.31
Mean EGFR	45.75	47.34	P<.001

Asthma



Plan (Asthma)



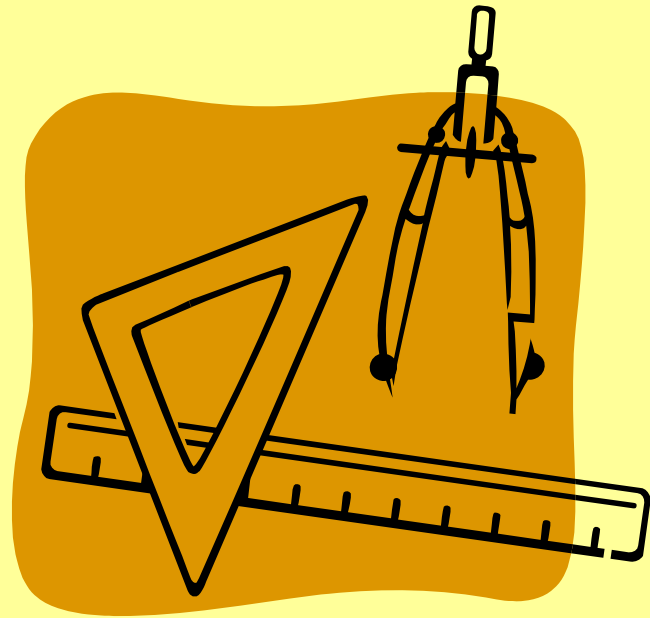
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PCP OFFICE



Outcome measures

- Severity assessed
- Triggers assessed
- Action plan
- Persistent on controller meds



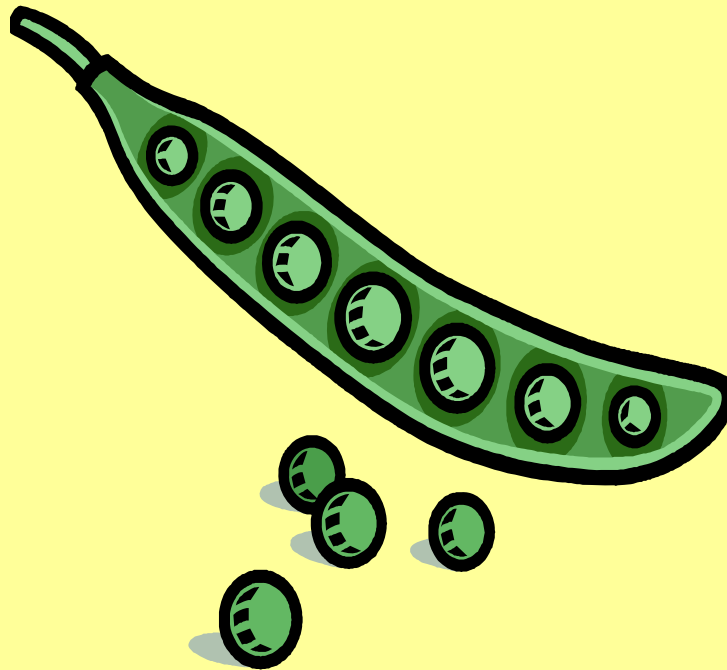


Results

<u>OUTCOMES</u>	<u>BASELINE</u> n (%)	<u>POST-INTERVENTION</u> n (%)	<u>PERCENT CHANGE</u> <u>(Absolute)</u>
Percent persistent	297(90%)	297 (90%)	+ 0%
Severity assessed	66(20%)	267 (80.9%)	+ 60.9%
Triggers assessed	66 (20%)	267 (80.9%)	+ 60.9%
Persistent on controller med	216(65.4%)	264 (88.9%)	+23.5%
Action plan	20 (6.1%)	216 (65.4%)	+ 59.3%

The Nurse Case manager was critical to achieving these results

PEAS





Collateral Benefit of PEAS

- Physicians requested a point of care guide for CKD through the PEAS
 - This was written and implemented by the PEAS
- They also requested a companion patient guide with the same information
 - This was also implemented.
 - The regional NKF is publishing these for patients



Lessons Learned





Key Points

- Academic detailing was needed to get clinician buy-in to the guidelines
 - Critical for CKD success but not for asthma
- PEAS are readily accepted in PCP offices for improvement of patient care
- PEAS working with offices produce multiple collateral benefits
- The system works best when combining modalities
- Nurse Case Managers were critical for asthma success but not for CKD



Future Directions

- This model will be used for other disease states. One project with DM has been started
 - Preliminary results are very encouraging
- The model can be tested in other populations; i.e. rural
- This model for CKD care will be tested when integrated with EMR point of care reminders
- This can be used for multiple co-morbidities simultaneously

THE END

