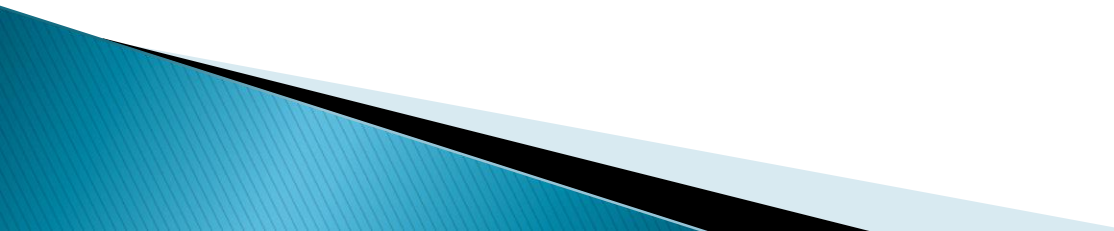


Engaging Patients with Diabetes in Self-Management A Clinical Pharmacy Services Approach

Rina Ramirez, MD FACP
Teresita Lawson, BSP Pharm, RPh, CDE

Learning Objectives

- ▶ List three components for CPS
 - ▶ Describe how to integrate CPS into the primary care team
 - ▶ Explain how CPS aligns with PCMH and Meaningful Use
- 

Zufall Health Center – A Federally Qualified Health Center serving Morris, Warren, Sussex, Hunterdon and Somerset Counties



- ▶ Established in 1990 in church basement in Dover by Dr. Zufall and volunteer physicians
- ▶ FQHC since 2004; providing entire range of primary medical, dental and enabling services
- ▶ Have 6 sites including a mobile medical van
- ▶ Serving uninsured, underinsured, homeless, residents of public housing, farm workers
- ▶ Open 7 days a week, extended hours
- ▶ NCQA PCMH Level 3
- ▶ Bilingual staff and on call services

Patient Services

- Pediatrics
- Adult Medicine
- Women's Health
- Ryan White Part A, C & F
- Dental
- Podiatry
- Behavioral Health
- Neurology
- Clinical Pharmacy Services
- Outreach and Health Fairs
- 340B Pharmacy
- Reach Out and Read
- Patient Navigation
- Case Management
- Health Literacy Program
- ACA Enrollment
- School-based dental program



Facts and Statistics 2013

- ▶ Served over 21,000 patients with approximately 62,000 visits
- ▶ 65% of adults either overweight or obese
- ▶ 13% have diabetes, 16% have hypertension
- ▶ 85% of patients are taking more than one medication on a regular basis
- ▶ Many patients taking duplicate medications/not taking medications as directed

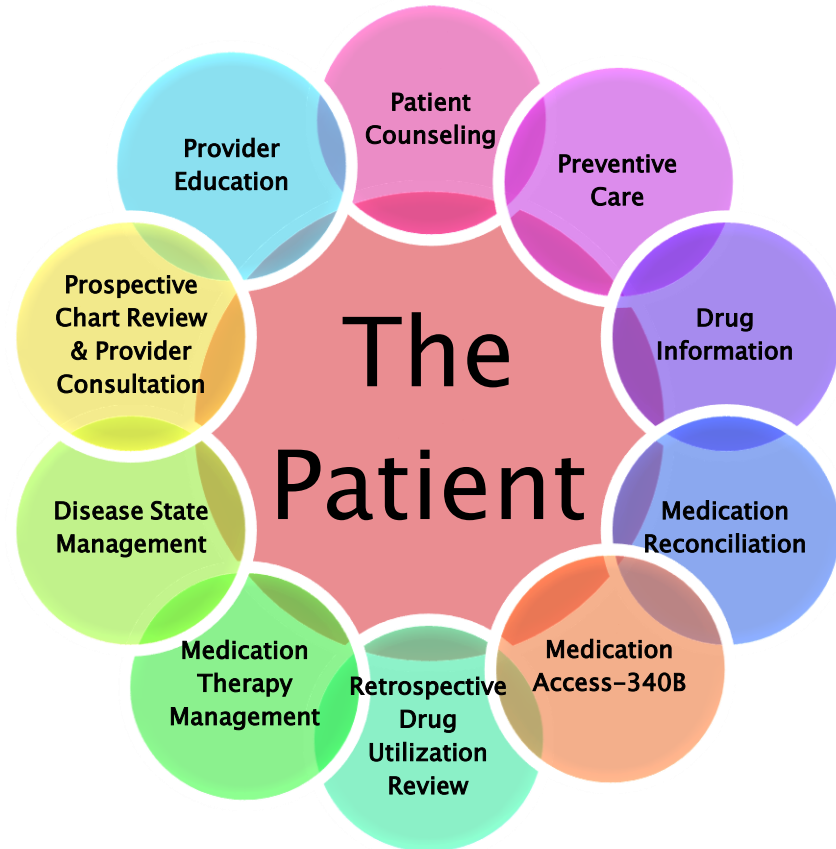
Patient Safety and Pharmacy Services Collaborative (PSPC)

- ▶ Joined in 2008, now in our 5th year
- ▶ Providing Clinical Pharmacy Services to patients with chronic diseases
- ▶ Pharmacist is integrated in primary care/team work/coordinated care
- ▶ Have seen over 3,000 patients, the majority with diabetes out of control
- ▶ Seeing consistent improvements in all health and safety measures



CLINICAL PHARMACY SERVICES: Elements/Components

- Patient Centered ✓
- Comprehensive ✓
- Conducted Regularly ✓
- Team Collaboration ✓
- Prevention ✓
- Care Transitions ✓



Project IMPACT–Diabetes

ZUFALL
HEALTH
CENTER

Clinical Pharmacy Services = Improved Outcomes

▶ Prospective Chart Review

- THE BIG PICTURE – CLUES TO PATIENT BEHAVIOR

▶ Retrospective Chart Review

- Drug Utilization/Medical, Social, Family History/Self-Efficacy/Adherence

▶ Medication Therapy Management

- Review of all medications, patient education, action plan, identification of medication related problems

▶ Disease State Management

- Consultations, adjustments, referrals, screenings, counseling and self management education

▶ Medication Access

- uninsured, not covered–i.e.: Donut Hole in Medicare

Clinical Pharmacy Services = Improved Outcomes

- ▶ **Preventive Care**– immunizations, foot exams
- ▶ **Drug Information** – patient, team
- ▶ **Medication Reconciliation** – Brown Bag
- ▶ **Patient Counseling**– DSMT, MTM
- ▶ **Provider Education** – buy-in

Which is not a component of CPS?

- ▶ Medication Therapy Management
- ▶ Patient Counseling– self management
- ▶ Medication Access
- ▶ Walking the dog ✓

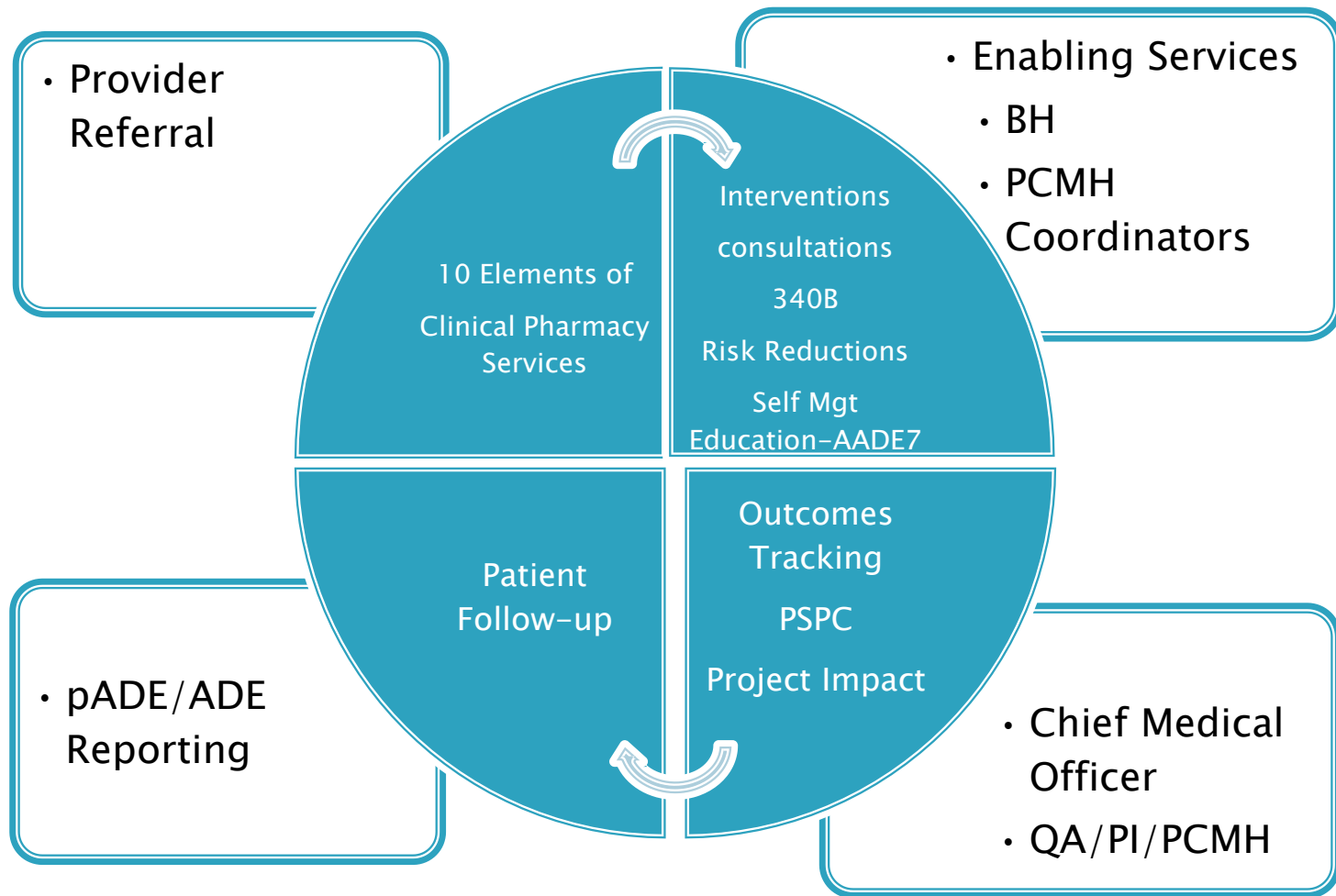


What Services can CPS deliver that improves patient outcomes?

- ▶ Medication Therapy Management, Self Management Education, Medication Access ✓
- ▶ Count Pills
- ▶ Draw necessary lab orders
- ▶ Diagnose



Coordination of Care – our Delivery Model



Delivery Model PCMH Alignment

- ▶ **Coordination of Care– Interdisciplinary Team**
 - Engagement of team members
 - Enhanced communications
- ▶ **Population Management**
 - Identification of high risk population
 - Tracking– patient follow-up
 - Community Resources
- ▶ **Medication Therapy Management**
 - Identification of Medication Related Problems
 - Meaningful Use
- ▶ **Continuous Quality Improvement**
 - Patient Satisfaction
 - Development of Patient Education Tools

What service in CPS aligns with CMS Meaningful Use?

- ▶ Medication Therapy Management–medication reconciliation ✓
- ▶ Provider Consultation
- ▶ Prospective Chart Review
- ▶ Medication Access



What worked?

- ▶ Trusting patient– pharmacist relationship
- ▶ Patient centered
- ▶ Face to Face encounters–30 minutes to an hour
- ▶ Frequent follow–up as needed
- ▶ Targeted interventions
 - Disease–specific
 - Culturally competent
 - Health literacy conscious
 - Barriers identified
 - Evidence Based
- ▶ Collaboration with clinical team for coordination of care

Which CPS Component is not aligned with PCMH?

- ▶ Medication Therapy Management
- ▶ Coordination of Care
- ▶ Population Management
- ▶ Getting together with friends ✓




TOOLS- Adherence Sheet

Name:	Date: _/_/_							
Medications - Medicinas	What is it for? - Para Que Es?	Before Breakfast - Antes del Desayuno	After Breakfast - Despues del Desayuno	Before Lunch - Antes del Almuerzo	After Lunch - Despues del Almuerzo	Before Dinner - Antes De La Comida	After Dinner - Despues De La Comida	Bedtime - Al Acostarse

- Teach Back
- Personal Medication Record
- Medication Action Plan
- Health Literacy/Literacy
- Self Management Tool

How to Use Adherence Sheet

Name:	Scenario: During an interview with patient they inform you that their metformin is causing problems with their stomach, they also tell you that they are taking morning and empty stomach tell you that the pressure medicine are complaining frequently during the night to go to the bathroom since starting the medicine. How can we use this tool to help patient minimize side effects and teach the patient about how best to take their medicines.																																																			
									S = Simplify Regimen I = Impart Knowledge M = Modify Patient Beliefs and Behaviors P = Provide Communication and Nurture Trust L = Leave the Bias E = Evaluate Adherence																																											
Medication:									They know what it is for so best take the medicine on drug information the last bite																																											
Medication:									Separate by at least 8 hours																																											
Metformin									<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																											
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Adherence Tool– interactive

- ▶ Patient Knowledge, Comprehension and Self Efficacy Assessment
- ▶ Improves Adherence– “ The SIMPLE Method”
 - S= Simplify Regimen
 - I= Impart Knowledge
 - M= Modify Patient Beliefs and Behaviors
 - P= Provide Communication and Trust
 - L= Leave the Bias
 - E = Evaluate Adherence
- ▶ Addresses Barriers– forgetfulness, side effects
- ▶ Engages patient in the process
- ▶ Helps identify Solutions
- ▶ Literacy– Universal Symbols, Clocks
- ▶ Reduces Side Effects– Enhances Acceptance
- ▶ Medication Reconciliation– Meaningful Use/PCMH
- ▶ Self–Management Take Home Tool for Patient/Medication Action Plan



TOOLS– Patient Education

How to Read Your Prescription Label

ZUFALL
HEALTH
CENTER

1	RX#/PRESCRIPTION NUMBER This number helps the pharmacy fill your prescription more easily.
2	YOUR NAME- Always make sure it is your name on the label
3	HOW TO TAKE YOUR MEDICINE Ask your pharmacist or provider if you are not sure about how to take your medicine
4	NAME OF GENERIC & BRAND, STRENGTH AND QUANTITY OF YOUR MEDICINE Ask your pharmacist or provider if you are not sure about what the medicine is for.
5	THE DATE YOUR PRESCRIPTION/REFILL WAS PREPARED BY YOUR PHARMACY
6	NAME OF YOUR PROVIDER WHO PRESCRIBED YOUR MEDICINE
7	NUMBER OF REFILLS AUTHORIZED ON THE MEDICINE
8	USE BY DATE Do not take this medicine after this date
9	ORIGINAL DATE This is the first time



GOODALE PHARMACY
16 N. Sussex St.
Dover, NJ 07801
ROBERT J. PERGOLA, R. PH.
DEA No. BG4920864
PHONE (973) 366-0976

PER CONTROLLED DRUGS - CAUTION: FEDERAL LAW PROHIBITS TRANSFER OF THIS DRUG TO ANY PERSON OTHER THAN PATIENT FOR WHOM PRESCRIBED

1 RX # 1329264 **2** JOHN SMITH **3** TAKE ONE TABLET DAILY **4** 30 LEVOTHYROXINE 75 MCG TABLET- SANDOZ **5** 01/24/14 **6** DR DOE, JOHN **7** 3 Refills Thru 24 Jan 15 **8** Use By: 012415 **9** LEVOTHYROXINE SODIUM Generic for SYNTHROID
Orig Dt: 01/24/14

OTHER HELPFUL TIPS:

- ✓ Request refills at your pharmacy first - they will get in touch with your provider
- ✓ Request a refill before running out of medicine
- ✓ Take with Food/Meal, ask if it should be taken before or after

- Counseling Tool– Simple/Health Literacy/Literacy
- Improves Adherence
- Educates Patient on Refills
- Helps patient navigate the system
- Patient feels less intimidated and more in control
- Integrates patient as integral to process
- Improves Communications– All Parties
- Engages Community 340B Partners

TOOLS– Medication Non-Adherence Risk Assessment

▶ Preventive Medicine: EMBEDDED IN EMR

Clinical Pharmacy: Drug Adherence: Risk Assessment

- I am convinced of the importance of my medicine 0–10 10,
- I worry that my medicine will do more harm than good to me 0–10 0,
- How committed are you to starting the medicine and staying on the medicine? 0–10 10,
- Do you sometimes forget to take your medicine? Not at all, Several Days, More than half the days, All the time

- Conducted for all Patients
- Helps Identify Barriers– Cognitive Issues, Health Beliefs, Self Efficacy
- Helps Identify potential for Non-Adherence
- Embedded in CPS Encounter

Interventions (check all that apply)

Last Name:

Gender:

Weight:

Date:

Medication

- ☐ 01
- ☐ 02
- ☐ 03
- ☐ 04
- ☐ 05
- ☐ 06
- ☐ 07
- ☐ 08
- ☐ 09
- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 13
- ☐ 14
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- ☐ 17
- ☐ 18
- ☐ 19
- ☐ 20
- ☐ 21
- ☐ 22
- ☐ 23
- ☐ 24

101 ☐

Entered recommendations into eCW encounter under treatment plan

102 ☐

Education/counseling provided to pt

A ☐

Motivational interviewing

B ☐

Reviewed medication action plan/teach back

C ☐

Reviewed importance of adherence/teach back

D ☐

Reviewed missed dose directions/teach back

E ☐

Revi

F ☐

Asse

103 ☐

Provid

104 ☐

Taugh

105 ☐

Provid

106 ☐

Consu

107 ☐

Provid

108 ☐

Referred to behavioral health WORK IN Progress- CQI

109 ☐

Had patient make an appointment with provider

110 ☐

Recommended D/C drug(s)

111 ☐

Recommended substituting drug(s)

112 ☐

Recommended adding drug(s)

113 ☐

Changed dose(s)/insulin titration/dose adjustment

114 ☐

Changed duration of therapy/quantity

115 ☐

Changed PRN to schedule

116 ☐

Changed schedule to PRN

117 ☐

Clarified Rx

118 ☐

Substituted dosage form

119 ☐

Recommended additional labs/closer monitoring

120 ☐

Gave patient care plan

121 ☐

Other _____

tion Errors
f Harm
of Severity

- Reviewed Monthly with CMO
- Quality Assurance and P&T
- Patient Safety
- Captures Specific Interventions - Data
- Coordination of Care

st

ction

, etc)
Outreach

vider

ustment

itoring

—

TOOLS– Self Management Education Curriculum

▶ AADE 7 Self Care Behaviors– EMBEDDED IN EMR

- Healthy Eating
- Being Active
- Medications
- Monitoring
- Reducing Risks
- Problem Solving
- Healthy Coping

Patient Self Management and

Patient Assessment– Ruler Method

- Level of Commitment
- Patient Acceptance
- Need for further Education
- Tracks Progress

Preventive Medicine

PCMH/MU: Care Plan Given? Care Plan Given.

AADE 7 Self Care Behaviours: Monitoring Monitoring Discussed:

Yes, Discussed SMGM Instructions, Blood Glucose Log Reviewed and
nancial, How
n Measure AM sugars,
oping Healthy Coping
Other referral to
to (Most
ed. Medications
e, Bring brown bag at
cial, How important is
e current regimen,
cing Risks Reducing
low up with provider,
How important is this

1. discussed brown bag at follow up with patient – will give him a written adherence medication action plan- patient to start learning the names of all the medications he is on and what they are for

2. BH referral given- patient understands there is a wait and reports that he is looking forward to it.

3. Continue monitoring in the morning, also suggested to patient to check pp sugars as well- patient does have financial barrier however is pleased with the prodigy meter he got at rxoutreach and 15 dollar strips

4. f/u with provider and myself after provider.

5. Patient going to see podiatrist right after this visit today, has not acted upon referral for Dr. Damato- will discuss further at f/u.

Procedure Codes

Practical Implications

- ▶ Health Center leadership commitment and support
- ▶ Provider buy-in
- ▶ Pharmacist committed to patient population
- ▶ Advanced Practice Pharmacist – CDE, PGYs
- ▶ **Access to electronic medical records crucial to success**
- ▶ Cost – Pharmacist salary, space, support staff, equipment, EMR license
- ▶ Sustainability–APhA Foundation Project Impact Diabetes

What element is crucial to assure that the pharmacist optimally benefits the patient and the team?

- ▶ Home visits
- ▶ Telecommunications/video conferencing
- ▶ Access to Electronic Medical Records ✓
- ▶ Grand Rounds



Project IMPACT – Diabetes

APhA Foundation

- ▶ One of 25 organizations selected due to our success with the PSPC
- ▶ Used our established process of integrated care
- ▶ Included diabetes education and self-management curriculum
- ▶ Collected health measures and reported data on a monthly basis

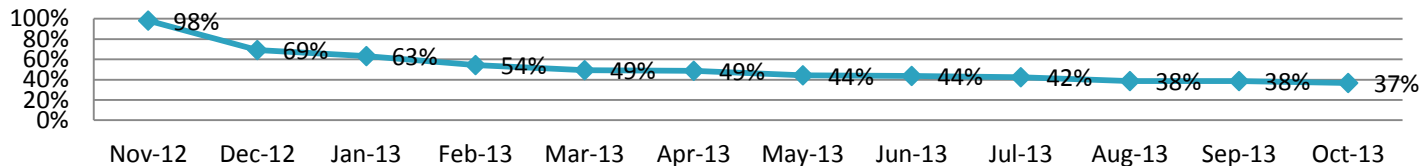


Zufall Project IMPACT–Diabetes

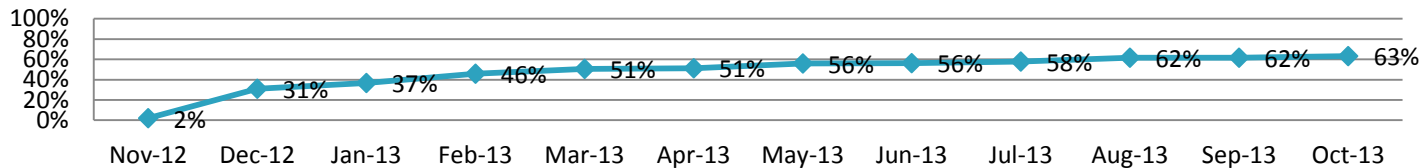
- ▶ Enrolled and followed 84 patients for one year
 - Average of 4 visits per patient
 - More >50% received action plans
- ▶ Results
 - HbA1c levels significantly reduced by 0.9% ($p=.0002$).
 - Improvements were seen in cholesterol and blood pressure ($p=0.164$, $p=0.444$)
 - 65.2% had eye exams, 84.2% had foot exams, and 70% received their flu vaccine
 - 28.6% of patients that smoked cigarettes quit smoking

PSPC Outcomes –Diabetes

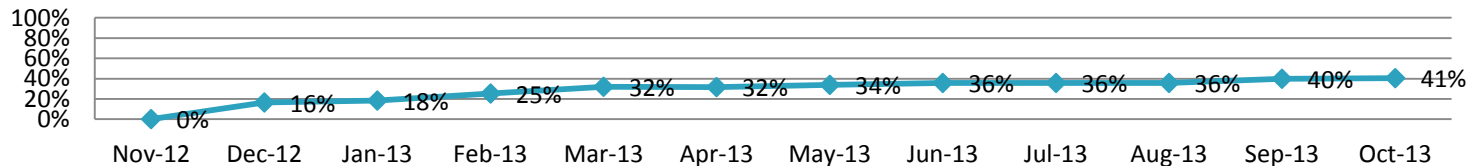
Percentage of patients in the PoF whose most recent hemoglobin A1c level is greater than 9% **37%**



Percentage Change/ Percentage Improvement
(Percentage of patients with HbA1c <9%) **63%**

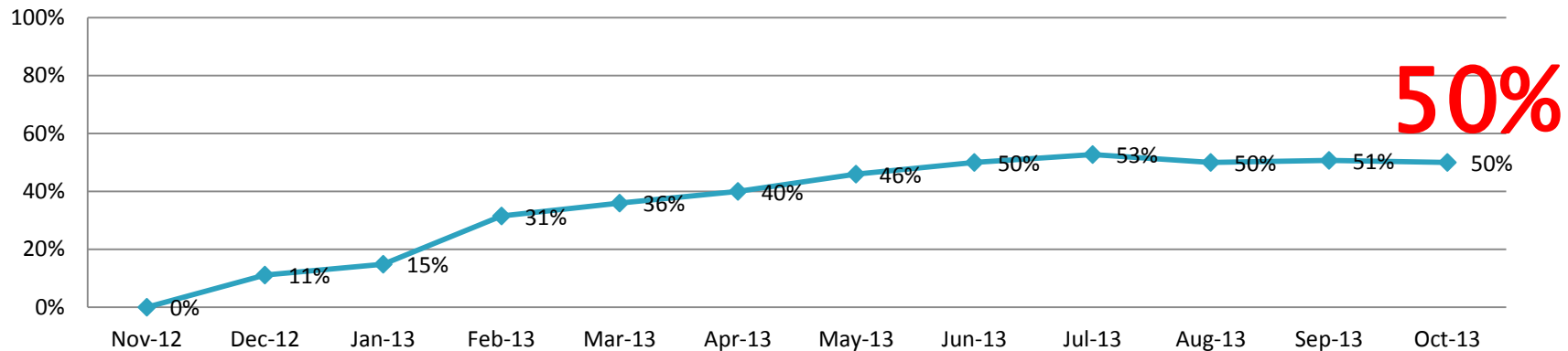


Percentage of patients in the PoF whose most recent hemoglobin A1c level is less than 8 % **41%**

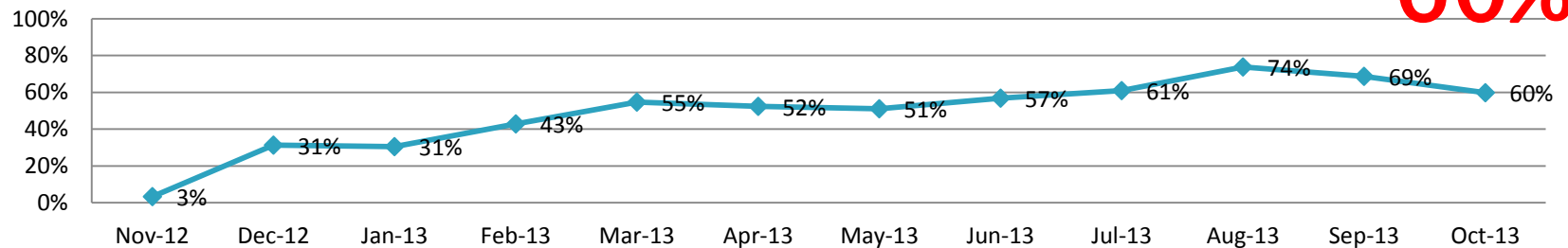


PSPC Outcomes – Cholesterol and Hypertension

Percentage of patients in the PoF whose LDL is at goal



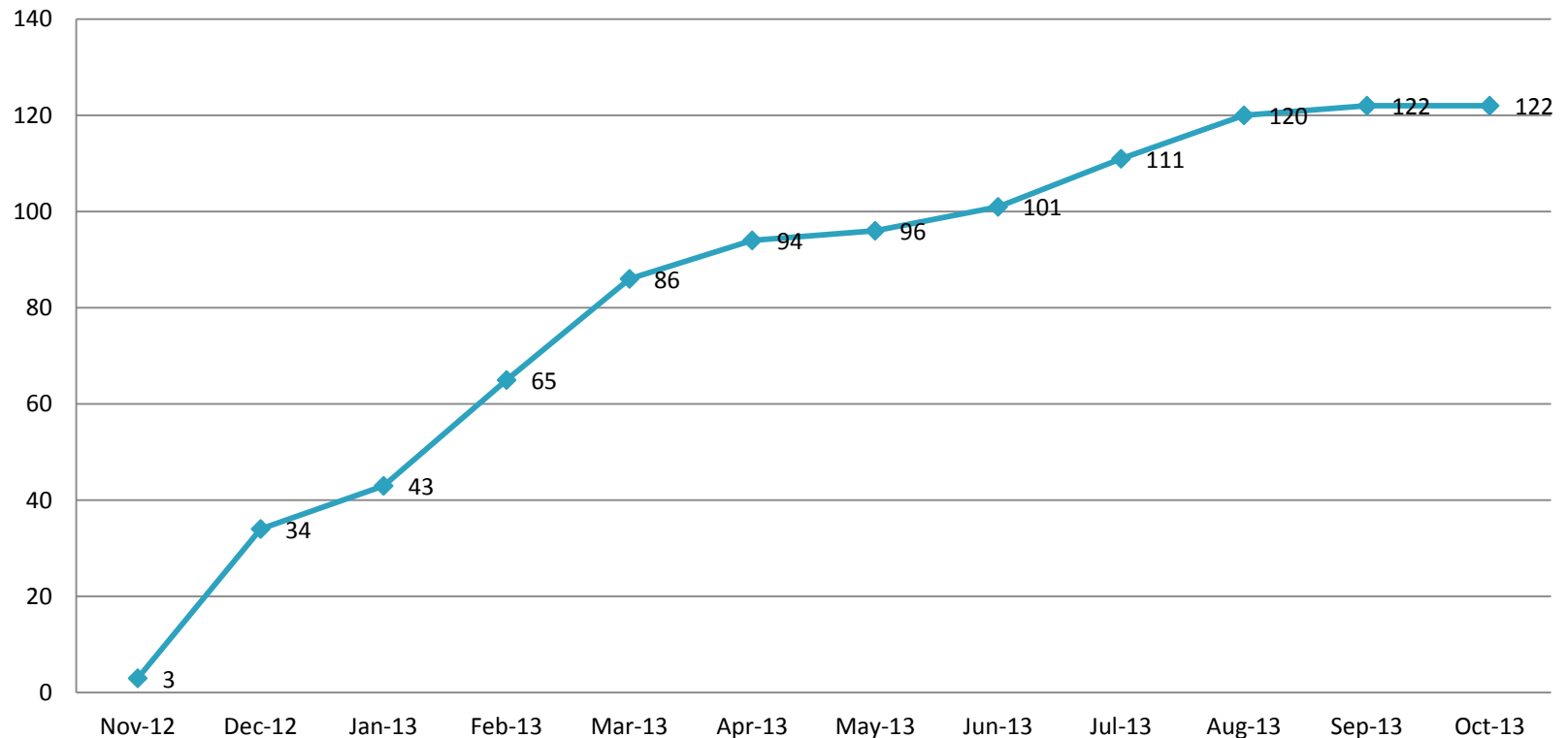
Percentage of patients in the PoF whose most recent blood pressure is under 140/90



PSPC Outcomes on All Conditions Followed

Patients under control for at least one condition

81%



A pharmacist in the care team results in:

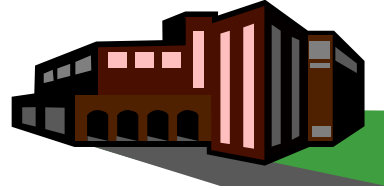
- ▶ Improves medication adherence
- ▶ Enhances patient safety
- ▶ Improves access to medications
- ▶ Enhanced self-management by the patient to accept drug and lifestyle changes regimen
- ▶ Increased efficiencies in the health care delivery model
- ▶ Improved screening and prevention services
- ▶ Added value to care– improved outcomes
- ▶ Decreased ED visits and hospitalizations

Value of CPS Integration in Primary Care

IMS Study –Medication misuse– > \$200B=8% costs	\$200B= cost to insure 24 million uninsured Americans
CDC– non-adherence costs \$2K/pt/physician/yr in extra visits	\$35.7M (Zufall 85% of 21K patients) x1500 Health Centers=\$53.6B
CDC– improved self management cost to savings ratio1:10	Cost to Savings Zufall est.\$250,000/yr=\$2.5M x 1500 Health Centers=\$3.75B
2025– costs projected to double	Double all numbers by 2025
Reality	Savings

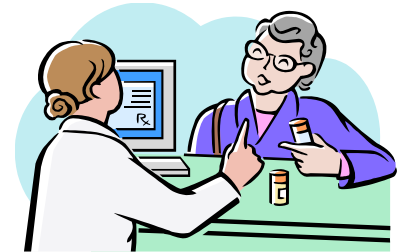
Next Steps to Include CPS in the Care Team

- Become a Teaching Site for Pharmacists



- Advanced Practice Students

- Introduce Annual Well Visits



- Increase Access to Care –
Provider Status for Pharmacists



Questions?

▶ Contact Information:

- Teresita Lawson – tlawson@zufallhealth.org
- Rina Ramirez – rramirez@zufallhealth.org



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